

Draft Environmental Impact Report
Volume I

Pebble Beach Company Project

State Clearinghouse No: 2011041028



Monterey County Planning Department

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DRAFT ENVIRONMENTAL IMPACT REPORT PEBBLE BEACH COMPANY PROJECT

VOLUME I

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Acronyms and Abbreviations

µg/m ³	micrograms per cubic meter
AFY	acre-feet per year
AMBAG	Association of Monterey Bay Area Governments
Antidegradation Policy	Statement of Policy with Respect to Maintaining High Quality Waters in California (SWRCB Resolution No. 68-16)
APN	assessor parcel numbers
AQMP	air quality management plan
ARB	California Air Resources Board
ASBS	Area of Special Biological Significance
ASR	Aquifer Storage and Recovery
Assembly Bill 32	Assembly Bill 32, the California Global Warming Solutions Act of 2006
Basin Plan	Water Quality Control Plan for the Central Coast Region
BAU	business as usual
BLM	U.S. Bureau of Land Management
BMPs	best management practices
CAA	Clean Air Act
CAAA	1990 Clean Air Act amendments
CAAQS	California ambient air quality standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal-Am	California-American Water Company
California Coastal Act	California Coastal Act of 1976
Caltrans	California Department Transportation
CAR	Climate Action Reserve
Carl Moyer Program	Carl Moyer Memorial Air Quality Standards Attainment Program
CAWD	Carmel Area Wastewater District
CCAA	California Clean Air Act
CCC	California Coastal Commission
CCRWQCB	Central Coast Regional Water Quality Control Board
CDFG	California Department of Fish and Game
CDHS	California Department of Health Services
CDM	Clean Development Mechanism
CDMG	California Division of Mines and Geology
CDO	cease and desist order
CDP	Coastal Development Permit
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CFS	calls for service
CGC	Coastal General Commercial
CGS	California Geological Survey

CH ₄	methane
CHP	California Highway Patrol
CIP	Coastal Implementation Plan
CMP	corrugated metal pipe
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ equivalent
Construction General Permit	NPDES General Permit for Construction Activities
CPCN	Certificate of Public Convenience and Necessity
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRLF	California red-legged frog
CUBC	California Uniform Building Code
CUSD	Carmel Unified School District
CVFP	Carmel Valley Filter Plant
CVSIM	Carmel Valley Simulation Model
CWA	Clean Water Act
CWA	Clean Water Act
cy	cubic yards
CZMA	Coastal Zone Management Act
dB	Decibel
dBA	A-Weighted Decibel
DMF PDP	Del Monte Forest Preservation and Development Plan
DPF	diesel particulate filter
DPM	diesel particulate matter
DSOD	California Division of Safety of Dams
du	dwelling unit
DUI	driving under the influence
EGRH	Emergency Guaranteed Ride Home program
EHB	Monterey County Health Department Environmental Health Bureau
EIR	Environmental Impact Report
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	federal Endangered Species Act
ESHA	environmentally sensitive habitat area
ETS	Environmental & Turf Services
F	Fahrenheit
FHSZ	Fire Hazard Severity Zone
Fire Code	Chapter 18.10, Fire Code, Section K105.3, of the Monterey County Code of Ordinances
FTA	Federal Transit Administration
g/l	micrograms/ liter
GHG	greenhouse gas

GP	General Plan
gpd	gallons per day
gpm	gallons per minute
HCP	Habitat Conservation Plan
HFCs	hydrofluorocarbons
HHNHA	Huckleberry Hill Natural Habitat Area
HI	hazard index
IC	Institutional Commercial
IPCC	Intergovernmental Panel on Climate Change
IPM	integrated pest management
ITP	incidental take permit
K-12	kindergarten through grade twelve school
KLI	Kinnetic Laboratories, Inc.
LCFS	low carbon fuel standard
LCP	Del Monte Forest Local Coastal Program
L _{dn}	Day-Night Level
LDR	Low Density Residential
L _{eq}	Equivalent Sound Level
LF	Linear Feet
L _{max}	Maximum Sound Level
L _{min}	Minimum Sound Level
LOS	level of service
LUP	Del Monte Forest Area Land Use Plan
L _v	vibration noise levels
L _{xxx}	Percentile-Exceeded Sound Level
Master RMP	Master Resource Management Plan
MBTA	Migratory Bird Treaty Act
MBUAPCD	Monterey Bay Unified Air Pollution Control District
MCIHR	Monterey County Inventory of Historic Resources
MCWD	Marina Coast Water District
MCWRA	Monterey County Water Resources Agency
MDR	Medium Density Residential
MF/RO	microfiltration/reverse osmosis
mg/L	milligrams per liter
mgd	million gallons per day
MOU	memorandum of understanding
mph	miles per hour
MRWMD	Monterey Regional Waste Management District
MST	Monterey Salinas Transit Agency
MT	metric tons
N	nitrate as nitrogen
N ₂ O	nitrous oxide
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NCCAB	North Central Coast Air Basin
NHPA	National Historic Preservation Act

NMFS	National Marine Fisheries Service
NO	nitric oxide
NO ₂	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOI	notice of intent
NOP	notice of preparation
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWP	Nationwide Permit
Ocean Plan	Water Quality Control Plan for Ocean Waters of California, Resolution No. 90-27
OF	Open Space Forest
OPR	Office of Planning and Research
OR	Open Space Recreational
OS	Open Space Shoreline
OSAC Plan	Del Monte Forest Open Space Management Plan
Pb	lead
PBC	Pebble Beach Company
PBCSD	Pebble Beach Community Services District
PCO	Pest Control Operator
Pebble Beach Lot Program	1992 applications, amendments, and zoning changes to build out the remaining vacant land in the Pebble Beach area of Del Monte Forest
PFC	perfluorinated carbon
PG&E	Pacific Gas and Electric
PGA	Professional Golf Association
PGUSD	Pacific Grove Unified School District
PM	particulate matter
PM10	particulate matter 10 microns or less in diameter
PM2.5	particulate matter 2.5 microns or less in diameter
POM	Presidio of Monterey
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
ppm	parts per million
PPV	peak particle velocity
proposed project	Pebble Beach Company's Del Monte Forest Plan
PSR	Project Study Report
PUD	Planned Unit Development
QAC	Qualified Applicator Certificate
RCP	reinforced concrete pipe
Regional Project	Monterey Regional Water Supply Project
RES	Renewable Energy Standard
RM	River Mile
RMA	Resource Management Agency
ROG	reactive organic gasses
ROW	right-of-of-way
RPMP	Monterey Presidio Real Property Master Plan

RPS	Renewable Portfolio Standard
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB 97	Senate Bill 97
SCWRCB	State Water Resources Control Board
SEL	Sound Exposure Level
sf	square feet
SF ₆	sulfur hexafluoride
SO ₂	sulfur dioxide
SR	State Route
SRTP	Short-Range Transit Plan
STIP	State Transportation Improvement Program
SVP	Society of Vertebrate Paleontology
SWANCC	Solid Waste Agency of Northern Cook County
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TAMC	Transportation Agency for Monterey County
TDS	total dissolved solids
the applicant	Pebble Beach Company
the Board	California State Geology and Mining Board
The Inn	The Inn at Spanish Bay
The Lodge	The Lodge at Pebble Beach
USACE	U.S. Army Corps of Engineers
USC	U.S. Government Code
USFWS	U.S. Fish and Wildlife Service
USGS	US Geological Survey
v/c	volume-to-capacity
VdB	vibration decibels
VOC	volatile organic compounds
vph	vehicles per hour
VSC	Visitor-Serving Commercial
WDRs	Waste Discharge Requirements
WEG	Wind Erodibility Group
WQC	water quality criteria
WRCB	State Water Resources Control Board
WSA	water supply assessment

Executive Summary

Executive Summary

1

2 The title of the proposed project is the “Pebble Beach Company Project.” The project applicant is the
3 Pebble Beach Company (PBC), and the lead agency is the County of Monterey Resources
4 Management Agency - Planning Department (County). The proposed project includes PBC’s
5 application for renovation and expansion of visitor-serving uses; creation of single-family
6 residential lots; road, infrastructure, and trail improvements; and preservation in the Del Monte
7 Forest Land Use Plan (LUP) area. This Draft Environmental Impact Report (DEIR) has been prepared
8 in compliance with the California Environmental Quality Act (CEQA) and CEQA Guidelines (Title 14
9 California Code of Regulations section 15000 et seq).

10 This summary presents the following information, including major findings of this DEIR:

- 11 • Overview, including the project location, background, goals and objectives, and brief project
12 description.
- 13 • Areas of Known Controversy and Key Issues, including a brief description of impacts associated
14 with those issues.
- 15 • Summary of Environmental Impacts and Mitigation Measures for the Proposed Project,
16 including significant and unavoidable impacts.
- 17 • Alternatives to the Proposed Project, including alternatives considered, a summary of the
18 impacts for different alternatives and identification of the environmental superior alternative.
- 19 • Summary of Prior Projects, discussing the previous projects proposed by PBC for buildout of its
20 properties in the Del Monte Forest.

21 Overview

22 Project Location

23 The proposed project would be located within Monterey County’s unincorporated Del Monte Forest
24 area. The Del Monte Forest is located on California’s Pacific Coast and is bounded by the Pacific
25 Ocean to the west and the cities of Pacific Grove, Monterey, and Carmel-by-the-Sea to the north, east,
26 and south, respectively (Figure ES-1).

27 Background

28 PBC has submitted previous applications for development and preservation of its land within Del
29 Monte Forest, including the Pebble Beach Lot Program in 1992, Refined Alternative 2 in 1996, and
30 the Del Monte Forest Preservation and Development Plan in 2002 (which was consistent with the
31 “Measure A” initiative approved by Monterey County voters in 2000). These prior projects are
32 discussed at the end of this summary.

33 Project Objectives and Goals

34 The general objectives of Monterey County (the CEQA Lead Agency) are to:

- 1 • Protect the natural, cultural, and visual resources of the Del Monte Forest.
- 2 • Preserve and enhance public access and recreation opportunities.
- 3 • Enhance visitor-serving uses.
- 4 • Ensure a planned and balanced approach to development (both visitor-serving commercial and
- 5 residential) and preservation within the Del Monte Forest, specifically with regard to the build-
- 6 out of remaining undeveloped properties.

7 The Applicant's general objectives of the proposed project are to:

- 8 • Expand and improve existing priority visitor-serving uses.
- 9 • Develop a reduced number of primarily large residential lots from that allowed by the current
- 10 Del Monte Forest Land Use Plan (LUP) and concentrate such lots in or adjacent to already
- 11 developed areas.
- 12 • Formally preserve large undeveloped tracts of forested open space previously planned for
- 13 residential development.
- 14 • Provide management prescriptions to the preserve areas to enhance habitat values.
- 15 • Provide a reduced intensity build-out plan compared to prior proposals for the Del Monte Forest
- 16 that can obtain California Coastal Commission staff concurrence and that reduces the potential
- 17 for litigation over the interpretation and effect of the existing LCP.

18 The specific goals to expand and improve the visitor-serving uses include:

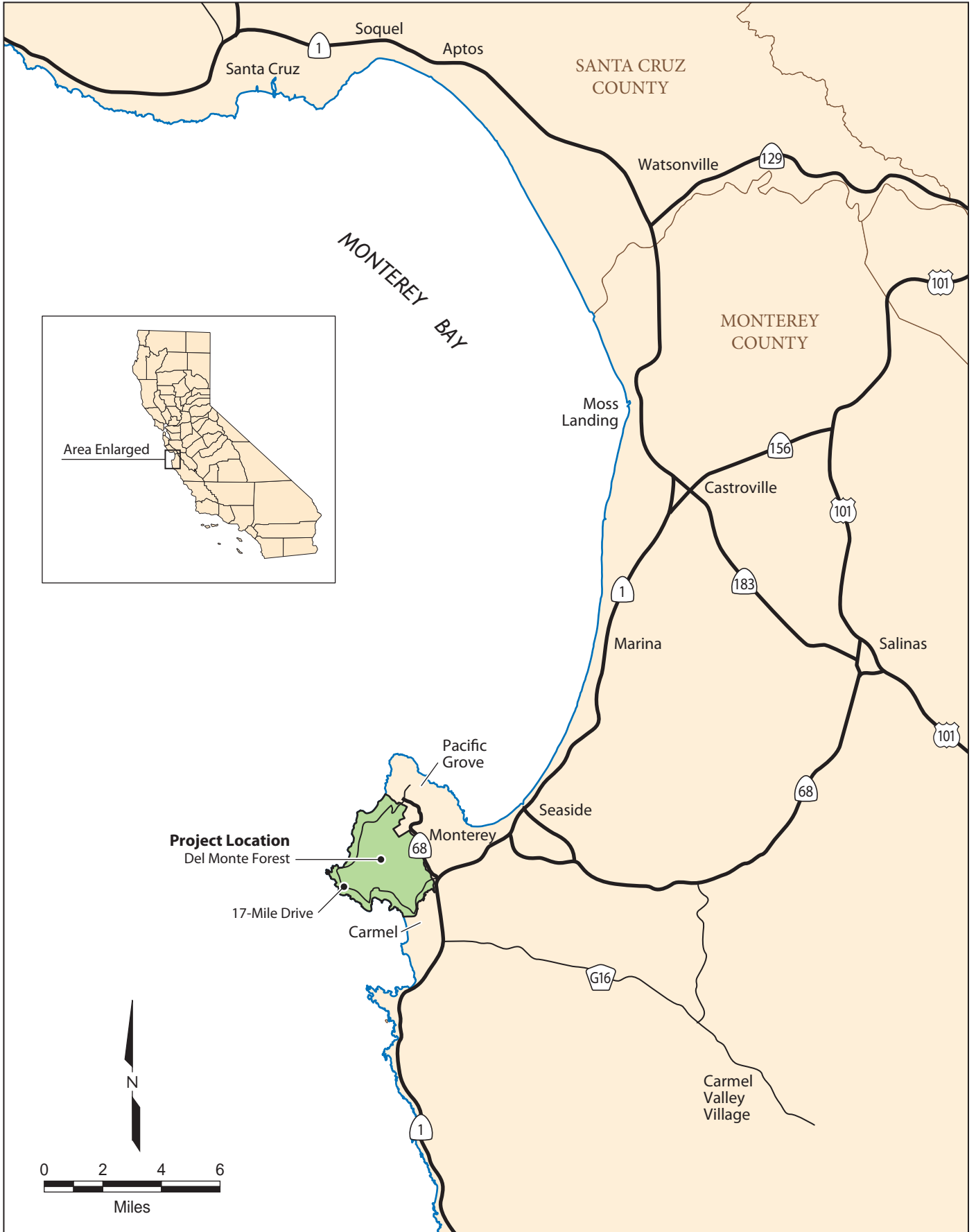
- 19 • Adding guest rooms to The Lodge at Pebble Beach and The Inn at Spanish Bay, and building a
- 20 new hotel at Spyglass Quarry.
- 21 • Modernizing and expanding existing meeting facilities.
- 22 • Relocating the Pebble Beach Driving Range to a larger area that can accommodate support
- 23 facilities, including a golf training facility.
- 24 • Renovating the Equestrian Center.
- 25 • Improving parking and circulation for visitors, employees, and residents.

26 **Project Description**

27 The proposed project includes PBC's application for renovation and expansion of visitor-serving
28 uses; creation of single-family residential lots; road, infrastructure, and trail improvements; and
29 preservation in the Del Monte Forest Land Use Plan (LUP) area. ¹

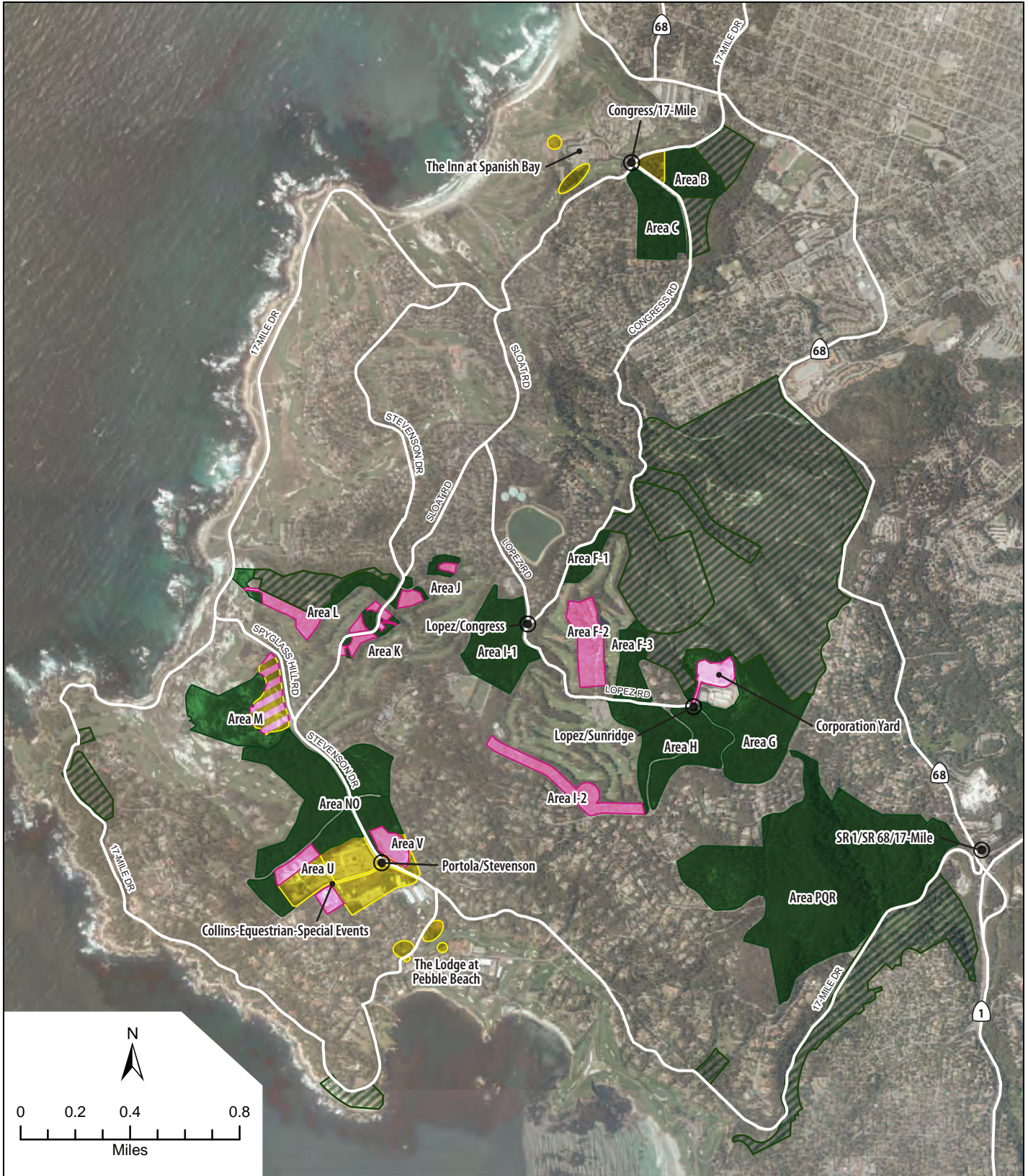
30 The PBC application (PLN100138) is for build-out (development and preservation) of the remaining
31 undeveloped PBC properties located in the Del Monte Forest LUP area. The development proposals
32 and preservation areas are summarized in Tables ES-1 and ES-2 in the order shown below, and
33 shown in Figure ES-2.

¹ As discussed in Chapter 2, Project Description, Monterey County and the California Coastal Commission also have been preparing a LCP amendment that includes changes relevant to this project. The LCP amendment is exempt from CEQA evaluation because it is processed through the CCC's certified regulatory program which is considered a functional equivalent to CEQA. The LCP amendment is not formally part of the "project" analyzed in this EIR.



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Figure ES-1
Project Location



Legend

- Residential Lot Subdivision
- Visitor-Serving/Recreation
- Area M Spyglass Hill
Option 1: Visitor-Serving
Option 2: Residential Lot Subdivision
- Roadway Intersection Improvement
- Preservation Area
- Existing Preservation Area

Pebble Beach Company Project

Figure ES-2
Development and Preservation Areas

- 1 ● Visitor-Serving Development:
 - 2 ○ The Lodge at Pebble Beach.
 - 3 ○ The Inn at Spanish Bay.
 - 4 ○ Collins Field–Equestrian Center–Special Events Area.
 - 5 ○ Area M Spyglass Hill Option 1 (New Resort Hotel, 100 guest units and spa).
- 6 ● Residential Lot Subdivisions:
 - 7 ○ 90 to 100 new residential lots.²
- 8 ● Roadway, Infrastructure, and Trails:
 - 9 ○ Roadway Improvements.
 - 10 ○ Infrastructure Improvements.
 - 11 ○ Trail Improvements.
- 12 ● Preservation and Conservation Areas:
 - 13 ○ Preservation of 627 acres of Monterey pine forest and other native habitat.
 - 14 ○ Conservation of an additional 8 acres of Monterey pine forest and other native habitat.

15 There are two development options under consideration for Area M Spyglass Hill. Under Option 1, a
16 100-room new resort hotel would be constructed; and under Option 2, 10 new residential lots
17 would be created.

² The proposed project includes 90 residential lots under Option 1 (New Resort Hotel) and 100 residential lots under Option 2 (New Residential Lots). If Option 2 is selected, 10 residential lots would be located in Area M. The remaining 90 residential lots would be located in eight other areas (Areas F-2, I-2, J, K, L, U, V, Collins Residence, and Corporation Yard). The Collins Residence is currently two lots with two residences, which would be subdivided into four lots with four residences. Therefore, when the existing residences are counted, the total additional residential lots would be 88 to 98 (instead of 90 to 100).

1 **Table ES-1. Summary of Proposed Development**

Proposed Development	New Visitor-Serving			Del Monte Forest Land Use Plan		
	New Guest Units	Additional Square Feet ^a	New Residential Lots	Planning Area and Unit ^b	Current Designation	Designation with LCP Amendment
The Lodge at Pebble Beach						
Meeting Facility Expansion	Add 2,100 square feet (sf) meeting space and 2,900 sf support/circulation space to the existing facility.	5,000		Pebble Beach	CGC	CGC
New Colton Building	Construct new 20-unit guest facility.	20		Pebble Beach	VSC	VSC
Fairway One Reconstruction	Construct new 40-unit guest facility; demolish existing 5-unit facility and Bierne residence.	35		Pebble Beach	CGC & LDR	VSC
Parking and Circulation Reconstruction	Construct new two-level 224-space parking facility and 23-space short-term parking lot; demolish existing 113-space parking lot.			Pebble Beach	CGC	CGC
The Inn at Spanish Bay						
Conference Center Expansion	Add 4,660 sf meeting space and 4,155 sf support/circulation space to the existing facility.	8,815		Spanish Bay	VSC	VSC
New Guest Cottages	Construct new 40-unit guest facility.	40		Spanish Bay	OR & VSC	VSC
New Employee Parking	Construct new 285-space surface parking lot.			Spanish Bay Area B	MDR & OF	VSC & OF
Collins Field-Equestrian Center-Special Events Area						
Pebble Beach Driving Range Relocation from Area V to Collins Field	Relocate driving range to Collins Field and construct golf academy, ball kiosk/bathroom, and 26-space surface parking lot.	2,650		Pebble Beach	MDR & OR	OR

Proposed Development	New Visitor-Serving			Del Monte Forest Land Use Plan			
	New Guest Units	Additional Square Feet ^a	New Residential Lots	Planning Area and Unit ^b	Current Designation	Designation with LCP Amendment	
Equestrian Center Reconstruction	Demolish existing equestrian center and construct new equestrian center in its place with same uses plus covered arena.			Pebble Beach Area U	OR	OR	
Special Events Staging Area Grading and Expansion	Grade and slightly expand the special events staging area.			Pebble Beach	OR	OR	
Area M Spyglass Hill							
New Resort Hotel (Option 1)	Construct new resort hotel with 100 guest rooms, 6,677 sf restaurant/lounge, 5,120 sf meeting space, 301-space parking facility, and 17,000 sf spa with 41-space surface and underground parking lot.		100	28,797	Spyglass Cypress Area M	MDR, OR, OS, OF	VSC, OR, OS, OF
New Residential Lots (Option 2)	Create 10 single-family residential lots.			10	Spyglass Cypress Area M	MDR, OR, OS, OF	LDR, OR, OS, OF and an Unclassified road and utility parcel
Residential Lot Subdivisions							
Area F-2	Create 16 single-family residential lots.			16	Gowen Cypress Area F	MDR	LDR and an Unclassified road and utility parcel
Area I-2	Create 16 single-family residential lots.			16	Middle Fork Area I	MDR	LDR and an Unclassified road and utility parcel

Proposed Development	New Visitor-Serving			Del Monte Forest Land Use Plan		
	New Guest Units	Additional Square Feet ^a	New Residential Lots	Planning Area and Unit ^b	Current Designation	Designation with LCP Amendment
Area J	5		5	Spyglass Cypress Area J	MDR	MDR
Area K	8		8	Spyglass Cypress Area K	MDR	MDR, and Unclassified road and utility parcels
Area L	10		10	Spyglass Cypress Area L	MDR	MDR and an Unclassified road and utility parcel
Area U	7		7	Pebble Beach Area U	LDR	MDR
Area V	14		14	Pebble Beach Area V	MDR	MDR, OR and an Unclassified road and utility parcel
Collins Residence	2		2	Pebble Beach	LDR	MDR and two Unclassified road and utility parcels
Corporation Yard	10		10	Huckleberry Hill	CGC and IC	OR, MDR, and IC
Roadway Improvements						
SR 1/SR 68/17-Mile Drive Intersection Reconstruction	Reconfigure the intersection by demolishing median, widening, and modifying on-ramps/off-ramps, constructing a retaining wall, modifying signals.			NA		

Proposed Development	New Visitor-Serving			Del Monte Forest Land Use Plan		
	New Guest Units	Additional Square Feet ^a	New Residential Lots	Planning Area and Unit ^b	Current Designation	Designation with LCP Amendment
Congress Road/17-Mile Drive Intersection Improvements		Improve the intersection by adding a left-turn lane, restriping to incorporate crosswalks, and adding handicap ramps at crosswalks.		Spanish Bay		
Congress Road/Lopez Road Intersection Improvements		Improve the intersection by realigning to eliminate the intersecting angle and improve sight distance.		Gowen Cypress, Middle Fork		
Lopez Road/Sunridge Road Intersection Improvements		Improve the intersection by adding lane channelization and realigning to improve sight distance.		Gowen Cypress, Middle Fork, Huckleberry Hill		
Portola Road/Stevenson Drive Intersection Improvements		Improve the intersection by adding lane channelization and realigning to eliminate acute angle and improve sight distance.		Pebble Beach		
Trail Improvements						
Area F-2		Relocate portion of existing trail eastward between proposed residential development and Poppy Hills Golf Course (20 linear feet net increase in trail).		Gowen Cypress Area F		
Area I-2		Relocate portion of existing trail northward between proposed residential development and Poppy Hills Golf Course (70 linear feet net increase in trail).		Middle Fork Area I		

Proposed Development	New Visitor-Serving			Del Monte Forest Land Use Plan		
	New Guest Units	Additional Square Feet ^a	New Residential Lots	Planning Area and Unit ^b	Current Designation	Designation with LCP Amendment
Area J		Relocate portion of existing trail outside of new lots (130 linear feet net increase in trail).		Spyglass Cypress Area J		
Area K		Relocate portion of existing trail outside of new lots (56 linear feet net increase in trail).		Spyglass Cypress Area K		
Area PQR		Create 1.36 miles of new trails on existing dirt fire roads and 0.25 mile of new connector trails in the Pescadero planning area.		Pescadero Area PQR		
Corporation Yard		Create 0.15 mile of new trails on existing dirt fire roads to connect the proposed residential lot subdivision to the network of trails in the HHNHA and SFB Morse Preserve.		Huckleberry Hill		
Huckleberry Hill Natural Habitat Area		Create 0.59 mile of new trail following the existing Haul Road.		Huckleberry Hill		
Portions of 17-Mile Drive, Spyglass Road and Stevenson Drive ^c		Dedicate bicycle lane for 4.7 miles in each direction.				

Infrastructure Improvements

Infrastructure including water lines, sewer lines, reclaimed water lines, and storm drains would be installed to support the proposed development.

Source:

Pebble Beach Company 2011.

Notes:

NA = Not Applicable

Proposed Development	New Visitor-Serving			Del Monte Forest Land Use Plan		
	New Guest Units	Additional Square Feet^a	New Residential Lots	Planning Area and Unit^b	Current Designation	Designation with LCP Amendment

LDR = Low Density Residential
 MDR = Medium Density Residential
 CGC = Coastal General Commercial
 IC = Institutional Commercial
 VSC = Visitor Serving Commercial
 OF = Open Space Forest
 OR = Open Space Recreation
 OS = Open Space Shoreline

- ^a The square footage is from the May 2011 application. It is expected that the square footage may change as the design plans for the facilities are finalized but the changes would not be substantial and would not change any impact determinations in Chapter 3.
- ^b The Del Monte Forest Land Use Plan includes eight Planning Areas (Spanish Bay, Spyglass Cypress, Middle Fork, Pescadero, Huckleberry Hill, Gowen Cypress, Pebble Beach, Country Club), which are further divided into lettered sub-planning areas delineated as Areas A through Y (Figure 2-32). Refer to the Monterey County Local Coastal Program Amendments section of this chapter for more information.
- ^c From north to south, the new bicycle lanes begins on and follows 17-Mile Drive, turns up Spyglass Hill Road, continues south along Stevenson Drive, and ends at the Stevenson Drive/17-Mile Drive intersection.

1 A detailed discussion of the proposed project is provided in Chapter 2, Project Description.
 2 Additional specific information regarding the development proposal, including grading/drainage
 3 plans and architectural renderings, can be found in the application plan set (Pebble Beach Company
 4 2011).

5 **Table ES-2. Summary of Proposed Preservation**

Preservation Area	Current LUP Designation	LUP Designation with LCP Amendment	New Dedication Area (acres)	New Conservation Easements (acres)^a	Total
Area B	MDR, OF	OF	19.45	0.29	19.74
Area C	MDR, OF	OF	29.05	0.83	29.88
Area F-1	MDR, OF	OF	9.77	0.47	10.24
Area F-3	MDR	OF	16.81	0.31	17.12
Area G	MDR, OF	OF	59.97	0.56	60.53
Area H	MDR, OF	OF	49.81	1.08	50.89
Area I-1	LDR, MDR, OF	OF	38.16	0.66	38.82
Area I-2	OF	OF	0.28	0	0.28
Area J-1	MDR	OF	3.19	0.05	3.24
Area J-2	MDR	OF	1.59	0.26	1.85
Area J-3	MDR	OF	0.8	0.16	0.96
Area K	MDR	OF	4.7	1.14	5.84
Area L	MDR	OF	8.51	0.74	9.25
Area M	MDR,, OS	OS	34.12	0	34.12
Area N	LDR	OF	48.87	0	48.87
Area O	MDR, OF	OF	19.5	0.48	19.98
Area PQR	LDR, OF	OF	245.89	0	245.89
Area U	LDR	OF	16.69	0.75	17.44
Area V	MDR	OF	12.56	0.2	12.76
Corporation Yard Area	OF	OF	6.96	0	6.96
Total			626.68 (627)	7.98 (8)	634.66 (635)

Note:

LDR = low-density residential; MDR = medium-density residential; VSC = visitor-serving commercial; CGC = coastal general commercial; OR = open space recreation; OF = open space forest; OS = open space shoreline (including dune habitat).

^a The conservation easements are for smaller buffer areas and setbacks around development, as opposed to the larger preservation areas. For purposes of the proposed project and EIR analysis, the 635 acres of dedication areas are considered the preservation areas.

6
 7 In order to provide for integrated resource management of the proposed preservation areas, a
 8 Master Resource Management Plan (Master RMP) has been developed by the County with technical
 9 assistance from ICF. The Master RMP (located in Appendix C of the EIR) is considered part of the
 10 mitigation framework because it is a necessary component to ensure proper management of the
 11 preservation areas for the benefit of biological resources and establishes a framework for the

1 development of site-specific RMPs for each preservation area. The site-specific RMPs will include
2 the CEQA mitigation identified in this EIR.

3 **Areas of Known Controversy and Key Issues**

4 Through issuance of a Notice of Preparation (NOP) and a scoping meeting held on April 27, 2011,
5 responsible agencies, interested organization, and individuals have been provided the opportunity
6 to provide both written and oral comment concerning the scope of this DEIR, the alternatives to be
7 considered, and issues of concern and controversy. The NOP and written comments have been
8 included in Appendix A of this DEIR. All comments, which are on file with the Monterey County
9 Planning Department in Salinas, were considered during the development of the DEIR and
10 consideration of alternatives.

11 Some of the issues raised might be considered controversial. These issues are discussed below.
12 Individuals may not agree that these issues are controversial or may think that other issues, not
13 discussed here, are controversial. The intent of this discussion is not a comprehensive discussion of
14 issues and concerns; the intent is to highlight the issues of apparent greatest concern raised in
15 comment to date.

- 16 • **Monterey Pine Forest.** Within the Del Monte Forest, Monterey pine forest is the dominant
17 biological community. The California Department of Fish and Game (DFG) recognizes Monterey
18 pine forest as a sensitive natural community because of its restricted distribution and the
19 substantial reduction from its historic extent. Monterey pine is considered by the California
20 Native Plant Society (CNPS) to be “rare, threatened, or endangered in California” (CNPS List 1B).
21 Monterey pine forest also includes maritime chaparral as understory in many parts of the Del
22 Monte Forest, and maritime chaparral is also considered a sensitive vegetation community
23 because it includes endemic species not found in other chaparral communities. Local residents,
24 conservation organizations, and resource agencies are concerned with the project’s potential to
25 directly and indirectly impact undeveloped forest on the Monterey Peninsula.
- 26 • **Huckleberry Hill Natural Habitat Area and Indian Village.** There are concerns regarding the
27 potential indirect impacts on biological resources in Huckleberry Hill Natural Habitat Area
28 (HHNHA) and Indian Village from adjacent residential development at the Corporation Yard and
29 Area L. The HHNHA includes Monterey pygmy forest and other sensitive habitats. Indian Village
30 includes occurrences of special-status and rare plant species (Hickman’s potentilla and Pacific
31 Grove clover) and wildlife species (California red-legged frog).
- 32 • **Special-Status and Rare Plants.** A number of special-status and rare plants would be affected
33 by the implementation of the Proposed Project, including several species that are state or
34 federally listed. Resource agencies, conservation organizations, and individuals have expressed
35 concern with the impact of the project on these special-status and rare plants.
- 36 • **California Red-Legged Frog (CRLF).** California red-legged frogs, a federally listed threatened
37 species, have been identified in the lower watershed of Seal Rock Creek, in water hazards
38 immediately adjacent to Spyglass Hill golf course, and in two locations in the proposed Area N
39 preservation area.
- 40 • **Water Supply.** The water supply situation on the Monterey Peninsula is complex and future
41 regional water supplies are uncertain. Concern has been expressed about the legal basis of PBC
42 water entitlements.

- 1 • **Traffic.** Portions of existing highways that serve the Del Monte Forest, including State Route
2 (SR) 1 and SR 68, currently operate at unacceptable levels of service. There is also concern
3 raised about increased traffic within the Del Monte Forest, as well as construction-related traffic
4 (discussed under “Construction Disruption”).
- 5 • **Construction Disruption.** Local residents within the Del Monte Forest have expressed concern
6 about the level of construction traffic, dust, and noise.

7 This section discusses the key issues of concern raised above relative to the Proposed Project and
8 the conclusions of this document regarding those issues. This is not a comprehensive discussion of
9 impacts of the proposed project, for which the reader is directed to Chapter 3 of the document.

10 **Monterey Pine Forest**

11 The proposed project would result in direct loss of up to 41 acres of Monterey pine forest, which
12 represents approximately 2% of the remaining undeveloped Monterey pine forest in the Del Monte
13 Forest and less than 1% of the undeveloped forest in the Monterey region. Indirect effects on up to
14 47 acres of Monterey pine forest would also occur in areas directly adjacent to direct removal and
15 development activity.

16 The project would also result in preservation of 598 acres of Monterey pine forest, which would be
17 5% of the total remaining native Monterey pine forest in the world, 6% of the total forest in the
18 Monterey region, and 35% of the total forest in the Del Monte Forest.

19 In concept, the proposed preservation of such areas would substantially offset the direct and
20 indirect effects of the project. However, the proposed project application includes no formal
21 proposal for management of the preservation areas for the benefit of Monterey pine forest and
22 maritime chaparral. Mitigation measures are required to formalize dedication of these areas and to
23 prepare and implement site-specific resource management plans for preservation areas for the
24 benefit of Monterey pine forest, including maritime chaparral.

25 **Huckleberry Hill Natural Habitat Area**

26 The HHNHA contains Monterey pygmy forest (Gowen cypress/Bishop pine), which DFG considers a
27 sensitive biological community because it is restricted in distribution. HHNHA also contains
28 occurrences of a number of other special status plant species as well as habitat for several special
29 status animal species. The proposed project would result in residential development at the
30 Corporation Yard, which is adjacent to HHNHA.

31 The proposed project would not result in the removal of any Monterey pygmy forest or other
32 habitats in the HHNHA. The project may result in indirect effects due to increased trail use and
33 indirect effects to wildlife within the HHNHA (which could include pallid bat, Monterey shrew,
34 ringtail, CRLF and nesting raptors) due to lighting effects from the residential area at the
35 Corporation Yard. The project would result in preservation of 4.25 acres of Monterey pine forest
36 adjacent to the Corporation Yard residential area and 17.1 acres in Area F-3; both are adjacent to the
37 HHNHA. In concept, the proposed preservation of such areas around the HHNHA substantially
38 offsets the indirect effects of the project. However, mitigation measures identified in the EIR are
39 required to formalize dedication of these adjacent areas, implement resource management plans for
40 preservation areas for the adjacent areas, and manage indirect effects within the HHNHA due to
41 increased trail use and lighting.

1 Special-Status and Rare Plants

2 The Proposed Project would result in significant impacts to a several federal- and state-listed and
3 other special-status plant species before mitigation.

4 **Yadon's Piperia.** Direct and indirect effects on Yadon's piperia, which is federally listed as
5 endangered, would occur primarily as a result of residential development. The project would result
6 in the removal of up to 6 acres of occupied habitat and remove approximately 4,500 plants. The
7 applicant has proposed to preserve extensive areas of occupied habitat (125 acres including an
8 estimated 123,000 total plants, which is 94% of the 134 acres of occupied Yadon's piperia habitat in
9 the project area). In concept, the proposed preservation of such extensive areas of habitat
10 substantially offsets the direct and indirect effects of the project. However, mitigation measures
11 identified in the EIR are required to formalize dedication of these areas and implement resource
12 management plans for preservation areas for the benefit of Yadon's piperia.

13 **Gowen Cypress.** The project could result in the removal or disturbance of up to 16 individual
14 Gowen cypress, which is federally listed as threatened. Implementing mitigation measures
15 described in the EIR would require the applicant to restore habitat at the HHNHA, and ensure that
16 preservation areas are effectively managed for the benefit of this species in order to preserve the
17 Gowen cypress population.

18 **Pacific Grove Clover.** The project would eliminate one occurrence of Pacific Grove clover, a state-
19 listed rare species that could be considered endangered, at Collins Field from relocation of the
20 driving range. Additionally, a second occurrence at Indian Village could be indirectly affected by
21 proposed adjacent residential subdivisions by changing the hydrology, introducing non-native plant
22 species for landscaping, and increased recreational access. Implementation of Mitigation Measures
23 identified in the EIR would either require redesign of the proposed driving range to avoid Pacific
24 Grove clover, or would require establishment or enhancement of an off-site area of occupied habitat
25 for this species.

26 **Pine Rose.** The project could affect pine rose, a state-listed rare species, because it is located in
27 areas proposed for residential development. Pine rose is also located in several preservation areas.
28 Implementing mitigation measures in the EIR would require minimization of impacts to this species.

29 **Hickman's Potentilla.** Hickman's potentilla is currently only known to exist at the Indian Village
30 and at a second location in San Mateo County. The occurrence at Indian Village could be indirectly
31 affected by proposed adjacent residential subdivisions due to changes in hydrology, introduction of
32 non-native plant species for landscaping, and increased recreational access. Implementation of
33 mitigation measures identified in the EIR would require avoidance of hydrological effects and
34 expansion of existing protection and management of the Indian Village occurrence.

35 California Red-Legged Frog

36 The proposed project would not result in the removal of any aquatic habitat for the CRLF (a
37 federally listed threatened species), but may result in mortality of individuals during construction,
38 would remove upland habitat, and could indirectly degrade CRLF habitat due to project runoff. The
39 project would also result in the preservation of CRLF habitat in certain areas. In concept, the
40 proposed preservation of such areas substantially offsets the direct and indirect effects of the
41 project. However, implementation of mitigation measures identified in the EIR are required to
42 formalize dedication of these areas, implement resource management plans for preservation areas

1 for the benefit of CRLF, limit construction period impacts, and provide additional and enhanced
2 compensatory frog breeding habitat.

3 **Water Supply**

4 The water supply situation on the Monterey Peninsula is complex. The majority of the existing
5 public water supply has been provided by California-American Water Company (Cal-Am) from two
6 sources: (1) the Carmel River alluvial aquifer and (2) the Seaside aquifer. The State Water Resources
7 Control Board (SWRCB) is requiring Cal-Am to cease extracting water from the Carmel River by
8 2017³, and the Seaside aquifer is oversubscribed and Cal-Am is required to reduce its withdrawals
9 from this source as well. The regional water supply project (Regional Project) (or an equivalent),
10 whose principal element is a desalination plant, has completed environmental review and been
11 approved by the California Public Utilities Commission, and is planned to be completed by 2016 to
12 replace the water that Cal-Am will no longer be able to withdraw from the Carmel River and the
13 Seaside Aquifer. However, as discussed in Section 3.12, Water Supply and Demand, the Regional
14 Project, although approved by the CPUC, is somewhat uncertain given unresolved issues concerning
15 permits from the California Coastal Commission, costs, and governance, and may be delayed or
16 possibly replaced by an alternative project. Alternatives to the Regional Project are currently being
17 proposed, but none of them have completed environmental review and are thus speculative at this
18 time.

19 The applicant has previously funded a Recycled Water Project that treats wastewater to provide an
20 irrigation source for golf courses and other large landscaped areas within the Del Monte Forest in
21 order to completely replace the use of potable water for these large irrigation uses. The applicant
22 derived a water entitlement for approximately one-third of the reduction in water use. The applicant
23 proposes to utilize a portion of this water entitlement for the proposed project.

24 The proposed project would create an estimated demand for water of up to 135 AFY in an average
25 year. The project's water demand would represent an increase in water use above the 2011 existing
26 conditions, but less than the remaining entitlement amount, meaning that Cal-Am can provide water
27 to the project from the Carmel River through 2016. After 2016, the project could be supplied by
28 water from either the Carmel River or the Regional Project (or an alternative); however, but given
29 the current uncertain nature of regional water supplies, the additional project water demand could
30 intensify water supply shortfalls and potential water rationing starting in 2017, if the Regional
31 Project or its equivalent is not built by then. The project would directly and indirectly contribute to
32 the need for regional water supply development which would in turn have secondary significant
33 impacts to the environment. The project's demand would also increase withdrawals from the
34 Carmel River through 2016 which would be a significant impact on the biological resources of the
35 Carmel River due to the cumulative effects of withdrawals on river resources. After 2017, the project
36 would not affect the biological resources of the Carmel River as Cal-Am's withdrawals are limited by

³ In October 2009, the SWRCB issued Order WR-2009-0060, a cease and desist order (CDO), which prescribes a series of significant cutbacks to Cal-Am's pumping from Carmel River from 2010 through December 2016. If a new water supply cannot be built by the end of 2016, the California Public Utilities Commission (CPUC), which regulates Cal-Am as a water utility, may require water rationing and/or a moratorium on new water permits for construction/remodels. Customers in Del Monte Forest using an entitlement from the Pebble Beach Wastewater Reclamation Project (including the proposed project) are not subject to the moratorium, but would be subject to any rationing program that affects the Cal-Am water system. Lawsuits have been filed challenging the CDO, and proceedings are pending in Santa Clara Superior Court. Ongoing litigation is not anticipated to be resolved until late 2011 (MPWMD 2011).

1 State Water Resources Control Board orders and the project demand would not change that amount
2 of withdrawals.

3 **Traffic**

4 The proposed visitor-serving development and residential subdivisions would bring more people
5 into Del Monte Forest and add traffic to intersections within Del Monte Forest and the immediate
6 vicinity. The project includes roadway improvements at the SR 1/SR 68/17-Mile Drive intersection
7 and four internal intersections. There would be a minor increase in traffic at the Del Monte Forest
8 gates that would not create a significant impact

9 However, traffic operations at the following locations outside the Del Monte Forest would decrease
10 from acceptable levels of service to unacceptable levels or would worsen existing unacceptable
11 levels of service, resulting in significant impacts:

- 12 • SR 68/Skyline Forest Drive intersection.
- 13 • SR 68/Carmel Hill Professional Center intersection.
- 14 • SR 1/Ocean Avenue intersection.
- 15 • SR 1 northbound on-ramp merge from SR 68 (west).
- 16 • SR 1 from Munras Street to Fremont Street.
- 17 • SR 1 from Fremont Street to Fremont Boulevard.
- 18 • SR 1 north of SR 156.
- 19 • SR 68 west of Skyline Forest Drive.
- 20 • SR 68 east of Olmsted Road.
- 21 • SR 68 east of Laguna Seca.
- 22 • SR 156 from SR 1 to US 101.

23 Improvements to the intersections, on-ramp, and various parts of SR 1, SR 68, and SR 156 would be
24 required to reduce this impact to a less than significant level, and the applicant would be required to
25 pay a fair-share contribution to these improvements. The impacts would remain significant and
26 unavoidable during the interim period between when the impact occurs and when the improvement
27 is actually built. This impact would also remain significant and unavoidable if sufficient funds are
28 not derived from other sources or if fair-share fees for this mitigation are instead concentrated to
29 pay for other proposed mitigation.

30 Construction-related traffic is discussed below.

31 **Construction Disruption**

32 The proposed project would result in construction-related traffic, dust, and noise, as summarized
33 below.

34 **Construction Traffic.** Construction traffic could impact traffic flow on adjacent streets and
35 aggravate the operations of intersections previously identified as deficient. Mitigation identified
36 includes scheduling truck trips to comply with the Del Monte Forest Architectural Board Guidelines,

1 development and implementation of a traffic control plan, review and approval for construction
2 truck traffic routes from Monterey County and include the routes in all contracts, and
3 implementation of the SR 1/SR 17/17-Mile Drive improvements early in the overall construction
4 schedule.

5 **Construction Dust.** Construction of the proposed project would result in PM 10 emissions and
6 fugitive dust from earth moving and site grading, construction worker vehicles, and mobile and
7 stationary construction equipment exhaust. Mitigation has been identified, including: using after-
8 market emissions control technology on on-road and off-road construction equipment to reduce
9 diesel emissions, fugitive dust controls, and implementing measures to reduce construction-related
10 exhaust emissions as recommended by MBUAPCD.

11 **Construction Noise.** Construction of the proposed project would result in exposure of outdoor
12 activity areas of noise-sensitive land uses at certain locations to construction noise greater than 85
13 dB at a distance of 50 feet during construction, under a worst case assumption. Mitigation has been
14 identified including; limits on work hours, location of equipment and use of buffers and barriers, use
15 of sound control devices, shielding/shrouding of impact tools, machinery management, truck
16 routing, a noise complaint response/tracking program, and additional measures as identified as
17 necessary to comply with the County's noise ordinance.

18 Summary of Environmental Impacts and Mitigation 19 Measures of the Proposed Project

20 The impacts of the proposed project, identified mitigation, and significance conclusions are
21 discussed in detail in Chapter 3. Table ES-3, at the end of this chapter, summarizes the impacts,
22 mitigation measures, and levels of significance identified in this document by resource topic.
23 Following is a brief discussion of significant impacts by resource topic, followed by a list of the
24 significant and unavoidable impacts.

25 Significant Impacts by Resource Topic

26 **Aesthetics.** The proposed project would change certain portions of existing views within Del Monte
27 Forest. It would degrade the views where new development is visible from 17-Mile Drive (including
28 views of residential development in Area F-2 and the Corporation Yard), and it would degrade the
29 visual character and quality and introduce light and glare at some development sites. These impacts
30 would be less than significant with implementation of the mitigation measures described in Section
31 3.1, Aesthetics, of Chapter 3 Environmental Setting, Impacts, and Mitigation Measures.

32 **Air Quality.** The proposed project would result in increased emissions of priority pollutants and
33 dust during construction and operation, as well as exposure of new sensitive receptors (residents in
34 Area U) to odor from operation of the Equestrian Center. All but one of the impacts would be less
35 than significant with implementation of the mitigation measures described in Section 3.2, Air
36 Quality, of Chapter 3. Impact AQ-C1, which identifies a short-term increase in PM10 emissions due
37 to grading and construction, would not be reduced to a less-than-significant level. Project elements
38 that would result in substantial excavation at the development site include: Pebble Beach Driving
39 Range Relocation from Area V to Collins Field, Area M Spyglass Hill New Resort Hotel (Option 1) or
40 Area M New Residential Lots (Option 2), and Residential Lot Subdivision at the Corporation Yard.

1 **Biological Resources.** The proposed project would result in loss of sensitive habitat (e.g., Monterey
2 pine forest and small areas of seasonal wetlands), special-status plants (e.g., Yadon's piperia and
3 other species) and special-status wildlife habitat (e.g., California red-legged frog and other species).
4 Monterey pine forest is affected by most project elements, but the primary effects are due to
5 residential development. Impacts on plants, wildlife, and seasonal wetlands and other waters are
6 also primarily due to residential development. The impacts would be less than significant with
7 implementation of the mitigation measures described in Section 3.3, Biological Resources; however,
8 the project would still result in a net reduction in the acreage of Monterey pine forest and of Yadon's
9 piperia habitat and other biological resources, even with mitigation.

10 **Climate Change.** The proposed project would generate GHG emissions and contribute to cumulative
11 greenhouse gas impacts. The impacts would be less than significant with implementation of the
12 mitigation measures described in Section 3.4, Climate Change.

13 **Cultural Resources.** The proposed project would not result in degradation of known significant
14 cultural or paleontological resources, but it could disrupt undiscovered cultural and paleontological
15 resources. The impacts would be less than significant with implementation of the mitigation
16 measures described in Section 3.5, Cultural Resources.

17 **Geology, Seismicity, and Soils.** The proposed project could result in exposure of structures and
18 people to seismic hazards, unstable soils, and hazardous materials and could increase erosion and
19 sedimentation. The impacts would be less than significant with implementation of the mitigation
20 measures described in Section 3.6, Geology, Seismicity, and Soils.

21 **Hydrology and Water Quality.** The proposed project would result in alteration of drainage
22 patterns, increased impervious surfaces and stormwater runoff, and water quality degradation from
23 construction and sedimentation and contaminants in stormwater. The impacts would be less than
24 significant with implementation of the mitigation measures described in Section 3.7, Hydrology and
25 Water Quality, of Chapter 3.

26 **Land Use and Recreation.** The proposed project could result in incompatible land uses where
27 residential use in Area U is proposed adjacent to the existing equestrian center. The proposed
28 project could result in some inconsistencies with the land use designations and zoning contained
29 within the existing LCP; however, these inconsistencies would be resolved by the LCP Amendment,
30 once certified by the CCC. The impacts would be less than significant with implementation of the
31 mitigation measures described in Section 3.8, Land Use and Recreation and conditions of approval.

32 **Noise and Vibration.** The proposed project would result in increased noise and vibration during
33 construction. Additionally, the ventilation equipment for the underground parking structures would
34 generate operational noise. Traffic noise increases would not be significant. Noise impacts overall
35 would be less than significant with implementation of the mitigation measures described in Section
36 3.3, Noise and Vibration.

37 **Public Services and Utilities.** The proposed project would expose people and structures to risk of
38 wildland fire where proposed residential development is adjacent to undeveloped open space, most
39 notably the Corporation Yard. The impacts would be less than significant with implementation of the
40 mitigation measures described in Section 3.10, Public Services and Utilities.

41 **Transportation and Circulation.** The proposed project would result in construction-related traffic
42 that would temporarily increase traffic volumes that would affect LOS and intersection operations.
43 The project would add substantial traffic to intersections within and adjacent to Del Monte Forest
44 and adjacent highway ramps, causing the levels of service to worsen, in certain locations from

1 acceptable to unacceptable. The proposed project would contribute to cumulative traffic on several
2 highways outside Del Monte Forest that already operate at unacceptable LOS. Implementation of
3 mitigation measures described in Section 3.11, Transportation, would reduce identified significant
4 impacts, but impacts related to construction traffic and impacts related to certain roadways outside
5 the Del Monte Forest where mitigation is payment of fair-share impact fees would remain significant
6 after mitigation.

7 **Water Supply and Demand.** As described in Section 3.12, Water Supply and Demand, the proposed
8 project would generate demand for water. The project's water demand would be an increase in
9 demand over 2011 existing conditions but would be less than the Applicant's remaining unused
10 entitlement and would have a less than significant water supply impact through 2016. However,
11 starting in 2017, servicing the project demand could intensify water shortages in the event the
12 Regional Project (or an equivalent) is not completed by the end of 2016, and could worsen potential
13 water rationing for other water users in 2017 and after which is a significant and unavoidable
14 impact. In addition, the project's water demand would directly or indirectly contribute to the need
15 for new regional water supply infrastructure. The project would also increase withdrawals from the
16 Carmel River compared to 2011 existing conditions through the end of 2016, which is a significant
17 and unavoidable impact on river-dependent biological resources. After 2016, Cal-Am withdrawals
18 from the Carmel River would be sharply curtailed and the project demand would not change the
19 amount of allowed withdrawals.

20 Significant and Unavoidable Impacts

21 Impacts determined to be significant and unavoidable include the following: air quality, traffic, and
22 water supply impacts. Mitigation has been identified to reduce impacts, but not to a less than
23 significant level. These impacts are also discussed under "Key Issues" above.

24 Air Quality

- 25 • AQ-C1. The proposed project would result in a short-term increase in PM10 emissions due to
26 grading and construction.

27 Traffic

- 28 • TRA-A1. Construction traffic would result in short-term increases in traffic volumes that would
29 affect level of service and intersection operations.
- 30 • TRA-C1. The proposed project would add substantial traffic to certain intersections along SR 68
31 or SR 1 to decrease from acceptable levels of service to unacceptable levels or to worsen existing
32 unacceptable levels of service.
- 33 • TRA-C2. The proposed project would add traffic to regional highway sections that are projected
34 to operate at unacceptable levels of service.
- 35 • TRA-C3. The proposed project would add traffic to a SR 68 highway ramp projected to operate
36 at an unacceptable level of service.

37 Water Supply

- 38 • WSD-A1. The project's water demand would represent an increase in water use above the 2011
39 existing conditions, but would be within the Applicant's current entitlement and could be legally
40 supplied by Cal-Am through 2016. However, given the current uncertain nature of regional

- 1 water supplies, the additional project water demand could intensify water supply shortfalls and
2 rationing starting in 2017 if the Regional Water Supply Project or its equivalent is not built by
3 then.
- 4 • WSD-B1. Local water infrastructure is included to serve the proposed project, and existing
5 supply infrastructure outside the project area is adequate to serve the project through 2016.
6 The Regional Project (or its equivalent) will need to be built by 2017 to serve existing demand
7 and the increase in demand from the project; regional water supply infrastructure and
8 operations will have secondary environmental impacts.
 - 9 • WSD-C1. The project's water demand would result in increased withdrawals from the Carmel
10 River through 2016 and thus would have a significant and unavoidable impact on Carmel River
11 biological resources. After 2017, SWRCB mandated reductions in Cal-Am withdrawals from the
12 Carmel River will not be changed by the project demand.

13 Alternatives to the Proposed Project

14 CEQA Guidelines require that an EIR describe and evaluate a reasonable range of alternatives to the
15 proposed project that would feasibly attain most of the project's basic objectives, but that would
16 avoid or substantially lessen any identified significant environmental impacts of the project. An EIR
17 must consider a reasonable range of potentially feasible alternatives that will foster informed
18 decision making. To develop a reasonable range of alternatives to the project for analysis, the
19 County considered the following:

- 20 • Project Objectives (described above).
- 21 • Significant Impacts of the Proposed Project (described above).
- 22 • Alternatives Suggested during the Scoping Process (described below).

23 The scoping comments included the following suggestions for analyzing project alternatives:

- 24 • Underground parking garage for employees at The Inn at Spanish Bay rather than a surface
25 parking lot in Area B (analyzed in the EIR).
- 26 • Roundabout at the SR 68/SR 1 intersection off-ramp (analyzed in the EIR).
- 27 • New road to alleviate traffic on upper Sunridge Road near the SR 1 gate (not analyzed in the EIR
28 because it does not meet any project objectives nor is an alternative to any project element).

29 Alternatives Considered

30 The alternatives considered for evaluation are identified in Table ES-4. They include alternatives
31 that were suggested during public scoping and that reduce significant impacts. Because it was
32 determined there were no feasible alternatives to completely avoid significant and unavoidable
33 impacts, the alternatives selected for analysis focus on reducing impacts to biological resources, air
34 construction quality, construction and operational traffic, and water demand. The County also
35 considered alternatives that require meeting the County's affordable housing requirements through
36 construction of inclusionary units inside the Del Monte Forest.

37 The alternatives listed in Table ES-4 were initially evaluated for their feasibility and their ability to
38 achieve most of the project objectives while avoiding, reducing, or minimizing significant impacts

1 identified for the proposed project. The list of alternatives is separated into those that are analyzed
 2 in the Draft EIR and those that were considered but dismissed from further analysis in the Draft EIR.

3 **Table ES-4. Summary of Alternatives Considered for Evaluation**

Alternative	Meets Most Project Objectives?	Feasible?	Further Reduces Significant Impacts^a?	Reduces Impacts¹ to Less than Significant?	Creates Additional Significant impacts?
Analyzed in Draft EIR					
1A. Clustered Development Option A	Yes	Yes	Yes	No	No
1B. Clustered Development Option B	Yes	Yes	Yes	No	No
1C. Clustered Development Option C	Yes	Yes	Yes	Yes	No
2A. Reduced Development Option A	Yes	Yes	Yes	No	No
2B. Reduced Development Option B	Yes	Yes	Yes	No	No
2C. Reduced Development Option C	Yes	Yes	Yes	Yes	No
3. Driving Range Redesign	Yes	Yes	Yes	Yes	No
4. Spanish Bay Underground Employee Parking	Yes	Yes	Yes	No	Yes
5. Roundabout at the SR 68/SR 1/ 17-Mile Drive Interchange	Yes	Yes	No	No	No
Alternatives Considered but Dismissed from Further Analysis					
Alternative A—New Access Road near SR 1 Gate	No	No	No	No	Yes
Alternative B—Residential Development at Sawmill Gulch	Yes	No	No	No	Yes
Alternative C—No Residential Development	No	Yes	Yes	Yes	No
Alternative D – No Visitor-Serving Development	No	Yes	Yes	Yes	No
Alternative E – Reduced Visitor-Serving Development	No	Yes	Yes	No	No

^a Reduces at least one (but not all) significant impacts.

4

5 **Alternatives Evaluated**

6 The characteristics of Alternatives 1 to 5 are described briefly below and in Table ES-5. The ability of
 7 these alternatives to substantially lower the significant impacts identified for the proposed project is
 8 summarized below. Table ES-6 includes a comparison of the alternative impacts to the proposed
 9 project. For additional detail, refer to Chapter 5, Alternatives.

10 **Alternative 1—Clustered Development Options**

11 Multiple options exist to cluster residential development to reduce the level of impact on biological
 12 resources. Three options (1A, 1B and 1C) were developed to reduce the level of impact on Monterey
 13 pine forest and Yadon’s piperia. All three options have the same visitor-serving component as the

Table ES-5. Summary of Characteristics for Alternatives Evaluated in the Draft EIR

Alternative ¹	VSC Units	Residential Units			Alternative Description	
		Total Residential Units in DMF	Market Rate Residential Units in DMF	Inclusionary Housing	Notes	Lot Modifications
Proposed Project	195	90	90	In Lieu Fee	Refer to Ch 2, Project Description for description of residential lot subdivisions and other project elements.	
Alternative 1: Clustered Development						
1A: Clustered Development to Avoid Impacts to Areas J and K	195	108	90	18 units In Corporate Yard (MDR)	Preserve Areas J and K by concentrating residential development in Areas F-2 and I-2 and change to MDR, Change Corp Yard LDR (10 units) to MDR.	Add 6 lots to F-2 and 7 lots to I-2. F-2: Split lots 3, 4, 11, 12, 13, 14 I-2: Split lots 7, 8, 9, 13, 14, 15, 16
1B: Clustered Development to Avoid Impacts to Areas K and L	195	108	90	18 units In Corporate Yard (MDR)	Preserve Area K and L by concentrating in F-2 and I-2. Change F-2 and I-2 to MDR. Change Corp Yard LDR (10 units) to MDR.	Add 9 lots each to F-2 and I-2. F-2: Split lots 3, 4, 6, 7, 10-14 I-2: Split lots 7-11, 13-16
1C: Clustered Development to Avoid Impacts to Yadon's Piperia	195	108	90	18 units In Corporate Yard (MDR)	Avoids YP entirely by focusing growth away from YP at each site as feasible and minor relocation of lots. Eliminate 6 lots in Area K and relocate to Area L. Change Corp Yard LDR (10 units) to MDR.	F-2: Modify lots 1, 2, 5, 6, 8, 9, 10, 11, 15 to avoid YP; eliminate Lot 16, and Split Lot 4 I-2: Delete lots 1, 3, 4, 5, 6, 12; Split lots 2, 7, 8, 9, 13, 14 J: Delete lots 1 and 5; split lots 2, 3, modify Lot 5 to avoid YP K: Modify Lot 1 and 5 to avoid YP; delete Lots, 2-4, 6-8. L: Split Lots 1-5, 8 U: Modify Lot 7 to avoid YP V: Delete Lot 11, modify Lot 10 to avoid YP; reconfigure to add new lot 11 but avoid all YP. Modify special events center to avoid YP.
Alternative 2: Reduced Development						
2A: Reduced Development to Avoid Impacts to Areas J and K	195	93	77	16 units In Corporate Yard (MDR)	Preserve Area J and K by eliminating units. Change Corp Yard LDR (10 units) to MDR.	Area J and K - Delete all 13 lots
2B: Reduced Development to Avoid Impacts to Areas K and L	195	87	72	15 units In Corporate Yard (MDR)	Preserve Area K and L by eliminating units. Change Corp Yard LDR (10 units) to MDR.	Area K and L - Delete all 18 lots
2C: Reduced Development to Avoid Impacts to Yadon's Piperia	195	77	64	13 units In Corporate Yard (MDR)	Avoids YP entirely by deleting certain lots in Areas F-2, I-2, J, K, U and V. Change Corp Yard LDR (10 units) to MDR.	F-2: Delete lots 1, 2, 5, 6, 8, 9, 15, 16 I-2: Delete lots 1, 3, 4, 5, 6, 12 J: Delete lots 1, 4, 5 K: Delete all 8 lots U: Modify Lot 7 to avoid YP V: Delete Lot 11, modify Lot 10 to avoid YP. Modify special events center to avoid YP.
Alternative 3: Driving Range Redesign	195	90	90	In Lieu Fee	Redesign driving range (being relocated from Area V to Collins Field) to avoid Pacific Grove clover in northwest corner.	
Alternative 4: Spanish Bay Underground Employee Parking	195	90	90	In Lieu Fee	Relocate 290-space surface parking lot from Area B to underground at the Inn at Spanish Bay to reduce impacts to Monterey pine forest.	
Alternative 5: Roundabout at the SR 68/SR 1/17-Mile Drive Interchange	195	90	90	In Lieu Fee	Intersection modified to include two roundabouts instead of a traffic signal. A smaller single-lane roundabout would be located at the intersection of the SR 1 southbound on-ramp and 17-Mile Drive, and a larger roundabout would be located at the intersection of the SR 1 southbound off-ramp and SR 68 intersection.	

Notes: **DMF** = Del Monte Forest; **LDR** = Low Density Residential; **MDR** = Medium Density Residential; **VSC** = Visitor-Serving Commercial

¹ The proposed project presented in the first row and all alternatives proposed assume Option 1 New Resort Hotel would be implemented in the Area M Spyglass Hill area, which includes construction of a new resort hotel instead of 10 residential lots.

Resource Topic	Impacts of Proposed Project	Impacts of Alternatives								
		1. Clustered Development Options			2. Reduced Development Options			3. Driving Range Redesign	4. Spanish Bay Underground Employee Parking	Alternative 5: Roundabout at the SR 68/SR 1/17-Mile Drive Interchange
		1A: Option A	1B: Option B	1C: Option C	2A: Option A	2B: Option B	2C: Option C			
Aesthetics	<ul style="list-style-type: none"> Adverse change in views; visual degradation; increased light and glare. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>more</u> for views and light in Areas F-2, I-2 and Corporate Yard and <u>less</u> in Areas J and K. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>more</u> for views and light in Areas F-2, I-2 and Corporate Yard and <u>less</u> in areas K and L. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>more</u> for views and light in Areas F-2, I-2 and Corporate Yard. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>more</u> for views and light in Corporate Yard and <u>less</u> in Areas J and K. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>more</u> for views and light in Corporate Yard and <u>less</u> in Areas K and L. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>more</u> for views and light in Corporate Yard. 	<ul style="list-style-type: none"> Same impacts. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>less</u> for new light/tree removal in Area B. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>less</u> because fewer trees removed and less retaining wall structure.
Air Quality	<ul style="list-style-type: none"> Construction-related PM10. Construction-related diesel; odors from equestrian. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>less</u> near Areas J and K and slightly <u>more</u> near F-2, I-2 and Corporate Yard for emissions from construction. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>less</u> near Areas K and L and slightly <u>more</u> near F-2, I-2 and Corporate Yard for emissions from construction. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>more</u> near Corporate Yard or emissions from construction. 	<ul style="list-style-type: none"> Similar impacts. <u>Less</u> near Areas J and K and slightly <u>more</u> near Corporate Yard for emissions from construction. 	<ul style="list-style-type: none"> Similar impacts. <u>Less</u> near Areas K and L and slightly <u>more</u> near Corporate Yard for emissions from construction. 	<ul style="list-style-type: none"> Similar impacts. <u>Less</u> in Areas F-2, I-2, J, K and slightly <u>more</u> near Corporate Yard for emissions from construction. 	<ul style="list-style-type: none"> Same impacts. 	<ul style="list-style-type: none"> Similar impacts. <u>More</u> at SBI for construction-related emissions. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>less</u> because less grading but offset by slightly larger disturbance area.
Biological Resources	<ul style="list-style-type: none"> Adverse effects and loss of sensitive habitat and special status plants and wildlife. 	<ul style="list-style-type: none"> <u>Less</u> impact to MPF, YP, streams and wetlands and CRLF habitat. 	<ul style="list-style-type: none"> <u>Less</u> impact to MPF, YP, streams and wetlands and CRLF habitat. 	<ul style="list-style-type: none"> <u>Less</u> impact to MPF, YP, streams and wetlands and CRLF habitat. Yadon's piperia 	<ul style="list-style-type: none"> <u>Less</u> impact to MPF, YP, streams and wetlands and CRLF habitat. 	<ul style="list-style-type: none"> <u>Less</u> impact to MPF, YP, streams and wetlands and CRLF habitat. 	<ul style="list-style-type: none"> <u>Less</u> impact MPF, YP, streams and wetlands and CRLF habitat. Yadon's piperia 	<ul style="list-style-type: none"> Similar impacts overall Less impacts to Pacific Grove clover 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> to Monterey pine forest. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> because fewer Monterey pine trees removed but need to evaluate small unsurveyed areas.
Climate Change	<ul style="list-style-type: none"> Contribute to climate change impacts. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> contribution. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> contribution. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> contribution. 	<ul style="list-style-type: none"> Same impacts. 	<ul style="list-style-type: none"> Slightly <u>more</u> impact during construction 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> contribution because less grading and less idling due to shorter traffic queues.
Cultural Resources	<ul style="list-style-type: none"> Potential disturbance to unknown resources from excavation and grading 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> excavation from residential development 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> excavation from residential development 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> excavation from residential development 	<ul style="list-style-type: none"> Same impacts. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> contribution during construction. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> excavation but need to evaluate small unsurveyed areas.
Geology and Soils	<ul style="list-style-type: none"> Potential structural damage from seismic hazards and unstable soils/slopes; increased erosion and sedimentation; exposure to hazardous materials at Corp Yard 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> due to 18 more units in Corp Yard. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> due to 18 more units in Corp Yard. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> due to 18 more units in Corp Yard. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> exposure to soil hazards due to less residential. Slightly <u>more</u> due to more units in Corps Yard. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> exposure to soil hazards due to less residential. Slightly <u>more</u> due to more units in Corps Yard. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> exposure to soil hazards due to less residential. Slightly <u>more</u> due to more units in Corps Yard. 	<ul style="list-style-type: none"> Same impacts. 	<ul style="list-style-type: none"> <u>More</u> impact due to increase in potential for structural failure with additional underground structure and because in area of shallow groundwater and weak surrounding deposits 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>less</u> because less grading but offset by slightly larger disturbance area.

Resource Topic		Impacts of Alternatives								
		1. Clustered Development Options			2. Reduced Development Options			3. Driving Range Redesign	4. Spanish Bay Underground Employee Parking	Alternative 5: Roundabout at the SR 68/SR 1/17-Mile Drive Interchange
		1A: Option A	1B: Option B	1C: Option C	2A: Option A	2B: Option B	2C: Option C			
Hydrology and Water Quality	<ul style="list-style-type: none"> Alteration of drainage patterns; increased impervious surface; degraded water quality 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> local impact due to 18 more units in Corp Yard 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> local impact due to 18 more units in Corp Yard 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> local impact due to 18 more units in Corp Yard 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> due no residential development in Areas J and K. Slightly <u>more</u> due to more units in Corp Yard 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> due no residential development in Areas K and L. Slightly <u>more</u> due to more units in Corp Yard 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> due to removing lots in several areas. Slightly <u>more</u> due to more units in Corp Yard 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> due more underground construction at SBI 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>less</u> because less grading but offset by slightly larger disturbance area.
Land use and Recreation	<ul style="list-style-type: none"> Potential incompatibility of new residential by equestrian center Consistency determination 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Same impacts. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Same impacts. Additional bicycle paths beneficial.
Noise and Vibration	<ul style="list-style-type: none"> Construction related noise and vibration; operation noise at PBL parking structure 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> construction noise to residents near Area J and slightly <u>more</u> to residents near Area I-2. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> construction noise to residents near Area I-2. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> construction noise to residents near Area J. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Same impacts. 	<ul style="list-style-type: none"> Similar impact. <u>More</u> construction related noise and vibration and operation noise from parking ventilation fans at SBI 	<ul style="list-style-type: none"> Similar impact.
Public Services and Utilities	<ul style="list-style-type: none"> Exposure of people/structures to risk of wildland fire. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Same impacts. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Same impacts.
Transportation	<ul style="list-style-type: none"> Construction related traffic increases at intersections; operation related traffic to regional highways Increased traffic at intersections within DMF and highway ramps; potential design hazards from new roadways; increased risk to bicyclists 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> local traffic due to 18 more residences at Corporate Yard but same regional traffic. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> local traffic due to 18 more residences at Corporate Yard but same regional traffic. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> local traffic due to 18 more residences at Corporate Yard but same regional traffic. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> local traffic due to more residents in Del Monte Forest. Less regional traffic due to less residential units. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> local and regional traffic 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> local and regional traffic 	<ul style="list-style-type: none"> Same impacts. 	<ul style="list-style-type: none"> Similar impact. <u>More</u> traffic within SBI 	<ul style="list-style-type: none"> Similar impact. <u>Less</u> impacts from shorter queues and less backup but requires Caltrans design exception. Additional study required to determine additional improvements required.

		Impacts of Alternatives								
Resource Topic	Impacts of Proposed Project	1. Clustered Development Options			2. Reduced Development Options			3. Driving Range Redesign	4. Spanish Bay Underground Employee Parking	Alternative 5: Roundabout at the SR 68/SR 1/17-Mile Drive Interchange
		1A: Option A	1B: Option B	1C: Option C	2A: Option A	2B: Option B	2C: Option C			
Water Supply and Demand	● Demand for potable water and infrastructure extension would be accommodated through 2016. If Regional Project not built, project would intensify potential rationing. Project contributes to need for Regional Project, which has secondary impacts	● Similar impact.	● Similar impact.	● Similar impact.	● Less water demand since less residential development.	● Less water demand since less residential development.	● Less water demand since less residential development.	● Same impacts.	● Similar impact.	● Similar impact. Slightly more water demand for additional landscaping with roundabout.

Note: These are the impacts overall, considering all the impacts combined and the wors

- = Significant unavoidable impact.
- ⊙ = Significant impact that can be reduced to less than significant.
- = Less-than-significant impact.
- = No impact or not applicable to the development site.

1 proposed project (with Area M Spyglass Hill New Resort Hotel [Option 1]) and the same
2 transportation improvements and preservation areas. Unlike the proposed project (whereby the
3 applicant contributes an in-lieu fee for affordable housing), these three options include an additional
4 18 inclusionary housing units in the Corporation Yard to comply with the County's affordable
5 housing program, which increases the total residential development within Del Monte Forest to 108
6 residential units (90 market-rate and 18 inclusionary).

7 Table ES-5 includes a summary of the alternative characteristics for each option, including the total
8 number of residential units (market rate and inclusionary), a description of how the residential
9 units would be clustered, and the biological resource impacts being avoided or reduced. Table ES-6
10 includes a comparison of the alternative impacts to the proposed project.

11 All three Alternative 1 options would meet most of the project objectives, but the lots in certain
12 subdivisions would be significantly reduced in size and therefore would not meet the specific
13 project objectives for large lots.

14 Because all three Alternative 1 options have the same number of market-rate units, visitor-serving
15 development, and infrastructure as the proposed project, the primary differences in impacts have to
16 do with the arrangement of residential units (clustering) and the addition of 18 units of inclusionary
17 housing at the Corporation Yard site. All three options would have lower impacts to biological
18 resources, in particular to Monterey pine forest and Yadon's piperia as well as other resources. The
19 impacts of housing at the Corporation Yard location would be higher than the project, but it is
20 expected that indirect impacts to increased trail use within HHNHA could be managed using
21 mitigation similar to that proposed for the proposed project. Impacts to resources other than
22 biological resources would be mostly similar to the proposed project.

23 **Alternative 2—Reduced Development Options**

24 Multiple options exist to reduce the development level to reduce the level of impact on biological
25 resources. Three options (2A, 2B and 2C) were developed to reduce the level of impact on Monterey
26 pine forest and Yadon's piperia through reduction of the number of market-rate lots. Similar to
27 Alternative 1, all three options have the same visitor-serving component as the proposed project
28 under Option 1 (Area M Spyglass Hill New Resort Hotel) and the same transportation improvements
29 and preservation areas. Unlike the proposed project, these three Alternative 2 options include an
30 additional 13 to 16 inclusionary housing units in the Corporation Yard to comply with the County's
31 affordable housing program, instead of the applicant contributing an in-lieu fee. Because these
32 alternatives would have fewer market-rate residential lots, the requirements for inclusionary
33 housing units are also less than those of the proposed project. Therefore, under this alternative,
34 there would be 77 to 93 residential units (64 to 77 market-rate and 13 to 16 inclusionary).

35 Table ES-5 includes a summary of the alternative characteristics for each option, including the total
36 number of residential units (market rate and inclusionary), a description of how the residential
37 units would be clustered, and the biological resource impacts being avoided or reduced. Table ES-6
38 includes a comparison of the alternative impacts to the proposed project.

39 All three Alternative 2 options would meet all of the project objectives, including increasing the
40 number of residential lots, but they would not provide for as many lots as the proposed project
41 would provide. All three Alternative 2 options would not meet the specific project objective for large
42 lots at the Corporation Yard due to the addition of inclusionary units.

1 Because all three Alternative 2 options have fewer residential units than the proposed project, these
2 options would all lower impacts related to construction air quality overall, biological resources,
3 construction and operational traffic, and water supply. All three options would have substantially
4 lower impacts to biological resources, in particular to Monterey pine forest and Yadon's piperia as
5 well as other resources. The impacts of housing at the Corporation Yard location would be higher
6 than the project, but it is expected that indirect impacts to increased trail use within HHNHA could
7 be managed using mitigation similar to that proposed for the proposed project. Impacts to resources
8 other than biological resources, traffic, water supply and construction air quality would be mostly
9 similar to the proposed project.

10 **Alternative 3—Driving Range Redesign**

11 This alternative would redesign the relocated Pebble Beach Driving Range to avoid the 0.2-acre
12 habitat area with Pacific Grove clover in the far northwest corner of Collins Field near the proposed
13 tee box (refer to Figure 2-13 in Chapter 2, Project Description). The tee box would be relocated
14 elsewhere on site within the proposed development footprint. Entry into the area containing Pacific
15 Grove clover would be discouraged by a low fence installed around the perimeter with signage
16 indicating that the area is closed for the protection of a sensitive natural resource. The area would
17 be monitored annually to document the condition of the population and determine which factors are
18 affecting the population. The population would be maintained in perpetuity through the use of
19 adaptive management to compensate for factors adversely affecting the population and promoting
20 factors that benefit the population.

21 Table ES-5 includes a summary of the alternative characteristics, including the total number of
22 residential units (market rate and inclusionary). Table ES-6 includes a comparison of the alternative
23 impacts to the proposed project. Alternative 3 would meet all the project objectives.

24 The impacts of this alternative would be the same as the proposed project except that direct impacts
25 to Pacific Grove clover would be less than the proposed project.

26 **Alternative 4—Spanish Bay Underground Employee Parking**

27 This alternative would include a 285-space underground parking lot at The Inn at Spanish Bay, to
28 replace the proposed 285-space surface employee parking lot in Area B, to avoid impacts on
29 Monterey pine forest in Area B.

30 The underground parking lot would be located nominally under the tennis courts in approximately
31 the same location as the 443-space underground parking garage that was proposed as part of the
32 prior project and studied in the 2005 EIR. Underground parking would be available 24 hours daily.
33 The entry road would be realigned via a new driveway south of the underground parking structure.
34 Separate access to the residential portion of the site would be located east of the parking garage.
35 Paths would allow resident access to the tennis courts. Additional parking and circulation needs for
36 The Inn at Spanish Bay, including arrival and parking areas serving the existing Inn as well as
37 proposed new guestrooms and meeting rooms, would be reconfigured to provide visitor access and
38 service.

39 Table ES-5 includes a summary of the alternative characteristics, including the total number of
40 residential units (market rate and inclusionary). Table ES-6 includes a comparison of the alternative
41 impacts to the proposed project. Alternative 4 would meet all the project objectives.

1 The impacts of this alternative would be the same as the proposed project except that construction
2 of the underground parking lot would have greater construction air quality, noise, geology and soils
3 and disruption than construction of a surface parking lot. The underground parking lot would also
4 require likely noise mitigation for ventilation fans. This alternative would lower biological resource
5 impacts by a few acres by avoiding the disturbance of Monterey Pine Forest in the area south of the
6 Inn at Spanish Bay.

7 **Alternative 5—Roundabout at the SR 1/SR 68/17-Mile Drive Interchange**

8 This alternative was developed by the City of Monterey and has been included in this analysis upon
9 their request because it would result in better traffic conditions at this interchange than either the
10 proposed Phase 1B improvement or the RTP's Highway 68 Widening Project.

11 However, as described in Section 3.11, Transportation and Circulation, the Phase 1B improvement
12 included in the proposed project would substantially improve traffic conditions compared to a no
13 project condition. As a result, the roundabout is an alternative to this project element, but is not
14 necessary to address a significant impact of the project.

15 Under Alternative 5, all the project elements would be the same as those of the proposed project
16 except the SR 1/SR 68/17-Mile Drive Intersection Reconfiguration. Under Alternative 5, the
17 intersection would be modified to include two roundabouts instead of a traffic signal. A smaller
18 single-lane roundabout would be located at the intersection of the SR 1 southbound on-ramp and
19 17-Mile Drive, and a larger roundabout would be located at the intersection of the SR 1 southbound
20 off-ramp and SR 68 intersection (refer to Figure 5-1 in Chapter 5). Refer to Chapter 5 for a list of the
21 specific interchange modifications included for this alternative.

22 The footprint of the roundabout (Alternative 5) is similar to the footprint of the proposed project
23 modifications. Compared to the proposed project, Alternative 5 results in an increase in the
24 disturbed area to the east and west of the southbound off-ramp to accommodate the Class I bike
25 lane, and on the south side of the ramp lanes leading from SR 68 to the Pebble Beach gate. There
26 would be small decreases in the disturbed area at other locations (e.g., west side of the
27 northernmost portion of the southbound off-ramp, northwest of the corner of SR 68 and the Carmel
28 Hills Professional Center driveway, south side of SR 68 adjacent to Sunridge Road, east of the
29 southbound on-ramp and a small piece to the west of the southbound on-ramp). The retaining walls
30 required under Alternative 5 would be similar to the proposed project, except along the Sunridge
31 Road corridor where they are higher and longer with the proposed project to accommodate the
32 third eastbound lane.

33 Table ES-5 includes a summary of the alternative characteristics, including the total number of
34 residential units (market rate and inclusionary). Table ES-6 includes a comparison of the alternative
35 impacts to the proposed project. Alternative 5 would meet all the project objectives.

36 The impacts of this alternative would be the same as the proposed project except at the SR1 / SR
37 68/ 17-Mile Drive interchange. Construction of the roundabout would have similar impacts as the
38 proposed Phase 1B improvements included in the project, but somewhat less grading due to fewer
39 retaining walls, which would also have a lower aesthetic impact. The roundabout would have better
40 operational traffic level of service than the Phase 1B improvements and shorter queuing. However,
41 it should be noted that the Phase 1B and the currently proposed Highway 68 Widening Project
42 would also result in acceptable traffic conditions and queuing. As such, the roundabout is an

1 alternative to the Phase 1B improvements, but is not mandated as mitigation for project impacts on
2 traffic.

3 **Environmentally Superior Alternative**

4 Based on the assessment of environmental impacts for the feasible alternatives described above, the
5 environmentally superior alternative is the No Project Alternative, which would have lesser
6 significant adverse impacts than the proposed project, particularly as it relates to biological
7 resources, and would reduce, but not completely avoid the unavoidable impacts associated with air
8 quality, traffic, and water supply. It should be noted that the No Project Alternative would also not
9 result in the dedication of the proposed preservation areas. As noted above, the environmental
10 impact of one single-family dwelling unit per existing lot of record (perhaps as many as 41 units
11 overall, of which only 20 would be in areas considered ESHA with perhaps 8 acres of disturbance in
12 ESHA) with implementation of conditions through the permit review process, is expected to be less
13 than the 90 to 100 units included in the proposed project including 76 units in areas considered to
14 be mostly or entirely ESHA (Areas F-2, I-2, J, K, L, U, and V) with associated disturbance of sensitive
15 habitat over 40 acres. The No Project Alternative would result in fewer units than any action
16 alternative (77 to 108 units within the Del Monte Forest, depending on alternative) reducing traffic
17 and water supply impacts). While it is possible that foregoing formal dedication of conservation
18 easements for substantial areas within Del Monte Forest could leave the window open for more
19 extensive subsequent future development of these areas, such potential is not considered in this
20 determination.

21 If the No Project Alternative is selected as the environmentally superior alternative, the State CEQA
22 Guidelines require that an environmentally superior alternative among the other analyzed
23 alternatives be identified. Based on the assessment of environmental impacts above and
24 summarized in Table ES-6 and the analysis in Chapter 5, Alternatives, the environmentally superior
25 “action” alternative is Alternative 2C (Clustered Development Alternative C) because it reduces the
26 impacts on biological resources (Monterey pine forest and Yadon’s piperia, in particular), has lower
27 air quality impacts (due to less construction), less traffic and a lower water demand compared to the
28 other action alternatives (as well as the proposed project). This alternative would also reduce the
29 levels of impact related noise and water quality. This alternative would reduce but not eliminate any
30 of the significant unavoidable impacts of the proposed project.

31 **Summary of Prior Projects**

32 The following projects were previously proposed by PBC for buildout of their lands in the Del Monte
33 Forest.

34 **Pebble Beach Lot Program**

35 In 1992, PBC submitted applications, including Del Monte Forest Area Land Use Plan (LUP)
36 amendments and zoning changes, to build out the remaining vacant land in the Pebble Beach area of
37 Del Monte Forest (Pebble Beach Lot Program). The Pebble Beach Lot Program proposed 403
38 residential units on 685 acres, including a 34-unit Planned Unit Development (PUD); 53 low-cost
39 housing units; an 18-hole golf course, clubhouse and related facilities; and expansion of an existing
40 driving range.

1 **Refined Alternative 2**

2 In response to public/agency input and concern regarding the intensity of the proposed
3 development and the effect on the Monterey pine forest and other resources, PBC submitted three
4 additional applications with design changes to the original project proposal. These changes reduced
5 the total number of proposed housing units to 364, relocated some housing units to different areas,
6 and moved the golf course location from Area PQR to Area MNOUV. The new location of the golf
7 course required relocating the existing Equestrian Center to the Sawmill Gulch site near the city of
8 Pacific Grove. This revised proposal became known as Refined Alternative 2.

9 Both the Pebble Beach Lot program and Refined Alternative 2 were analyzed in a Final EIR (FEIR) in
10 1997. The project permits and FEIR were brought before the Monterey County Standard Subdivision
11 Committee in spring of 1999. A staff recommendation of certification of the FEIR and “approval” of
12 Refined Alternative 2 was made to the Monterey County Planning Commission in June 1999.

13 However, by August 1999, PBC was under new ownership, the project application was withdrawn,
14 and the FEIR was never certified.

15 **Del Monte Forest Preservation and Development Plan**

16 The Del Monte Forest Preservation and Development Plan was a subsequent project which was
17 represented on county-wide ballot in November 2000 as “Measure A” (The Del Monte Forest Plan:
18 Forest Preservation and Development Limitations). Measure A was supported by 63.5% of Monterey
19 County voters. Measure A included proposed changes to the Del Monte Forest Local Coastal Program
20 (LCP), including the LUP and zoning designations and policies, and identified areas within Del Monte
21 Forest for preservation.⁴

22 Measure A included five overall proposed changes to the LCP:

- 23 ● Increase forest open space by approximately 217 acres.
- 24 ● Increase designated recreational open space by approximately 220 acres.
- 25 ● Decrease the residential unit development potential allowed under the LCP’s land use
26 designations by 856 lots within 7 planning areas, with a decrease in density from medium to
27 low, subject to other resource policies in the plan.
- 28 ● Increase potential visitor-serving use by removing limitations on the number of visitor-serving
29 units allowed at two locations in Del Monte Forest, and the designation of an additional 4-acre
30 area for visitor-serving commercial use.
- 31 ● Remove the Resource Constraint Overlay from much of the PBC-owned property in Del Monte
32 Forest in response to a finding that the subject resource constraints had been relieved.

33 The Del Monte Forest Preservation and Development Plan included the following elements:

- 34 ● New development at several locations in Del Monte Forest:
 - 35 ○ Construction of a new 18-hole golf course with clubhouse and 11 visitor-serving suites on
36 the existing Pebble Beach Equestrian Center site and adjacent undeveloped lands (Area
37 MNOUV).

⁴ Amendments to LCPs require approval of both the local jurisdiction and the California Coastal Commission (CCC). As a local referendum, Measure A represented local jurisdiction approval of the amendments of the LCP. However, the CCC denied Measure A in 2007. Thus, the Measure A changes never took effect.

- 1 ○ Relocation of the existing Equestrian Center to the Sawmill Gulch borrow site with
2 construction of clubhouse, dormitory building, arena, barns, and replacement employee
3 housing.
- 4 ○ Construction of 91 visitor-serving units, additional meeting space, a new underground
5 parking lot and reconfigured surface parking lot, and a new driving range/golf instruction
6 facility for the Spanish Bay Resort.
- 7 ○ Construction of 63 visitor-serving units, additional meeting and hospitality space, and new
8 underground parking structure at the Lodge at Pebble Beach.
- 9 ○ Creation of 33 residential lots in various locations.
- 10 ○ Construction of 12 employee-housing units near Spanish Bay and 48 employee-housing
11 units at the Pebble Beach Company Corporation Yard.
- 12 ● Proposed road, infrastructure, and trail improvements:
 - 13 ○ Improvements to the State Route (SR) 1/SR 68/17-Mile Drive interchange.
 - 14 ○ Abandonment, realignment, and improvements to certain internal roadways within Del
15 Monte Forest.
 - 16 ○ Sanitary sewer, potable water, joint utilities, and reclaimed water line extensions within and
17 without project development sites.
 - 18 ○ Relocation of existing hiking/equestrian trail segments and construction of new trail
19 segments, for a net increase of 3.6 miles of new trails.
- 20 ● Dedication of conservation easements for the preservation and conservation of certain areas:
 - 21 ○ Dedication of conservation easements for the preservation of approximately 436 acres and
22 conservation of 56 acres within Del Monte Forest.
 - 23 ○ Resource management of the preservation and conservation areas, as well as an additional
24 32 acres of preservation/conservation areas within development site boundaries.
- 25 ● Permit/conservation easement amendments:
 - 26 ○ Requests to amend certain conditions of a prior Monterey County use permit related to the
27 original Spanish Bay Resort development and the use of the Sawmill Gulch site.
 - 28 ○ Potential amendment of conservation easements on the Sawmill Gulch site.

29 The Del Monte Forest Preservation and Development Plan was analyzed in a FEIR that was certified
30 by the County of Monterey Board of Supervisors and approved by Monterey County in March 2005.
31 Measure A was analyzed in a separate environmental analysis prepared in 2005; as a voter initiative,
32 Measure A was not subject to review under the California Environmental Quality Act (CEQA).

33 The project approval was subsequently appealed to the California Coastal Commission (CCC) and the
34 project EIR was legally challenged. Measure A was denied by the CCC in June 2007. As a result, the
35 project appeals were never considered by the CCC, and the legal challenge to the EIR was
36 withdrawn. Subsequently, the PBC and CCC staff worked on a compromise project, which has
37 resulted in the current proposed project.

1 **Comparison of Prior Projects to the Current Proposed Project**

2 Compared to the Pebble Beach Lot Program, the Refined Alternative 2, and the Del Monte Forest
3 Preservation and Development Plan (DMF/PDP), the current project proposes less area for new
4 development and more area for preservation. Three major prior development proposals (new golf
5 course in Area MNOUV, relocation of the Equestrian Center to the Sawmill Gulch site, and new
6 driving range at The Inn at Spanish Bay) have been eliminated. Relative to the DMF/PDP, the
7 proposed project would increase the number of single family residential lots from 33 to 90 (or 100
8 with the Area M Residential Option), but decrease the number of residential units. The proposed
9 project would result in buildout in the Del Monte Forest of 195 to 205 residential units (including 90
10 to 100 residential units with the proposed project, 96 units on existing vacant lots, and 9 units in
11 areas outside the project area) compared to 284 units with the DMF PDP (33 single-family dwelling
12 units and 60 employee housing units with that project, plus 144 units on existing vacant lots and 47
13 units in non-project subdivisions). Also compared to the DMF/PDP, the proposed project would
14 increase the number of visitor-serving units in Del Monte Forest under one option (Option 1) but
15 slightly decrease the number of visitor-serving units under another option (Option 2), and would
16 dedicate larger areas for preservation. A comparison of the proposed project with previously
17 proposed projects is provided in Table ES-7.

1 **Table ES-7. Comparison of Proposed Project with Previously Proposed Projects**

Land Use	1992 Pebble Beach Lot Program	1994 Refined Alternative 2	2000 Del Monte Forest Preservation and Development Plan	2010 Proposed Project (Pebble Beach Company Project)
Golf Course/Driving Range	New golf course and driving range in Area PQR	New golf course in Area MNOUV	New golf course in Area MNOUV New driving range at Spanish Bay	No new golf course No new driving range at Spanish Bay Relocation of Pebble Beach driving range from Area V to Collins Field
Equestrian Center	In existing location	Relocated to Sawmill Site	Relocated to Sawmill Site	In existing location
Visitor-Serving Guest Units	0	0	160 new units	95 new units ¹
Visitor-Serving Meeting Space	0	0	~17,790 square feet (sf)	~ 13,815 sf ²
Residential Units/Lots	403 new units	364 new units	33 new lots	90 new lots
Area M Spyglass Hill				
Option 1, New Resort Hotel				100 new units 28,797 sf ³
Option 2, New Residential Lots				10 new lots
Employee Housing Units	0	0	60 units	0
Inclusionary Housing Units ⁴	53 (included in 403 total above)	48 (included in 364 total above)	14 (included in employee housing total)	Applicant pay in-lieu fee
Preservation ⁵	25 acres ⁸	254 acres ⁹	436 acres	627 acres
Conservation ⁶	52 acres ⁸	31 acres ⁹	56 acres	8 acres
Resource Management Areas ⁷	204 acres ⁸	114 acres ⁹	32 acres	0 acres
All habitat areas	281 acres	399 acres	524 acres	635 acres

Sources:

Monterey County 2005, Pebble Beach Company 2011.

Notes:

- ¹ Includes an additional 40 units at The Inn at Spanish Bay and 55 units at The Lodge at Pebble Beach (20 units Colton Building, 35 Fairway One). There are already 5 units at Fairway One. Additional guest units would be located in Area M Spyglass Hill under Option 1 (see separate row).
- ² Includes an additional 5,000 sf at The Lodge at Pebble Beach (2,100 sf meeting and 2,900 sf support/circulation) and 8,815 sf at The Inn at Spanish Bay (4,660 sf meeting and 4,155 sf support/circulation).
- ³ Includes a 6,677 sf restaurant/lounge, 5,120 sf meeting space, and 17,000 sf spa/fitness center.
- ⁴ The amount of inclusionary housing required depends on the amount of market-rate housing being developed (Monterey County Inclusionary Housing Ordinance requires 20%). The proposed project includes 90 market-rate units under Option 1 (requiring 18 inclusionary units) and 100 market-rate units under Option 2 (requiring 20 inclusionary units); however, the applicant instead proposes to pay an in-lieu fee.
- ⁵ *Preservation* is defined as areas not within development site boundaries to be managed for the sole purpose of preservation of natural resources. Project totals do not include the Huckleberry Hill Natural Habitat Area, which was previously dedicated by the applicant in relation to implementation of the DMF LUP and permit conditions for the original Spanish Bay resort project.

Land Use	1992 Pebble Beach Lot Program	1994 Refined Alternative 2	2000 Del Monte Forest Preservation and Development Plan	2010 Proposed Project (Pebble Beach Company Project)
<p>⁶ <i>Conservation</i> is defined as areas within development site boundaries that are separable from development and can be managed for natural resources.</p> <p>⁷ <i>Resource management areas</i> are defined as areas within development site boundaries that are not separable from development, but that would be managed for natural resources and for adjacent land use purposes.</p> <p>⁸ The prior EIR did not use same categorization as this document. Preservation areas are in Area B and part of Area J. Total includes all areas identified in prior EIR as “open space forest” areas. Other areas for 1995 Lot Program are interspersed within proposed residential or golf course development and would thus meet this document’s definition of conservation or resource management areas. Categorization by Jones & Stokes based on prior development layout.</p> <p>⁹ The prior EIR did not use same categorization as this document. Preservation areas are in Area B, part of Area J, and PQR. Total includes all areas identified in prior EIR as “open space forest” areas. Other areas for Refined Alternative 2 are interspersed within proposed residential or golf course development and would thus meet this document’s definition of conservation or resource management areas. Categorization by Jones & Stokes based on prior development layout.</p>				

1

3.1. Aesthetics

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL - EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Scenic Vistas and Corridors										
AES-A1. The proposed project could have substantial adverse visual effects on public viewing in or near “visually prominent” areas identified in the LUP and along the 17-Mile Drive corridor.	○	●	○	●	●	●	-	○	-	●
AES-A2. The proposed roadway improvements could adversely affect views from 17-Mile Drive.	-	-	-	-	-	-	●	-	-	●
Mitigation Measures:	AES-A1. Incorporate design features and landscaping requirements in design plans and specifications for all development sites that involve construction of new structures or modification of existing structures. AES-A2. Prepare and implement a landscape plan for SR 1/SR 68/17-Mile Drive intersection reconfiguration and internal roadway improvements.									
B. Visual Character/Building Scale and Mass										
AES-B1. The proposed project could degrade the visual character and quality of some development sites (at The Inn at Spanish Bay, Area M Spyglass Hill, Residential Lot Subdivisions, and 17-Mile Drive intersections).	○	●	●	●	●	●	●	○	-	●
Mitigation Measures:	AES-A1, AES-A2. See above.									
C. Light and Glare										
AES-C1. The proposed project would introduce new sources of light and glare at development sites, which could affect nighttime views or activities in the area.	● (Applies to proposed project as a whole)									
Mitigation Measures:	AES-C1. Incorporate light and glare reduction measures in design plans and specifications.									

Notes:

- = Significant unavoidable impact. ● = Significant impact that can be reduced to less than significant.
- = Less-than-significant impact. - = No impact or not applicable to the development site.

PBL – The Lodge at Pebble Beach; **SBI** – The Inn at Spanish Bay; **COL-EQC** – Collins Field–Equestrian Center–Special Events Area; **MH** – Area M Spyglass Hill—New Resort Hotel (Option 1); **MR** – Area M Spyglass Hill—New Residential Lots (Option 2); **RES SUB** – Residential Lot Subdivisions; **RD** – Roadway Improvements; **TRA** – Trail Improvements; **INF** – Infrastructure Improvements; **Cumulative** – Proposed Project’s Contribution to Cumulative Impacts

3.2 Air Quality

Project Impact	Project Elements									Cumulative
	PBL	SBI	COL-EC	Area M		SUB	RD	TRA	INF	
				MH	MR					
A. Air Quality Plan Consistency										
AQ-A1. The proposed project would be consistent with the 2008 Air Quality Management Plan.	— (Applies to proposed project as a whole)									○
B. Long-Term Emissions										
AQ-B1. The proposed project would result in a long-term increase in ROG, NOx, CO, and PM10 emissions due to vehicular traffic generated by development, but would not exceed air quality standards of daily emissions thresholds.	○ (Applies to proposed project as a whole)									○
C. Construction Emissions										
AQ-C1. The proposed project would result in a short-term increase in PM10 emissions due to grading and construction.	● (Applies to proposed project as a whole)									●
Mitigation Measures:	AQ-C1. Implement measures to control fugitive dust emissions. AQ-C2. Implement measures to control construction-related exhaust emissions.									
D. Sensitive Receptors										
AQ-D1. The proposed project would result in the emission of diesel toxic air contaminants, which pose a risk to human health, from diesel truck and equipment use during construction.	⊙	○	⊙	○	○	⊙	⊙	⊙	⊙	⊙
Mitigation Measures:	AQ-D1. Implement after-market emissions control technology on on-road and off-road construction equipment.									
AQ-D2. The proposed project would expose sensitive receptors to less-than-substantial pollutant concentrations of CO from project-related traffic.	○ (Applies to proposed project as a whole)									⊙
E. Odors										
AQ-E1. The proposed project would expose new sensitive receptors to objectionable odors from the Equestrian Center.	○	○	⊙	○	○	⊙	○	○	○	—
Mitigation Measures:	AQ-E1. Prepare and implement a manure management plan.									

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3.3 Biological Resources

Impact Topic	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Environmentally Sensitive Habitat Areas										
BIO-A1. Project development would result in direct removal and indirect disturbance to ESHA areas while preserving far larger areas of ESHA.	—	—	⊙	⊙	⊙	⊙	⊙	—	⊙	⊙
Mitigation Measures:	BIO-A1. Develop and implement a site-specific resource management plan, based on the Master RMP, for each preservation area. BIO-A2. Dedicate conservation easements to the Del Monte Forest Foundation for all preservation areas. Additional Mitigation Measures for individual resources are noted below (BIO-B1, BIO-B2, etc.)									
B. Sensitive Habitats										
BIO-B1. Project development would result in direct disturbance and indirect impacts on Monterey pine forest (including maritime chaparral) while preserving far larger areas of Monterey pine forest (including maritime chaparral).	—	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-B1(C). Dedicate additional area of undeveloped Monterey pine forest.									
BIO-B2. Project development would result in potential direct and indirect disturbance of coastal dune habitat near Areas M and L while preserving the entire remnant dune area in Area M.	—	—	—	⊙	⊙	⊙	—	—	—	⊙
Mitigation Measures:	BIO-A1, BIO-A-2. See above. BIO-B2. Include additional measures in the resource management plan to avoid indirect impacts on dune habitat near Areas M and L.									
BIO-B3. Project would indirectly disturb Monterey pygmy forest and other sensitive plant habitat areas and plant and wildlife species in the HHNHA due to increased trail use and adjacent residential use.	—	—	—	—	—	⊙	—	—	—	⊙

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Impact Topic	Project Elements										Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF		
				MH	MR						
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-B3. Include additional measures in the resource management plan for Huckleberry Hill Natural Habitat Area to avoid indirect trail use impacts on sensitive resources and use directed lighting at the Corporation Yard residential area.										
C. Wetlands/Waters											
BIO-C1. Project development would result in potential disturbance of 0.06 acre of wetlands/drainages and result in indirect effects to wetlands and waters in and adjacent to project development areas.	—	—	⊙	—	—	⊙	—	—	—	⊙	
Mitigation Measures:	BIO-C1. Avoid or compensate for the loss of wetlands and implement resource management measures to maintain wetlands in the preservation areas. HYD-A1. Ensure on-site detention of stormwater run-off at development sites and oil/grease separators at parking lots; prepare final drainage plan with flow calculations and construction detail, and implement approved drainage plan. HYD-A2. Maintain and monitor drainage and flood control facilities, and prepare annual report(s) that describe the condition, maintenance performed, and required improvements of drainage and flood control facilities. HYD-C1. Prepare and implement a stormwater pollution prevention plan to prevent and reduce sediments and contaminants in stormwater runoff during construction. HYD-C2. Provide regular inspection and maintenance of operational best management practices to ensure function and minimize the discharge of pollutants to surface water. HYD-C3. Prepare and implement an integrated pest management program for the relocated Pebble Beach Driving Range.										
D. Special-Status Plant Species											
BIO-D1. Project development would result in the direct loss of individual Yadon’s piperia plants and habitat and indirect impacts on adjacent occupied piperia habitat, while preserving far larger areas of occupied piperia habitat.	—	—	—	—	—	⊙	—	—	—	⊙	
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-D1. Implement resource management measures to maintain and enhance Yadon’s piperia habitat.										

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Impact Topic	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
BIO-D2. Project development would result in potential loss or disturbance of up to 16 Gowen cypress trees due to residential development while preserving 3.5 acres of Gowen cypress/Bishop pine pygmy forest.	—	—	—	—	—	⊙	—	—	—	⊙
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-D2. Restore 1.6 acres of Gowen cypress/Bishop pine habitat at the Huckleberry Hill Natural Habitat Area, and implement resource management measures to maintain and enhance Gowen cypress habitat.									
BIO-D3. Project development would result in loss of one occurrence (0.2 acre) of Pacific Grove clover and indirect effects to a second occurrence.	—	—	⊙	—	—	⊙	—	—	—	⊙
Mitigation Measures:	BIO-D3. Redesign the proposed driving range to avoid Pacific Grove clover, or create or enhance a 0.2-acre compensation area for this species within another preservation area on the Monterey Peninsula. BIO-D4. Manage the Indian Village occurrence of Pacific grove clover to ensure its continued survival.									
BIO-D4. Project development would result in direct loss and indirect impacts to Hooker’s manzanita habitat while preserving larger areas of habitat.	—	—	—	—	—	○	—	—	—	○
BIO-D5. Project development could result in potential loss or disturbance of pine rose and habitat for pine rose while preserving larger areas of development.	—	—	—	—	—	⊙	—	—	⊙	⊙
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-D5. Conduct preconstruction surveys for pine rose, implement avoidance and protection measures, if found, and conduct construction monitoring.									
BIO-D6. Project development in Area L could result in indirect effects on one occurrence of Hickman’s potentilla.	—	—	—	—	—	⊙	—	—	—	⊙
Mitigation Measures:	BIO-D6. Avoid hydrological effects to the Indian Village Hickman’s potentilla population and expand existing protection and management.									

Notes:

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Impact Topic	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
BIO-D7. Trail development could result in small amounts of lost habitat for special-status plant species.	—	—	—	—	—	—	—	⊙	—	⊙
Mitigation Measures:	BIO-D7. Minimize special-status species habitat disturbance during trail construction.									
E. Special-Status Wildlife Species										
BIO-E1. Project construction could result in direct mortality to California red-legged frog, degradation of aquatic habitat, loss of and degradation of upland habitats, which would be partially offset by preservation of existing known occupied and suitable habitat.	—	—	—	—	—	⊙	—	—	—	⊙
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-E1. Conduct preconstruction surveys for California red-legged frog, implement protection measures if found, and conduct construction monitoring. BIO-E2. Design new California red-legged frog breeding habitat along Seal Rock Creek in accordance with criteria to establish California red-legged frog habitat characteristics.									
BIO-E2. Development in Areas L and M could result in loss of Smith’s blue butterfly host plants, while preservation of Area M dunes will preserve host plant and habitat.	—	—	—	○	○	○	—	—	—	—
BIO-E3. Stormwater runoff from project developments during construction and operation could degrade nearshore water quality and result in indirect impacts on the southern sea otter, western snowy plover, California brown pelican and other marine resources, including the Carmel Bay Area of Special Biological Significance.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	HYD-A1, HYD-A2, HYD-C1, HYD-C2, HYD-C3. See above. GSS-C1. Prepare and implement an erosion and sediment control plan. GSS-D1. Dewater excavations and shore temporary cuts during construction of underground parking facilities.									

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Impact Topic	Project Elements										Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF		
				MH	MR						
BIO-E4. Project construction and development would result in potential loss or disturbance to habitat occupied by certain non-listed special-status wildlife species while preserving large, unfragmented areas of habitat for these species.	See below by specific species										
Legless Lizard	—	—	—	⊙	⊙	⊙	—	—	—	—	⊙
Mitigation Measures:	BIO-A1, BIO-A2, BIO-B2. See above. BIO-E5. Conduct pre-construction surveys for legless lizard, implement protection measures if found, and conduct construction monitoring for ground-disturbing construction activities.										
California Horned Lizard	—	—	—	○	○	○	—	—	—	—	○
Western Pond Turtle	—	—	—	—	—	○	—	—	—	—	○
Monterey Dusky-Footed Woodrat	—	—	—	—	—	⊙	—	—	—	—	⊙
Mitigation Measures:	BIO-E6. Conduct a preconstruction survey for woodrats and woodrat nests, and implement protection measures if found for ground-disturbing construction activities.										
Pallid bat	—	—	—	—	—	⊙	—	—	—	—	⊙
Mitigation Measures:	BIO-E7. Retain dead trees or snags wherever feasible in development and preservation areas to provide roosting habitat for pallid bats.										
Ringtails and Monterey Ornate Shrew	—	—	—	—	—	⊙	—	—	—	—	⊙
Mitigation Measures:	BIO-A1, BIO-A2, BIO-B2. See above.										
F. Common Wildlife Habitat/Populations/Plant Communities											
BIO-F1. The project would remove habitat of common wildlife species and plant communities within Del Monte Forest while preserving far larger areas of habitat for common species.	⊙ (Applies to proposed project as a whole)										⊙
Mitigation Measures:	BIO-A1, BIO-A2. See above.										
G. Indirect Impacts on Habitat Resulting from Human Use											
BIO-G1. The project would increase trail use by pedestrians and equestrians and could adversely affect common and rare wildlife and plant species within existing and proposed preservation areas.	⊙ (Applies to proposed project as a whole)										⊙

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Impact Topic	Project Elements										Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF		
				MH	MR						
Mitigation Measures:	BIO-B2, BIO-B3, BIO-D4, BIO-D6. See above. BIO-G1. Include additional measures in the resource management plan for Preservation Areas J, K and PQR to avoid indirect trail use impacts on sensitive resources.										
H. Wildlife Movement											
BIO-H1. The project would fragment certain existing forested habitats and could interfere with wildlife movement while preserving larger, unfragmented areas of habitat providing wildlife movement opportunities.	—	—	—	—	—	⊙	—	—	—	—	⊙
Mitigation Measures:	BIO-A1. BIO-A2. See above.										
I. Wildlife Breeding and Nesting											
BIO-I1. Project construction, including tree removal and grading, could result in potential disturbance to nesting raptors, including several special-status raptor species, if present during construction.	⊙ (Applies to proposed project as a whole)										⊙
Mitigation Measures:	BIO-I1. Conduct pre-construction and breeding-season raptor surveys and implement protection measures.										
J. Tree Removal											
BIO-J1. Project construction and development could result in removal or disturbance of native Monterey pine trees and coast live oak trees while preserving far larger areas and numbers of trees in the Del Monte Forest.	⊙ (Applies to proposed project as a whole)										⊙
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-J1. Incorporate specific tree removal and replanting guidelines into the site-specific RMPs. BIO-J2. Protect retained trees from construction disturbance.										

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3.4 Climate Change

Project Impacts	Project Elements									
	PBL	SBI	COL- EQC	Area M		RES SUB	RD	TRA	INF	Cumulative
				MH	MR					
A. Contribute to Climate Change Impacts										
CC-A1. The proposed project would result in project-related greenhouse gas emissions, during construction and from operation that could considerably contribute to climate change impacts and be inconsistent with the goals of Assembly Bill 32.	◎ (Applies to proposed project as a whole)									
Mitigation Measures:	CC-A1. Implement best management practices for GHG emissions during construction. CC-A2-A. Reduce annual greenhouse gas emission by 26% relative to business as usual using a combination of design features, replanting, and/or offset purchases. OR CC-A2-B. Validate the greenhouse gas emission offset value of preserving Monterey Pine Forest designated for development using the Climate Action Registry Forest Project Protocol and preserve the lands in perpetuity.									
B. Effects of Climate Change										
CC-B1: The project would not result in significant exposure of persons or property to reasonably foreseeable impacts of climate change.	○ (Applies to proposed project as a whole)									

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3.5 Cultural Resources

Project Impact	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Historical Resources										
CR-A1. The proposed project would not cause a substantial adverse change in the significance of a historical resource.	— (Applies to proposed project as a whole)									—
B. Archaeological Resources										
CR-B1. Project grading and excavation could result in disturbance to previously undiscovered archaeological resources and cause substantial adverse change in the significance of a unique archaeological resource.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	CR-B1. Conduct worker awareness training for archaeological and paleontological resources prior to ground-disturbing construction activities. CR-B2. Stop work if buried cultural deposits or human remains are encountered during ground-disturbing construction activities.									
C. Human Remains										
CR-C1. Project grading and excavation could result in disturbance to previously undiscovered human remains.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	CR-B1, CR-B2. See above.									
D. Paleontological Resources										
CR-D1. Project grading and excavation could result in disturbance and destruction of a previously undiscovered unique paleontological resource or site or unique geologic feature.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	CR-B1. See above. CR-D1. Implement stop work order if vertebrate fossil materials are encountered during ground-disturbing construction activities.									

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3.6 Geology, Seismicity, and Soils

Impact Topic	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Seismic Hazards										
GSS-A1. Placement of new structures could result in potential structural damage and associated human safety hazards resulting from ground shaking caused by earthquakes on nearby active and potentially active faults.	●	●	●	●	●	●	●	—	—	●
Mitigation Measures:	GSS-A1. Ensure final design and construction specifications include recommendations contained in the site-specific geologic and geotechnical reports.									
B. Landslides and Slope Stability										
GSS-B1. Placement of buildings and grading on steep and/or unstable slopes could result in potential structural damage and associated human safety hazards from mass movements (landslides and debris flow).	—	—	—	●	●	●	—	—	—	●
Mitigation Measures:	GSS-A1. Ensure final design and construction specifications include recommendations contained in the site-specific geologic and geotechnical reports.									
C. Erosion										
GSS-C1. Grading and excavation could result in substantial soil erosion, loss of topsoil, and sedimentation.	● (Applies to proposed project as a whole)									●
Mitigation Measures:	GSS-C1. Prepare and implement an erosion and sediment control plan.									
D. Soils Constraints										
GSS-D1. Construction in areas of expansive soils could result in substantial damage to overlying building foundations and roadways.	—	●	●	●	●	●	●	—	—	●
GSS-D2. Construction of underground structures in the presence of shallow groundwater and weak surrounding deposits could result in inadequate drainage and structural failure during construction or operation.	●	—	—	●	●	●	—	—	—	●

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Impact Topic	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
GSS-D3. Construction in areas of unconsolidated fill could result in settlement and substantial damage to overlying building foundations.	—	⊙	—	⊙	⊙	⊙	—	—	—	⊙
Mitigation Measures:	GSS-A1. Ensure final design and construction specifications include recommendations contained in site-specific geologic and geotechnical reports. GSS-D1. De-water excavations and shore temporary cuts during construction of the underground facilities. HYD-A1. Ensure on-site detention of stormwater run-off at development sites and oil/grease separators at parking lots; prepare final drainage plan with flow calculations and construction detail; and implement approved drainage plan. HYD-A2. Maintain and monitor drainage and flood control facilities, and prepare annual reports that describe the condition, maintenance performed, and required improvements of drainage and flood control facilities.									
E. Hazardous Materials										
Impact GSS-E1. Potential hazardous materials and methane off-gassing related to materials in the fill at the Corporation Yard could result in worker and/or resident exposure to hazardous materials or hazardous conditions.	—	—	—	—	—	⊙	—	—	—	⊙
Mitigation Measures:	GSS-E1. Conduct Phase II investigation consisting of subsurface soil borings and initiate remedial action if warranted at Corporation Yard. GSS-E2. Assess potential for methane off-gassing at the Corporation Yard fill area and incorporate methane controls and/or venting into construction plans and final design if warranted.									

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3.7 Hydrology and Water Quality

Project Impact	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Alteration of Drainage Patterns										
HYD-A1. The proposed project would result in the alteration of surface drainage patterns, but would not alter the course of a stream or river in a manner that would result in substantial erosion or siltation on or off the site.	⊙	⊙	⊙	⊙	⊙	⊙	—	—	—	⊙
Mitigation Measures:	HYD-A1. Ensure on-site detention of stormwater run-off at development sites and oil/grease separators at parking lots; prepare final drainage plan with flow calculations and construction detail, and implement approved drainage plan. HYD-A2. Maintain and monitor drainage and flood control facilities, and prepare annual reports that describe the condition, maintenance performed, and required improvements of drainage and flood control facilities.									
B. Stormwater Run-off and Drainage Infrastructure										
HYD-B1. The proposed project would result in increased stormwater run-off due to an increase in impervious surfaces and topographic alterations.	○	⊙	⊙	⊙	⊙	⊙	○	—	—	⊙
Mitigation Measures:	HYD-A1, HYD-A2. See above.									
C. Water Quality										
HYD-C1. The proposed project would degrade surface water quality due to an increase in sediment and pollutant loading in stormwater drainage during construction and from operation.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	HYD-A1, HYD-A2. See above. HYD-C1. Prepare and implement a stormwater pollution prevention plan to prevent and reduce sediments and contaminants in stormwater run-off during construction. HYD-C2. Provide regular inspection and maintenance of operational best management practices to ensure function and minimize the discharge of pollutants to surface water. GSS-C1. Prepare and implement an erosion and sediment control plan. GSS-D1. Dewater excavations and shore temporary cuts during construction of the underground facilities.									

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Project Impact	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
HYD-C2. The proposed project could degrade water quality due to pesticide, herbicide, and fertilizer use from the Pebble Beach Driving Range Relocation from Area V to Collins Field.	—	—	⊙	—	—	—	—	—	—	⊙
Mitigation Measures:	HYD-C3. Prepare and implement an integrated pest management program for the relocated Pebble Beach Driving Range.									

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3.8 Land Use and Recreation

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Land Use Compatibility										
LU-A1. The proposed project could introduce new land uses that could be incompatible with surrounding land uses or with the general character of the area.	○	○	○	○	○	●	○	○	—	—
Mitigation Measures:	AQ-E1. Prepare and implement a manure management plan.									
B. Plan/Policy Consistency										
LU-B1. While the project is inconsistent with the existing LCP, the proposed project is consistent with the proposed LCP Amendment which is consistent with the Coastal Act and which would need to be approved prior to any project approval.	○ (Applies to proposed project as a whole)									○
C. Recreational Demand										
LU-C1. The proposed project would add new recreation trails and would increase the use of existing parks and recreation facilities, but would not require the construction or expansion of recreational facilities not included in the proposed project that might have an adverse physical effect on the environment.	○	○	○	○	○	○	—	—	—	—
D. Open Space Quality and Quantity										
LU-D1. The proposed project would not diminish the quality and quantity of open space used for recreation	—	—	—	—	—	○	—	—	—	—

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3.9 Noise

Project Impacts	Project Elements									Cumulative	
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF		
				MH	MR						
A. Permanent Increase in Noise due to Project Operations											
NOI-A1. The proposed project could result in exposure of persons to noise levels in excess of standards established in the County’s Land Use Compatibility for Community Noise chart from operation of ventilation fans for underground parking structure at The Lodge at Pebble Beach, but not from operation of other project elements.	●	○	○	○	○	○	○	○	○	○	●
Mitigation Measures:	NOI-A1. Employ noise-reducing treatments on parking structure fan systems.										
B. Short-Term Noise Increases due to Construction											
NOI-B1. The proposed project would result in exposure of outdoor activity areas of noise-sensitive land uses to construction noise greater than 85 dB at a distance of 50 feet during construction.	● (Applies to proposed project as a whole)									●	
Mitigation Measures:	NOI-B1. Limit hours of construction activities. NOI-B2. Locate equipment as far from noise-sensitive receptors as practicable. NOI-B3. Use sound-control devices on combustion-powered construction equipment. NOI-B4. Shield/shroud any impact tools used during construction. NOI-B5. Shut off machinery when not in use during construction. NOI-B6. Use shortest practicable traveling routes during construction. NOI-B7. Disseminate essential information to residences and implement a complaint response/tracking program during construction. NOI-B8. Implement additional mitigation measures, as needed, to reduce exposure of outdoor activity areas of noise-sensitive land uses to sustained construction noise levels greater than 85 dBA during construction.										

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Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
C. Construction-Related Vibration										
NOI-C1. The proposed project could result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels during construction at The Lodge at Pebble Beach and Area M Spyglass Hill Option 1 (New Resort Hotel).	●	○	○	○	○	○	○	○	○	—
Mitigation Measures:	NOI-C1. Limit construction activities that result in vibration to specified times, provide advance notice to adjacent residents of such schedules, and temporarily relocate residents if requested and if vibration testing demonstrates that levels exceed Federal Transit Administration vibration thresholds.									

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3.10 Public Services and Utilities

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Police and Fire Protection										
PSU-A1. The proposed project would increase demand for fire and first-responder emergency medical services.	○	○	○	○	○	○	—	—	—	○
PSU-A2. The proposed project would increase demand for police services.	○	○	○	○	○	○	—	—	—	○
B. Emergency Access										
PSU-B1. The proposed project could interfere with emergency access routes to open space areas and an adopted emergency access plan during construction.	—	—	—	—	—	○	—	—	—	○
C. Wildland Fire Hazard										
PSU-C1. The proposed project could expose people and structures to a significant risk of loss, injury, or death involving wildland fires.	● (Applies to proposed project as a whole)									●
Mitigation Measures:	PSU-C1. Implement vegetation management plans and maintenance in high-risk fire areas. PSU-C2. Implement fire safety precautions during the declared fire season when performing maintenance on natural open space areas. PSU-C3. Improve water flow requirements where needed to ensure proper fire flow.									
D. Schools										
PSU-D1. The proposed project could result in increased student enrollments.	—	—	—	—	○	○	—	—	—	○
E. Wastewater Collection and Treatment										
PSU-E1. The proposed project could result in increased wastewater treatment requirements.	○ (Applies to proposed project as a whole)									○
PSU-E2. The proposed project could increase need for sewer lines and wastewater treatment facility.	○ (Applies to proposed project as a whole)									○

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Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
F. Utility Disruption										
PSU-F1. The proposed project could result in utility service disruptions during construction.	◎ (Applies to proposed project as a whole)									◎
Mitigation Measures:	PSU-F1. Coordinate with the appropriate utility service providers and related agencies to reduce service interruptions prior to construction.									
G. Solid Waste										
PSU-G1. The proposed project would increase solid waste, green waste, and recycling disposal needs.	○ (Applies to proposed project as a whole)									○

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3.11 Transportation

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Traffic during Project Construction										
TRA-A1. Construction traffic would result in short-term increases in traffic volumes that would affect level of service and intersection operations.	● (Applies to proposed project as a whole)									●
Mitigation Measures:	TRA-A1. Schedule construction work and truck trips to comply with Del Monte Forest Architectural Board Guidelines. TRA-A2. Develop and implement a traffic control plan. TRA-A3. Obtain approval for construction truck traffic routes from Monterey County and include these routes in all contracts. TRA-A4. Implement SR 1/68/17-Mile Drive Intersection Reconstruction early in the overall construction schedule.									
B. Del Monte Forest Gates										
TRA-B1. The project would result in a minor increase in traffic at the Del Monte Forest gates.	○ (Applies to proposed project as a whole)									○
C. Impacts to Roadway Intersections and Segments										
TRA-C1. The proposed project would add substantial traffic to intersections in Del Monte Forest and the immediate vicinity to decrease from acceptable levels of service to unacceptable levels or to worsen existing unacceptable levels of service.	● (Applies to proposed project as a whole)									●
Mitigation Measures:	TRA-C1. Pay fair-share contribution to install a traffic signal at the intersection of SR 68/Skyline Forest Drive and widen SR 68 from two to four lanes through the intersection. TRA-C2. Pay fair-share contribution to construct the full SR 68 Widening Project. TRA-C3. Pay fair-share contribution to construct new turn lanes and establish new traffic signal timings at the SR 1/Ocean Avenue intersection. TRA-C6(C). Pay fair-share contribution to restripe the westbound approach at the Sunset Drive/Congress Avenue intersection to provide a left-turn pocket. TRA-C7(C). Pay fair-share contribution to optimize signal timings and phasing at the Forest Avenue/David Avenue intersection. TRA-C8(C). Pay fair-share contribution to construct the full SR 68 Widening Project (as required by TRA-C2) and to add third lane and to construct a third eastbound lane on SR 68 from east of the									

Notes:

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○ = Less-than-significant impact. – = No impact or not applicable to the development site.

PBL – The Lodge at Pebble Beach; **SBI** – The Inn at Spanish Bay; **COL-EQC** – Collins Field–Equestrian Center–Special Events Area; **MH** – Area M Spyglass Hill—New Resort Hotel (Option 1); **MR** – Area M Spyglass Hill—New Residential Lots (Option 2); **RES SUB** – Residential Lot Subdivisions; **RD** – Roadway Improvements; **TRA** – Trail Improvements; **INF** – Infrastructure Improvements; **Cumulative** – Proposed Project’s Contribution to Cumulative Impacts

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
	Carmel Hill Professional Center driveway through the SR 1 intersection, with one lane going to the SR 1 southbound on-ramp and two lanes proceeding across the SR 68 overcrossing. TRA-C9(C). Pay fair-share contribution to construct a refuge lane on SR 68 for traffic turning left out of the Aguajito Road intersection. TRA-C10(C). Pay fair-share contribution to optimize signal timings at the SR 1/Carpenter Street intersection.									
TRA-C2. The project would add traffic to regional highway sections that are projected to operate at unacceptable levels of service.	● (Applies to proposed project as a whole)									●
Mitigation Measures:	TRA-C4. Pay fair-share traffic impact fee for various improvements to SR 1, SR 68, and SR 156 based on the conditions described in the Transportation Agency of Monterey County’s Regional Development Impact Fee Program.									
TRA-C3. The project would add traffic to a highway ramp projected to operate at an unacceptable level of service.	● (Applies to proposed project as a whole)									●
Mitigation Measures:	TRA-C5. Pay fair-share contribution to replace the SR 1 northbound merge at SR 68 (west) with an auxiliary lane between SR 68 (west) and Munras Avenue.									
D. Access and Circulation										
TRA-D1. The project would create new roadways that do not meet the design criteria established in the Del Monte Forest Transportation Policy Agreement, substantially increase hazards because of roadway design or internal circulation patterns, or result in inadequate emergency access.	◎ (Applies to proposed project as a whole)									—
Mitigation Measures:	TRA-D1. Ensure compliance with the Del Monte Forest Transportation Policy Agreement. TRA-D2. Incorporate a 25-foot transition between all driveways and roadways that has no more than a 2% grade. TRA-D3. At The Lodge at Pebble Beach, add a crosswalk to address a pedestrian desire line (i.e., places pedestrians will walk) crossing the circulation road. TRA-D4. At The Lodge at Pebble Beach, modify the design of the two traffic circles to facilitate efficient vehicle flow. TRA-D5. At The Lodge at Pebble Beach, install yield signs to control the three-leg traffic circle while the other traffic circle should have no vehicle traffic controls.									

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Project Impacts	Project Elements										Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF		
				MH	MR						
	TRA-D6. At The Lodge at Pebble Beach, add sidewalks or paths to serve pedestrian movements between the Fairway One Complex, Peter Hay Golf Course, and The Lodge at Pebble Beach. TRA-D7. At the Colton Building, improve sight distance at the intersection between the existing driveway and Cypress Drive. TRA-D8. At the Colton Building, install a warning sign or lights at the entry to the parking facility, or widen the opening to at least 22 feet. TRA-D9. At The Inn at Spanish Bay, modify the 17-Mile Drive/Congress Road intersection to an all-way stop-controlled intersection, installing stop signs at all approaches. TRA-D10. At the Pebble Beach Links Driving Range, add a pedestrian crosswalk that connects the driving range to the Peter Hay Golf Course.										
E. Parking											
TRA-E1. Project land uses would create a need for additional parking.	○	○	○	—	○	—	—	—	—	—	—
F. Special Events											
TRA-F1. The project could change traffic volumes at Del Monte Forest gates during special events.	○ (Applies to proposed project as a whole)										—
TRA-F2. The project could change traffic volumes on internal roads during special events.	○ (Applies to proposed project as a whole)										—
TRA-F3. The project could change parking conditions during special events.	○ (Applies to proposed project as a whole)										—
G. Transit and Alternative Transportation											
TRA-G1. The project would be inconsistent, in part, with Del Monte Forest Land Use Plan alternative transportation policies and Monterey County trip reduction requirements.	⊙ (Applies to proposed project as a whole)										—
Mitigation Measures:	TRA-G1. Prepare and implement an alternative transportation plan, emphasizing specific trip reduction measures for proposed visitor, resident, and employee uses. TRA-G2. Expand the existing shuttle and valet system to incorporate the Spyglass Hotel as part of the overall parking management system (Option 1 only).										

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Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
H. Bicycles and Trails										
TRA-H1. The project would introduce additional traffic along 17-Mile Drive between Spanish Bay Drive and the Pacific Grove Gate, which could compromise the effectiveness of existing bicycle signage.	◎ (Applies to proposed project as a whole)									—
Mitigation Measures:	TRA-H1. Stencil “Route” after the bicycle symbols on the designated route for bicycling between the Pacific Grove Gate and Stevenson Drive at Ondulado Road.									
TRA-H2. The project would not conflict with adopted policies, plans, or programs supporting trails.	○ (Applies to proposed project as a whole)									—

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3.12 Water Supply and Demand

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Water Supply and Demand										
WSD-A1. The project’s water demand would represent an increase in water use above the 2011 Existing Conditions, but would be within the Applicant’s current entitlement and could be legally supplied by Cal-Am through 2016. However, given the current uncertain nature of regional water supplies, the additional project water demand could intensify water supply shortfalls and rationing starting in 2017, if the Regional Project (or its equivalent) is not built by then.	● (Applies to project as a whole)									●
Mitigation Measures:	Mitigation is not feasible because any additional mitigation would be disproportionate to the impact of proposed project given Applicant’s prior financing of the Recycled Water Project. The Applicant’s use of water for this project is pursuant to a valid, legal water entitlement affirmed by MPWMD, Cal-Am, and SWRCB.									
B. Water Infrastructure Capacity										
WSD-B1. Local water infrastructure is included to serve the proposed project, and existing supply infrastructure outside the project area is adequate to serve the project through 2016. The Regional Project (or its equivalent) will need to be built by 2017 to serve existing demand and the increase in demand from the project; regional water supply infrastructure and operations will have secondary environmental impacts.	● (Applies to project as a whole)									●
Mitigation Measures:	Mitigation is not feasible because any additional mitigation would be disproportionate to the impact of proposed project given Applicant’s prior financing of the infrastructure for the Recycled Water Project. The Applicant’s use of water for this project is pursuant to a valid, legal water entitlement affirmed by MPWMD, Cal-Am, and SWRCB.									

Notes:

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Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
C. Carmel River Biological Resources										
WSD-C1. The project's water demand would result in increased withdrawals from the Carmel River through 2016 and thus would have a significant and unavoidable impact on Carmel River biological resources. After 2017, SWRCB mandated reductions in Cal-Am withdrawals from the Carmel River will not be changed by the project demand.				●						●
				(Applies to project as a whole)						

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PBL – The Lodge at Pebble Beach; **SBI** – The Inn at Spanish Bay; **COL-EQC** – Collins Field–Equestrian Center–Special Events Area; **MH** – Area M Spyglass Hill—New Resort Hotel (Option 1); **MR** – Area M Spyglass Hill—New Residential Lots (Option 2); **RES SUB** – Residential Lot Subdivisions; **RD** – Roadway Improvements; **TRA** – Trail Improvements; **INF** – Infrastructure Improvements; **Cumulative** – Proposed Project’s Contribution to Cumulative Impacts

Chapter 1
Introduction

This chapter summarizes the historical background to the Pebble Beach Company Project (proposed project), provides a brief overview of the proposed project, identifies the intent and scope of this Draft Environmental Impact Report (EIR), describes the environmental impact review requirements that must be met prior to project approval, and outlines the organization of this document.

Background

PBC has submitted previous applications for development and preservation of its land within Del Monte Forest, including the Pebble Beach Lot Program in 1992, Refined Alternative 2 in 1994, and the Del Monte Forest Preservation and Development Plan (DMF PDP) in 2002 (which was consistent with the “Measure A” initiative approved by Monterey County voters in 2000).

Pebble Beach Lot Program

In 1992, PBC submitted applications, including the Del Monte Forest Area Land Use Plan (LUP) amendments and zoning changes, to build out the remaining vacant land in the Pebble Beach area of Del Monte Forest (Pebble Beach Lot Program). The Pebble Beach Lot Program proposed 403 residential units on 685 acres, including a 34-unit Planned Unit Development (PUD); 53 low-cost housing units; an 18-hole golf course, clubhouse, and related facilities; and expansion of an existing driving range.

Refined Alternative 2

In response to public/agency input and concern regarding the intensity of the proposed development and the effect on the Monterey pine forest and other resources, PBC submitted three additional applications with design changes to the original project proposal. These changes reduced the total number of proposed housing units to 364, relocated some housing units to different areas, and moved the golf course location from Area PQR to Area MNOUV. The new location of the golf course required relocating the existing Equestrian Center to the Sawmill Gulch site near the city of Pacific Grove. This revised proposal became known as Refined Alternative 2.

Both the Pebble Beach Lot Program and Refined Alternative 2 were analyzed in a Final EIR in 1997. The project permits and Final EIR were brought before the Monterey County Standard Subdivision Committee in spring of 1999. A staff recommendation of certification of the Final EIR and “approval” of Refined Alternative 2 was made to the Monterey County Planning Commission in June 1999. However, by August 1999, PBC was under new ownership, the project application was withdrawn, and the Final EIR was never certified.

Del Monte Forest Preservation and Development Plan

The DMF PDP was a subsequent project which was represented on county-wide ballot in November 2000 as “Measure A” (The Del Monte Forest Plan: Forest Preservation and Development

1 Limitations). Measure A was supported by 63.5% of Monterey County voters. Measure A included
2 proposed changes to the Del Monte Forest Local Coastal Program (LCP), including the LUP and
3 zoning designations and policies, and identified areas within Del Monte Forest for preservation.¹

4 Measure A included five overall proposed changes to the LCP:

- 5 • Increase forest open space by approximately 217 acres.
- 6 • Increase designated recreational open space by approximately 220 acres.
- 7 • Decrease the residential unit development potential allowed under the LCP's land use
8 designations by 856 lots within 7 planning areas, with a decrease in density from medium to
9 low, subject to other resource policies in the plan.
- 10 • Increase potential visitor-serving use by removing limitations on the number of visitor-serving
11 units allowed at two locations in Del Monte Forest, and the designation of an additional 4-acre
12 area for visitor-serving commercial use.
- 13 • Remove the Resource Constraint Overlay from much of the PBC-owned property in Del Monte
14 Forest in response to a finding that the subject resource constraints had been relieved.

15 The DMF PDP included the following elements:

- 16 • New development at several locations in Del Monte Forest:
 - 17 ○ Construction of a new 18-hole golf course with clubhouse and 11 visitor-serving suites on
18 the existing Pebble Beach Equestrian Center site and adjacent undeveloped lands (Area
19 MNOUV).
 - 20 ○ Relocation of the existing Equestrian Center to the Sawmill Gulch borrow site with
21 construction of clubhouse, dormitory building, arena, barns, and replacement employee
22 housing.
 - 23 ○ Construction of 91 visitor-serving units, additional meeting space, a new underground
24 parking lot and reconfigured surface parking lot, and a new driving range/golf instruction
25 facility for the Inn at Spanish Bay.
 - 26 ○ Construction of 63 visitor-serving units (58 new and 5 replacement), additional meeting and
27 hospitality space, and new underground parking structure at The Lodge at Pebble Beach.
 - 28 ○ Creation of 33 residential lots in various locations.
 - 29 ○ Construction of 12 employee-housing units near Spanish Bay and 48 employee-housing
30 units at the Pebble Beach Company Corporation Yard.
- 31 • Proposed road, infrastructure, and trail improvements:
 - 32 ○ Improvements to the State Route (SR) 1/SR 68/17-Mile Drive interchange.
 - 33 ○ Abandonment, realignment, and improvements to certain internal roadways within Del
34 Monte Forest.
 - 35 ○ Sanitary sewer, potable water, joint utilities, and reclaimed water line extensions within and
36 without project development sites.

¹ Amendments to LCPs require approval of both the local jurisdiction and the California Coastal Commission (CCC). As a local referendum, Measure A represented local jurisdiction approval of the amendments of the LCP. However, the CCC denied Measure A in 2007. Thus the Measure A changes never took effect.

- 1 ○ Relocation of existing hiking/equestrian trail segments and construction of new trail
- 2 segments, for a net increase of 3.6 miles of new trails.
- 3 ● Dedication of conservation easements for the preservation and conservation of certain areas:
- 4 ○ Dedication of conservation easements for the preservation of approximately 436 acres and
- 5 conservation of 56 acres within Del Monte Forest.
- 6 ○ Resource management of the preservation and conservation areas, as well as an additional
- 7 32 acres of preservation/conservation areas within development site boundaries.
- 8 ● Permit/conservation easement amendments:
- 9 ○ Requests to amend certain conditions of a prior Monterey County use permit related to the
- 10 original Spanish Bay Resort development and the use of the Sawmill Gulch site.
- 11 ○ Potential amendment of conservation easements on the Sawmill Gulch site.

12 The DMF PDP was analyzed in a Final EIR that was certified by the County of Monterey Board of
 13 Supervisors and approved by Monterey County in March 2005. Measure A was analyzed in a
 14 separate environmental analysis prepared in 2005; as a voter initiative, Measure A was not subject
 15 to review under the California Environmental Quality Act (CEQA).

16 The project approval was subsequently appealed to the California Coastal Commission (CCC) and the
 17 project EIR was legally challenged. Measure A was denied by the CCC in June 2007. As a result, the
 18 project appeals were never considered by the CCC, and the legal challenge to the EIR was
 19 withdrawn. Subsequently, the PBC and CCC staff worked on a compromise project, which has
 20 resulted in the current proposed project.

21 **Comparison of Prior Projects to the Current Proposed Project**

22 Compared to the Pebble Beach Lot Program, the Refined Alternative 2, and the DMF PDP, the project
 23 proposes less area for new development and more area for preservation. Three major prior
 24 development proposals (new golf course in Area MNOUV, relocation of the Equestrian Center to the
 25 Sawmill Gulch site, and new driving range at The Inn at Spanish Bay) have been eliminated. Relative
 26 to the DMF PDP, the proposed project would increase the number of single-family residential lots
 27 from 33 to 90 (or 100 with the Area M Spyglass Hill Option 2, New Residential Lots).

28 However, buildout in Del Monte Forest would be less with the proposed project. The proposed
 29 project would result in buildout in Del Monte Forest of 195 to 205 units (including 90 to 100
 30 residential units with the proposed project, 96 units on existing vacant lots and 9 units in
 31 subdivisions outside the project area) compared to 284 units with the DMF PDP (33 single-family
 32 dwelling units and 60 employee housing units with that project, plus 144 units on existing vacant
 33 lots and 47 units in non-project subdivisions). Also compared to the DMF PDP, the proposed project
 34 would increase the number of visitor-serving units in Del Monte Forest under one option (Area M
 35 Spyglass Hill Option 1, New Resort Hotel) and decrease the number of visitor-serving units under
 36 another option (Area M Spyglass Hill Option 2, New Residential Lots) and would dedicate larger
 37 areas for preservation. A comparison of the proposed project with previously proposed projects is
 38 provided in Table 1-1.

1 **Table 1-1. Comparison of Proposed Project with Previously Proposed Projects**

Land Use	1992 Pebble Beach Lot Program	1994 Refined Alternative 2	2000 Del Monte Forest Preservation and Development Plan	2010 Proposed Project (Pebble Beach Company Project)
Golf Course/Driving Range	New golf course and driving range in Area PQR	New golf course in Area MNOUV	New golf course in Area MNOUV New driving range at The Inn at Spanish Bay	No new golf course No new driving range at The Inn at Spanish Bay Relocation of Pebble Beach driving range from Area V to Collins Field
Equestrian Center	In existing location	Relocated to Sawmill Site	Relocated to Sawmill Site	In existing location
Visitor-Serving Guest Units	0	0	160 new units	95 new units ^a
Visitor-Serving Meeting Space	0	0	~17,790 square feet (sf)	~13,815 sf ^b
Residential Units/Lots	403 new units	364 new units	33 new lots	90 new lots
Area M Spyglass Hill				
Option 1, New Resort Hotel				100 new units 28,797 sf ^c
Option 2, New Residential Lots				10 new lots
Employee Housing Units	0	0	60 units	0
Inclusionary Housing Units ^d	53 (included in 403 total above)	48 (included in 364 total above)	14 (included in employee housing total)	Applicant pay in-lieu fee
Preservation ^e	25 acres ^h	254 acres ⁱ	436 acres	627 acres ^e
Conservation ^f	52 acres ^h	31 acres ⁱ	56 acres	8 acres
Resource Management Areas ^g	204 acres ^h	114 acres ⁱ	32 acres	0 acres
All habitat areas	281 acres	399 acres	524 acres	635 acres

Source:

Monterey County 2005, Pebble Beach Company 2011.

Notes:

- ^a Includes an additional 40 units at The Inn at Spanish Bay and 55 units at The Lodge at Pebble Beach (20 units Colton Building, 35 Fairway One). There are already 5 units at Fairway One. Additional guest units would be located in Area M Spyglass Hill under Option 1 (see separate row).
- ^b Includes an additional 5,000 sf at The Lodge at Pebble Beach (2,100 sf meeting and 2,900 sf support/circulation) and 8,815 sf at The Inn at Spanish Bay (4,660 sf meeting space and 4,155 sf support/circulation).
- ^c Includes a 6,677 sf restaurant/lounge, 5,120 sf meeting space, and 17,000 sf spa/fitness center.
- ^d The amount of inclusionary housing required depends on the amount of market-rate housing being developed (Monterey County Inclusionary Housing Ordinance requires 20%). The proposed project includes 90 market-rate units under Option 1 (requiring 18 inclusionary units) and 100 market-rate units under Option 2 (requiring 20 inclusionary units); however, the applicant instead proposes to pay an in-lieu fee.
- ^e *Preservation* is defined as areas not within development site boundaries to be managed for the sole purpose of preservation of natural resources. Project totals do not include the HHNHA, which was previously dedicated by the applicant in relation to implementation of the Del Monte Forest LUP and permit conditions for the original Spanish Bay resort project.

Land Use	1992 Pebble Beach Lot Program	1994 Refined Alternative 2	2000 Del Monte Forest Preservation and Development Plan	2010 Proposed Project (Pebble Beach Company Project)
<p>^f <i>Conservation</i> is defined as areas within development site boundaries that are separable from development and can be managed for natural resources.</p> <p>^g <i>Resource management areas</i> are defined as areas within development site boundaries that are not separable from development, but that would be managed for natural resources and for adjacent land use purposes.</p> <p>^h The 2005 Final EIR (Monterey County 2005) did not use same categorization as this document. Preservation areas are in Area B and part of Area J. Total includes all areas identified in prior EIR as “open space forest” areas. Other areas for 1995 Lot Program are interspersed within proposed residential or golf course development and would thus meet this document’s definition of conservation or resource management areas. Categorization was based on prior development layout.</p> <p>ⁱ The 2005 EIR did not use same categorization as this document. Preservation areas are in Area B, part of Area J, and PQR. Total includes all areas identified in prior EIR as “open space forest” areas. Other areas for Refined Alternative 2 are interspersed within proposed residential or golf course development and would thus meet this document’s definition of conservation or resource management areas. Categorization was based on prior development layout.</p>				

1

1 Project Overview

2 The title of the proposed project is the Pebble Beach Company Project. The proposed project would
3 be located in Monterey County's unincorporated Del Monte Forest area. Del Monte Forest is located
4 on California's Pacific Coast and is bounded by the Pacific Ocean to the west and the cities of Pacific
5 Grove, Monterey, and Carmel-by-the-Sea to the north, east, and south, respectively (see Figure 2-1 in
6 Chapter 2, Project Description).

7 PBC (the applicant) submitted applications for the proposed project on August 30, 2010. The
8 Monterey County Planning Department determined the application to be complete on April 22,
9 2011.

10 The proposed project includes the following elements: renovation and expansion of visitor-serving
11 uses; creation of 90 single-family residential lots; road, infrastructure, and trail improvements; and
12 preservation of large undeveloped tracts of forested open space. Project development would include
13 the following:

- 14 • Construction of 60 visitor-serving units (55 new and 5 replacement units), additional meeting
15 and hospitality space, and new surface and underground parking at The Lodge at Pebble Beach.
- 16 • Construction of 40 new visitor-serving units, additional meeting and hospitality space, and new
17 surface parking at The Inn at Spanish Bay.
- 18 • Relocation of the Pebble Beach Driving Range from Area V to Collins Field.
- 19 • Reconstruction of the Equestrian Center at its existing location.
- 20 • Construction of a new resort hotel (100 visitor-serving units, restaurant, meeting facility, and
21 spa) or 10 new residential lots at Spyglass Hill.
- 22 • Creation of 90 residential lots at various locations within or adjacent to existing developed
23 areas.

24 Roadway improvements would include improvements to the SR 1/SR 68/17-Mile Drive interchange
25 and the Congress Road/17-Mile Drive, Congress Road/Lopez Road, Sunridge Road/Lopez Road, and
26 Portola Road/Stevenson Drive intersections. Infrastructure improvements would include sanitary
27 sewer, potable water, and reclaimed water line extensions within and outside of project
28 development sites. Trail improvements include relocation of existing trail segments and creation of
29 new trail segments, for a net increase of approximately 2.4 miles of new trails.

30 The proposed project would formally preserve 627 acres of Monterey pine forest and other native
31 habitats. Combined with an additional 8 acres of conservation area for smaller buffer areas and
32 setbacks around development areas and along roadways, there would be a total of 635 acres of
33 dedicated Monterey pine forest and other native habitat. Preservation of these lands is proposed to
34 be accomplished through amendments to the LCP to change land uses and densities and through
35 dedication of conservation easements to the Del Monte Forest Foundation.

36 A detailed description of the project is provided in Chapter 2, Project Description.

1 Environmental Review Process

2 Public Involvement and Scoping

3 One of the purposes of CEQA is to establish opportunities for the public to review and comment on
4 projects that might affect the environment. CEQA provides public participation through:

- 5 • Publication of the Notice of Preparation (NOP).
- 6 • Project scoping.
- 7 • Public review of environmental documents.
- 8 • Public hearing.

9 Notice of Preparation

10 The purpose of the NOP is to solicit participation from responsible and coordinating federal, state,
11 and local agencies and from the public in determining the scope of an EIR. The scoping process for
12 this EIR was formally initiated April 7, 2011, with submission of the NOP to the California State
13 Clearinghouse in compliance with CEQA. In addition, a notification letter was distributed to
14 interested agencies, organizations, and members of the public. Comments were provided by a
15 number of agencies, organizations, and members of the public. Comments are on file at the
16 Monterey County Planning Department offices in Salinas, California. A copy of the NOP is included in
17 Appendix A.

18 Project Scoping

19 Scoping refers to the process used to assist the Lead Agency in determining the focus and content of
20 an EIR. Scoping solicits input on the potential topics to be addressed in an EIR, the range of project
21 alternatives, and possible mitigation measures. Scoping is also helpful in establishing methods of
22 assessment and in selecting the environmental effects to be considered in detail. Tools used in
23 scoping of this EIR included informal stakeholder and interagency consultation, a public scoping
24 meeting, and publication of the project NOP.

25 A public scoping meeting was held on April 27, 2011, at the Pebble Beach Community Services
26 District Board Room in Pebble Beach. Approximately 45 people attended the meeting, including a
27 number of regulatory representatives. The scoping meeting provided an opportunity for attendees
28 to comment on environmental issues of concern and the alternatives that should be discussed in the
29 EIR. Participants also provided written comments at, and subsequent to, the scoping meeting.
30 Written comments are on file in the Monterey County Planning Department offices in Salinas and
31 included in Appendix A.

32 The key environmental issues raised in the scoping comments include:

- 33 • Concerns regarding the potential impacts on biological resources in sensitive areas, including
34 Huckleberry Hill Natural Habitat Area (HHNHA) and Indian Village, from adjacent development.
- 35 • Concerns regarding invasive nonnative plant species, fuel management in open space areas, and
36 application of open space management plans.
- 37 • Concerns regarding impacts on the Carmel Bay Area of Special Biological Significance.

- 1 • Concerns regarding impacts on neighboring residences from new development, increased
- 2 traffic, and traffic pattern changes.
- 3 • Comments on the data and approach used in the traffic impact analysis.
- 4 • Request to consider a roundabout design option at the SR 68/SR 1 off-ramp and alternative
- 5 interior roads near the SR 1 gate.
- 6 • Request to consider an underground parking structure instead of a surface parking lot at The
- 7 Inn at Spanish Bay.

8 **Purpose of EIR**

9 **Intent and Scope of the EIR**

10 **Intent**

11 This Draft EIR has been prepared in accordance with CEQA, which requires all state and local
12 government agencies to consider the environmental consequences of projects over which they have
13 discretionary authority before taking action on those projects (California Public Resources Code
14 Section 21000 et seq.).

15 The intent of this Draft EIR is to:

- 16 • Identify potential direct, indirect, and cumulative environmental impacts associated with the
- 17 proposed project.
- 18 • Describe feasible mitigation measures intended to lessen or avoid potentially significant project
- 19 impacts or reduce them to a less-than-significant level.
- 20 • Disclose potential project impacts and proposed mitigation measures for public review and
- 21 comment.
- 22 • Discuss potential alternatives to the proposed project that avoid or reduce identified significant
- 23 project impacts.

24 This Draft EIR is also intended to supply the information necessary to support related permit
25 application and review processes.

26 **Scope**

27 This Draft EIR evaluates the potential impacts of the proposed project in relation to:

- 28 • Aesthetics.
- 29 • Air quality.
- 30 • Biological resources (including sensitive habitats, special-status plants and wildlife, and forest
- 31 resources).
- 32 • Climate change (including greenhouse gas emissions).
- 33 • Cultural and paleontological resources.
- 34 • Geology, seismicity, and soils (including hazardous materials).

- 1 • Hydrology and water quality.
- 2 • Land use and recreation.
- 3 • Noise and vibration.
- 4 • Public services and utilities.
- 5 • Transportation and circulation.
- 6 • Water supply and demand.

7 This Draft EIR also analyzes:

- 8 • Significant unavoidable impacts.
- 9 • Significant irreversible changes in the environment.
- 10 • Growth inducement.
- 11 • Cumulative impacts.
- 12 • Alternatives to the proposed project.

13 This Draft EIR does not evaluate the following topics because there would be no impacts on the
14 resource area or the potential impacts were determined to be less than significant.

15 **Agricultural Resources.** There are no farmlands within or near the project area that would be
16 affected by the proposed project. The nearest farmland in the County is located in Carmel Valley,
17 approximately 2 miles southeast of Del Monte Forest and in the Salinas Valley approximately 12
18 miles northeast of Del Monte Forest. Therefore, there would be no impact.

19 **Population and Housing.** The proposed project would result in the development of up to 90 to 100
20 residential lot subdivisions for single-family homes, which could generate 190 to 211 new residents.
21 This assumes that each single family residence has 2.11 occupants, consistent with 2010 U.S. Census
22 data average for the Del Monte Forest census-designated place. As described at the beginning of
23 Chapter 3, Environmental Setting, Impacts, and Mitigation Measures, under Analysis of Cumulative
24 Impacts, the existing LUP would allow development of up to 1,030 additional residential dwelling
25 units (equivalent population of 2,173 persons). As a result, the currently applicable LUP anticipated
26 a far greater amount of population and housing development than anticipated with the proposed
27 project. The proposed project would lower the long-term buildout potential compared to full
28 buildout under the existing LUP. Therefore, the impact would be less than significant.

29 **Mineral Resources.** The proposed project would not be located within a significant mineral, oil, or
30 gas resource area as defined by the County and the state (Monterey County 2005). The primary
31 mineral commodities currently mined in Monterey County are sand, gravel, and petroleum. There
32 are several former quarries in Del Monte Forest including at the Corporation Yard, at Sawmill Gulch,
33 and in Area M. None of these sites are currently mined. The Sawmill Gulch and Corporation Yard
34 quarry are being reclaimed, and the Area M quarry has been used for staging for special events and
35 other purposes other than mining. The proposed project would not result in the loss of availability
36 of known mineral resources of regional or statewide importance. Therefore, there would be no
37 impact.

1 EIR Organization

2 This Draft EIR includes two volumes.

3 Volume I—Draft Environmental Impact Report (this volume) contains the analyses and conclusions
4 of the Draft EIR. Following this chapter are:

- 5 • Chapter 2, Project Description, which describes the proposed project in detail.
- 6 • Chapter 3, Environmental Setting, Impacts, and Mitigation Measures, which discusses various
7 resources potentially affected by the proposed project, as outlined under Scope, above, and
8 identifies the impacts and mitigation measures, including cumulative impacts.
- 9 • Chapter 4, Other CEQA-Required Analyses, which provides a discussion of significant
10 environmental impacts that cannot be avoided, significant irreversible environmental changes,
11 and growth-inducing impacts.
- 12 • Chapter 5, Alternatives, which describes the various alternatives considered and either
13 dismissed from further analysis or analyzed in this document.
- 14 • Chapter 6, Report Preparation, which provides a list of preparers of and contributors to the EIR.
- 15 • Chapter 7, References Cited, which provides a bibliography of source material.

16 Volume II—Appendices to the Draft Environmental Impact Report, contains additional detail
17 supporting the analyses in Volume I.
18

Chapter 2
Project Description

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Location

The proposed project includes PBC’s Del Monte Forest Plan application for development, preservation of several sites within Monterey County’s unincorporated Del Monte Forest area. Del Monte Forest is located on California’s Pacific Coast and is bounded by the Pacific Ocean to the west and the cities of Pacific Grove, Monterey, and Carmel-by-the-Sea to the north, east, and south, respectively (Figure 2-1).

The Del Monte Forest area includes residential areas, three resort hotels (The Lodge at Pebble Beach, The Inn at Spanish Bay, and Casa Palmero), a small commercial center (at The Lodge at Pebble Beach), seven 18-hole golf courses including clubhouses, one 9-hole executive course, SFB Morse Botanical Reserve, Huckleberry Hill Natural Habitat Area (HHNHA), Forest Lake Reservoir, Robert Louis Stevenson School, Pebble Beach Equestrian Center, trails, and roads. PBC offices, the Pebble Beach Community Services District (PBCSD), and local offices of the California Department of Forestry and Fire Protection (CAL FIRE) are also located within Del Monte Forest.

The proposed project includes specific development activities and preservation areas (project elements) that occur at different project sites, and these sites collectively comprise the project area. The locations of the project area and project sites are shown in Figure 2-1 and Figure 2-2. The project sites and corresponding assessor’s parcel numbers (APN) are listed in Table 2-1.

All referenced figures are provided at the end of this chapter.

1 **Table 2-1. Proposed Project Site Assessor's Parcel Numbers**

Location of Project Site Project Element	Assessor Parcel Number
The Lodge at Pebble Beach	
Meeting Facility Expansion	008-423-029
New Colton Building	008-423-030
Fairway One Reconstruction	
Fairway One House	008-423-019
Bierne Residence	008-423-002
Parking and Circulation Reconstruction	008-431-009
The Inn at Spanish Bay	
Conference Center Expansion	007-091-028
New Guest Cottages	007-091-028, 007-091-033
New Employee Parking	007-101-041
Collins Field–Equestrian Center–Special Events Area	
Driving Range Relocation to Collins Field	008-321-006, 008-321-007
Equestrian Center Reconstruction	008-313-003
Special Events Area Grading and Expansion	008-313-003
Area M Spyglass Hill	
New Resort Hotel (Option 1)	008-272-011
New Residential Lots (Option 2)	008-272-011
Residential Lot Subdivisions	
Area F-2	008-032-004
Area I-2	008-031-014
Area J	008-022-024, 008-022-035
Area K	008-021-009, 008-022-031
Area L	008-021-009
Area U	008-313-002, 008-313-003
Area V	008-312-002
Collins Residence	008-321-008, 008-321-009
Corporation Yard	008-041-009
Preservation Areas	
Area B	007-101-041
Area C	007-101-041
Area F-1	008-032-005
Area F-3	008-032-006
Area G	008-041-009
Area H	008-031-015, 008-034-001
Area I-1	008-031-019
Area J-1	008-022-024
Area J-2	008-022-035
Area J-3	008-561-020
Area K	008-021-009, 008-022-031

Location of Project Site	Assessor Parcel Number
Project Element	
Area L	008-021-009
Area M	008-272-011
Area N	008-241-008, 008-311-011, 008-272-010, 008-272-011
Area O	008-242-007
Area PQR	008-171-009, 008-171-022, 008-163-001, 008-163-003, 008-163-005, 008-164-001
Area U	008-313-002
Area V	008-312-002
Corporation Yard	008-041-009

Note:

Proposed project sites are contained within the listed parcels, but do not necessarily include the entire parcel.

1

2 Objectives and Goals

3 The general objectives of Monterey County (the CEQA Lead Agency) are to:

- 4 • Protect the natural, cultural, and visual resources of Del Monte Forest.
- 5 • Preserve and enhance public access and recreation opportunities.
- 6 • Enhance visitor-serving uses.
- 7 • Ensure a planned and balanced approach to development (both visitor-serving commercial and
- 8 residential) and preservation within Del Monte Forest, specifically with regard to the build-out
- 9 of remaining undeveloped properties.

10 The applicant’s general objectives of the proposed project are to:

- 11 • Expand and improve existing priority visitor-serving uses.
- 12 • Develop a reduced number of primarily large residential lots allowed by the current LUP and
- 13 concentrate such lots in or adjacent to already developed areas.
- 14 • Formally preserve large undeveloped tracts of forested open space previously planned for
- 15 residential development.
- 16 • Provide management prescriptions to the preserve areas to enhance habitat values.
- 17 • Provide a reduced intensity build-out plan compared to prior proposals for Del Monte Forest
- 18 that can obtain California Coastal Commission staff concurrence and that reduces the potential
- 19 for litigation over the interpretation and effect of the existing LCP.

20 The specific goals to expand and improve the visitor-serving uses include:

- 21 • Adding guest rooms to The Lodge at Pebble Beach and The Inn at Spanish Bay, and building a
- 22 new hotel at Spyglass Quarry.
- 23 • Modernizing and expanding existing meeting facilities.

- 1 • Relocating the Pebble Beach Driving Range to a larger area that can accommodate support
- 2 facilities, including a golf training facility.
- 3 • Renovating the Equestrian Center.
- 4 • Improving parking and circulation for visitors, employees, and residents.

5 **Description**

6 **Overview**

7 The proposed project includes PBC's application for renovation and expansion of visitor-serving
8 uses; creation of single-family residential lots; road, infrastructure, and trail improvements; and
9 preservation in the LUP area¹.

10 **Pebble Beach Company Application**

11 The PBC application (PLN100138) is for build-out (development and preservation) of the remaining
12 undeveloped PBC properties located in the Del Monte Forest LCP area.

13 The development proposals are summarized in Table 2-2 and are described in greater detail in this
14 section in the order shown here. Specific information regarding the development proposal, including
15 grading/drainage plans and architectural renderings, can be found in the application plan set
16 (Pebble Beach Company 2011).

- 17 • Visitor-Serving Development:
 - 18 ○ The Lodge at Pebble Beach.
 - 19 ○ The Inn at Spanish Bay.
 - 20 ○ Collins Field–Equestrian Center–Special Events Area.
 - 21 ○ Area M Spyglass Hill Option 1 (New Resort Hotel, 100 guest units and spa).
- 22 • Residential Lot Subdivisions:
 - 23 ○ 90 to 100 new residential lots.²
- 24 • Roadway, Infrastructure, and Trails:
 - 25 ○ Roadway Improvements.

¹ As discussed later in this chapter, Monterey County and the CCC also have been preparing an LCP amendment that includes changes relevant to this project. The LCP amendment is exempt from CEQA evaluation because it is processed through the CCC's certified regulatory program, which is considered a functional equivalent to CEQA. The LCP amendment is not formally part of the "project" analyzed in this EIR.

² The proposed project includes 90 residential lots under Option 1 (New Resort Hotel) and 100 residential lots under Option 2 (New Residential Lots), depending on the option selected for Area M Spyglass Hill. If Option 2 is selected, 10 residential lots would be located in Area M. The remaining 90 residential lots would be located in eight other areas (Areas F-2, I-2, J, K, L, U, V, Collins Residence, and Corporation Yard). The Collins Residence is currently two lots with two residences, which would be subdivided into four lots with four residences. Therefore, when the existing residences are counted, the total additional residential lots would be 88 to 98 (instead of 90 to 100).

- 1 ○ Infrastructure Improvements.
- 2 ○ Trail Improvements.
- 3 ● Preservation and Conservation Areas:
- 4 ○ Preservation of 627 acres of Monterey pine forest and other native habitat.
- 5 ○ Conservation of an additional 8 acres of Monterey pine forest and other native habitat.
- 6 All structures would be designed and constructed in accordance with the current California Building
- 7 Code, Monterey County’s Fire Code, and other relevant County zoning and development standards.
- 8

1 **Table 2-2. Summary of Proposed Development**

Proposed Development	New Visitor-Serving			Del Monte Forest Land Use Plan		
	New Guest Units	Additional Square Feet ^a	New Residential Lots	Planning Area and Unit ^b	Current Designation	Designation with LCP Amendment
The Lodge at Pebble Beach						
Meeting Facility Expansion	Add 2,100 sf meeting space and 2,900 sf support/circulation space to the existing facility.	5,000		Pebble Beach	CGC	CGC
New Colton Building	Construct new 20-unit guest facility.	20		Pebble Beach	VSC	VSC
Fairway One Reconstruction	Construct new 40-unit guest facility; demolish existing 5-unit facility and Bierne residence.	35		Pebble Beach	CGC & LDR	VSC
Parking and Circulation Reconstruction	Construct new two-level 224-space parking facility and 23-space short-term parking lot; demolish existing 113-space parking lot.			Pebble Beach	CGC	CGC
The Inn at Spanish Bay						
Conference Center Expansion	Add 4,660 sf meeting space and 4,155 sf support/circulation space to the existing facility.	8,815		Spanish Bay	VSC	VSC
New Guest Cottages	Construct new 40-unit guest facility.	40		Spanish Bay	OR & VSC	VSC
New Employee Parking	Construct new 285-space surface parking lot.			Spanish Bay Area B	MDR & OF	VSC & OF
Collins Field-Equestrian Center-Special Events Area						
Pebble Beach Driving Range Relocation from Area V to Collins Field	Relocate driving range to Collins Field and construct golf academy, ball kiosk/bathroom, and 26-space surface parking lot.	2,650		Pebble Beach	MDR & OR	OR

Proposed Development	New Visitor-Serving			Del Monte Forest Land Use Plan		
	New Guest Units	Additional Square Feet ^a	New Residential Lots	Planning Area and Unit ^b	Current Designation	Designation with LCP Amendment
Equestrian Center Reconstruction	Demolish existing equestrian center and construct new equestrian center in its place with same uses plus covered arena.			Pebble Beach Area U	OR	OR
Special Events Staging Area Grading and Expansion	Grade and slightly expand the special events staging area.			Pebble Beach	OR	OR
Area M Spyglass Hill						
New Resort Hotel (Option 1)	Construct new resort hotel with 100 guest rooms, 6,677 sf restaurant/lounge, 5,120 sf meeting space, 301-space parking facility, and 17,000 sf spa with 41-space surface and underground parking lot.	100	28,797	Spyglass Cypress Area M	MDR, OR, OS and OF	VSC, OR, OS
New Residential Lots (Option 2)	Create 10 single-family residential lots.		10	Spyglass Cypress Area M	MDR, OR, OS, and OF	LDR, OR, OS and an Unclassified road and utility parcel
Residential Lot Subdivisions						
Area F-2	Create 16 single-family residential lots.		16	Gowen Cypress Area F	MDR	LDR and an Unclassified road and utility parcel
Area I-2	Create 16 single-family residential lots.		16	Middle Fork Area I	MDR	LDR and an Unclassified road and utility parcel
Area J	Create 5 single-family residential lots.		5	Spyglass Cypress Area J	MDR	MDR
Area K	Create 8 single-family residential lots.		8	Spyglass Cypress Area K	MDR	MDR, and Unclassified road and utility parcels

Proposed Development	New Visitor-Serving			Del Monte Forest Land Use Plan		
	New Guest Units	Additional Square Feet ^a	New Residential Lots	Planning Area and Unit ^b	Current Designation	Designation with LCP Amendment
Area L	Create 10 single-family residential lots.		10	Spyglass Cypress Area L	MDR	MDR and an Unclassified road and utility parcel
Area U	Create 7 single-family residential lots.		7	Pebble Beach Area U	LDR	MDR
Area V	Create 14 single-family residential lots.		14	Pebble Beach Area V	MDR	MDR, OR and an Unclassified road and utility parcel
Collins Residence	Create 4 single-family residential lots (out of two existing residential lots).		2	Pebble Beach	LDR	MDR and two Unclassified road and utility parcels
Corporation Yard	Create 10 single-family residential lots.		10	Huckleberry Hill	CGC and IC	OR, MDR, and IC
Roadway Improvements						
SR 1/SR 68/17-Mile Drive Intersection Reconstruction	Reconfigure the intersection by demolishing median, widening, and modifying on-ramps/off-ramps, constructing a retaining wall, modifying signals.			NA		
Congress Road/17-Mile Drive Intersection Improvements	Improve the intersection by adding a left-turn lane, restriping to incorporate crosswalks, and adding handicap ramps at crosswalks.			Spanish Bay		
Congress Road/Lopez Road Intersection Improvements	Improve the intersection by realigning to eliminate the intersecting angle and improve sight distance.			Gowen Cypress, Middle Fork		
Lopez Road/Sunridge Road Intersection Improvements	Improve the intersection by adding lane channelization and realigning to improve sight distance.			Gowen Cypress, Middle Fork, Huckleberry Hill		

Proposed Development	New Visitor-Serving			Del Monte Forest Land Use Plan		
	New Guest Units	Additional Square Feet ^a	New Residential Lots	Planning Area and Unit ^b	Current Designation	Designation with LCP Amendment
Portola Road/Stevenson Drive Intersection Improvements				Pebble Beach		
Trail Improvements						
Area F-2				Gowen Cypress Area F		
Area I-2				Middle Fork Area I		
Area J				Spyglass Cypress Area J		
Area K				Spyglass Cypress Area K		
Area PQR				Pescadero Area PQR		
Corporation Yard				Huckleberry Hill		
Huckleberry Hill Natural Habitat Area				Huckleberry Hill		

Proposed Development	New Visitor-Serving			Del Monte Forest Land Use Plan		
	New Guest Units	Additional Square Feet^a	New Residential Lots	Planning Area and Unit^b	Current Designation	Designation with LCP Amendment
Portions of 17-Mile Drive, Spyglass Road and Stevenson Drive ^c		Dedicate bicycle lane for 4.7 miles in each direction.				
Infrastructure Improvements						
Infrastructure including water lines, sewer lines, reclaimed water lines, and storm drains would be installed to support the proposed development.						
Source: Pebble Beach Company 2011.						
Notes NA = Not Applicable LDR = Low Density Residential MDR = Medium Density Residential CGC = Coastal General Commercial IC = Institutional Commercial VSC = Visitor Serving Commercial OF = Open Space Forest OR = Open Space Recreation OS = Open Space Shoreline						
^a The square footage is from the May 2011 application. It is expected that the square footage may change as the design plans for the facilities are finalized but the changes would not be substantial and would not change any impact determinations in Chapter 3.						
^b The Del Monte Forest Land Use Plan includes eight Planning Areas (Spanish Bay, Spyglass Cypress, Middle Fork, Pescadero, Huckleberry Hill, Gowen Cypress, Pebble Beach, Country Club), which are further divided into lettered sub-planning areas delineated as Areas A through Y (Figure 2-32).						
^c From north to south, the new bicycle lanes begins on and follows 17-Mile Drive, turn up Spyglass Hill Road, continue south along Stevenson Drive, and end at the Stevenson Drive/17-Mile Drive intersection.						

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1 The Lodge at Pebble Beach

2 Figure 2-3 shows the location of the proposed development at The Lodge at Pebble Beach (The
3 Lodge) complex. The purpose of the proposed alterations is to expand options for visitor-serving
4 accommodations at The Lodge, increase the efficiency of service to patrons of The Lodge, and
5 improve accessibility to services for residents, guests, and visitors to this area of Del Monte Forest.

6 The existing development at The Lodge complex includes The Lodge with 161 guest rooms, the
7 Fairway One House with five guest rooms, and Casa Palmero with 24 guest rooms; The Spa at Pebble
8 Beach; The Beach & Tennis Club; and several retail shops and restaurants. The Lodge complex is
9 located on 17-Mile Drive approximately 1.5 miles north of the lower Carmel Gate entrance to Del
10 Monte Forest.

11 Proposed development at The Lodge complex would include a net addition of 55 new visitor-serving
12 units, 7,100 sf of meeting and support areas, and the following supporting improvements.

- 13 • **Meeting Facility Expansion.** The existing 5,000 sf meeting facility would be renovated and
14 expanded to provide an additional 2,100 sf of meeting room space and 2,900 sf of additional
15 support and circulation areas in the back (Figure 2-4). The improvements are proposed to result
16 in more efficient meeting space, a protected entrance, a covered service corridor for staff to
17 access meeting rooms, banquet preparation and cooking areas, and storage. An elevator is
18 proposed to provide disabled persons access to other areas of The Lodge.
- 19 • **New Colton Building.** Construction of the new Colton Building would provide 20 additional
20 visitor-serving units on an existing parking lot adjacent to the existing Flavin, Morse, Jeffers, and
21 McComas buildings (Figure 2-5). Access would be from the existing driveway off Cypress Drive.
22 This building would displace 32 parking spaces but would provide 31 replacement parking
23 spaces in the basement level.
- 24 • **Fairway One Reconstruction.** The existing five-guest-room Fairway One House and the Bierne
25 residence would be removed to allow for the construction of a new Fairway One visitor-serving
26 facility, with 40 units in six guest buildings and a hospitality facility on the east side (Figure 2-6).
27 Fairway One would front the north side of the first fairway of the Pebble Beach Golf Links,
28 directly opposite the proposed Colton Building.
- 29 • **Parking and Circulation Reconstruction.** The central circulation and 113-space surface
30 parking area located north of the existing Meeting Facility would be reconfigured. A new two-
31 level 224-space parking facility and 23-space short-term surface lot would be constructed
32 (Figure 2-7). Circulation improvements are proposed to improve resident and visitor access to
33 parking, and safe access for pedestrians between parking areas and visitor-serving uses.

34 The Inn at Spanish Bay

35 Figure 2-8 shows the location of the proposed development at The Inn at Spanish Bay (The Inn)
36 complex. The purpose of the proposed development is to expand options for visitor-serving
37 accommodations at The Inn, increase the efficiency of service to patrons of The Inn, and provide
38 needed parking for employees and guests.

39 The existing development at The Inn complex includes The Inn with 269 guest rooms; The Spanish
40 Bay Club and Tennis Pavilion; and several restaurants and retail shops. The Inn complex is located

1 on 17-Mile Drive approximately 0.3 mile south of the Pacific Grove Gate and 2.5 miles north of the
2 lower Carmel Gate entrance to Del Monte Forest.

3 Proposed development at The Inn complex would include 40 new visitor-serving units, an additional
4 3,960 sf of meeting space, and supporting improvements as follows.

- 5 • **Conference Center Expansion.** The existing ballroom on the first floor would be expanded
6 outward, by extending the outside walls of the existing building to create an additional 4,155 sf
7 of support and circulation space; and the existing meeting facilities would be expanded by
8 adding meeting rooms on the backside of both the first floor and lower fairway level for an
9 additional 4,660 sf of meeting space (Figure 2-9).
- 10 • **New Guest Cottages.** Proposed development would add 40 guest rooms in five two-story
11 buildings, with a hospitality facility in the middle. The new buildings would displace 30 existing
12 parking spaces that would be replaced by the new 285-space parking lot in Area B (described
13 below) (Figure 2-10).
- 14 • **New Employee Parking.** Proposed development in Area B would add a 285-space surface
15 parking lot for employees, as well as guests, and approximately 200-foot pedestrian trail across
16 from the main entry to The Inn at the intersection of 17-Mile Drive and Congress Road (Figure
17 2-11). The remainder of Area B would be open space and preservation areas.

18 **Collins Field–Equestrian Center–Special Events Area**

19 The Collins Field–Equestrian Center–Special Events Area is located just north of The Lodge (Figure
20 2-12). Development in this area would include the following elements.

- 21 • **Pebble Beach Driving Range Relocation from Area V to Collins Field.** The driving range
22 would be relocated from its current location within Area V to the area known locally as Collins
23 Field because the current location is considered undersized by modern standards and cannot
24 incorporate support facilities. The new driving range would include tee-box hitting stations and
25 terraced tees; a putting and chipping green; a 350 sf golf ball kiosk with restroom; a 2,300-sf golf
26 academy with training center, offices and restrooms; and a 26-space surface parking lot (Figure
27 2-13). The current driving range location is proposed to be subdivided for residential use, as
28 described under Residential Lot Subdivisions.
- 29 • **Equestrian Center Reconstruction.** The existing equestrian center would be demolished, and
30 new equestrian facilities would be constructed to include a covered arena, employee housing,
31 barns and stalls, vehicle storage, interior roadway, parking, and accessory structures (Figure 2-
32 14). Although there would be a new covered arena in place, the overall footprint of the new
33 facility would be smaller than the existing facility, and there would be a minor capacity
34 reduction (Figure 2-14). Hours of operation would be primarily daylight hours, although the
35 covered arena would be used for indoor training and lessons during evening hours. A manure
36 management plan would be prepared for review and approval by the County Health
37 Department.
- 38 • **Special Events Staging Area Grading and Expansion.** The special events staging area would
39 be graded and slightly expanded northward (Figure 2-15). All existing structures and corrals
40 would be removed from the site.

1 Area M Spyglass Hill

2 For Area M Spyglass Hill (Figure 2-16), two development options, a new resort hotel or residential
3 lots, are under consideration.

- 4 • **New Resort Hotel (Option 1).** The resort hotel option includes development of a new resort
5 hotel on approximately 16 acres located across from the Spyglass Hill Golf Course at the
6 Spyglass Hill Road/Stevenson Drive Intersection (Figure 2-17). The proposed development is
7 composed of the main hotel, 100 guest rooms, and a spa facility. The main hotel area would have
8 a lobby (2,955 sf), restaurant (4,672 sf), bar/lounge (2,005 sf), meeting areas (5,120 sf),
9 offices/storage/retail (4,500 sf), and a three-level parking facility (one surface and two
10 underground levels) to accommodate 301 vehicles. The 100 guest rooms would be in 11
11 different single-story structures (totaling 79,400 sf) that are terraced so all have ocean views
12 and to minimize disruption of views. The 17,000 sf spa would have a fitness facility and parking
13 for 41 vehicles (27 underground spaces and 14 surface spaces). The buildings would be
14 designed to be low profile, and building materials would include stone veneer, cedar board
15 siding, and aluminum windows/curtain wall.
- 16 • **New Residential Lots (Option 2).** The residential lot subdivision option consists of 10 single-
17 family residential lots within the same building footprint as the hotel (Figure 2-18).

18 Residential Lot Subdivisions

19 The proposed project includes creating new residential lot subdivisions, which would enable future
20 development of up to 90 single-family residences³. As shown in Figure 2-2 and in Figure 2-19
21 through Figure 2-27, the proposed residential lot subdivisions are located in nine areas (F-2, I-2, J, K,
22 L, U, V, Collins Residence, Corporation Yard) within or adjacent to existing golf courses or other
23 development. The elements of the proposed residential use development are described below.

- 24 • **Area F-2 (16 lots).** The proposed development site is a 19.5-acre parcel in the Gowen Cypress
25 Planning Area⁴ surrounded by the Poppy Hills Golf Course to the north, east, and west (Figure 2-
26 19). The parcel would be subdivided to provide 16 residential lots ranging in size from 1 to 1.49
27 acres, averaging 1.10 acres, and totaling 17.71 acres. Roadway and public utility easement
28 would total 1.79 acres. Access to residential sites would be by an internal road with access from
29 Lopez Road. The existing trail on the site would be relocated and extended.
- 30 • **Area I-2 (16 lots).** The proposed development site is an 18.74-acre parcel in the Middle Fork
31 Planning Area surrounded by Poppy Hills Golf Course to the north and west and Viscaïno and
32 Ronda Roads and residential development to the south (Figure 2-20). The parcel would be
33 subdivided to provide 16 residential lots ranging in size from 1 to 1.62 acres, averaging 1.13
34 acres, and totaling 18.14 acres. Roadway and public utility easement would total .32 acre, and
35 .28 acre would be open space. Primary access would be from Viscaïno and Ronda Roads. The
36 existing trail on the site would be relocated and extended.

³ If New Residential Lots (Option 2) is selected for Area M Spyglass Hill instead of New Resort Hotel (Option 1), the project would enable future development of up to 100 single-family residences. The proposed project would create 88 to 98 new residential lots (depending on Option 1 or 2). The Collins Residence area contains two existing residential lots, each with a residence. The existing residences will be demolished and with the project there could be up to four new residences on the proposed four residential lots.

⁴ The LUP includes eight Planning Areas (Spanish Bay, Spyglass Cypress, Middle Fork, Pescadero, Huckleberry Hill, Gowen Cypress, Pebble Beach, and Country Club).

- 1 • **Area J (5 lots).** The proposed development site consists of two parcels totaling 9.38 acres in the
2 Spyglass-Cypress Planning Area, with frontage on Spyglass Woods Drive (Figure 2-21). The two
3 parcels would be subdivided to provide five residential lots ranging in size from 0.55 to 0.98
4 acre, averaging 0.76 acre, and totaling 3.80 acres. Open space would total 5.58 acres.
- 5 • **Area K (8 lots).** The proposed development site consists of two parcel areas totaling 10.62
6 acres in the Spyglass-Cypress Planning Area. Stevenson Drive extends between the two parcels,
7 which are otherwise surrounded by the Spyglass Hill Golf Course (Figures 2-22 and 2-23). The
8 two parcels would be subdivided into eight lots ranging in size from 0.44 to 0.74 acre, averaging
9 0.63 acre, and totaling 5.02 acres. Open space would total 4.70 acres. Roadway area would total
10 0.9 acre.
- 11 • **Area L (10 lots).** The proposed development site is a 20.92-acre parcel area located within the
12 Spyglass-Cypress Planning Area with access off of 17-Mile Drive by Dune Road (Figure 2-23).
13 The parcel is situated between Spyglass Hills Golf Course and Indian Village. Residential
14 development would be on the south side of the existing road that extends to the Indian Village
15 preserve area. The parcel would be subdivided into 10 lots ranging in size from 0.58 acre to 0.95
16 acre, averaging 0.71 acre, and totaling 7.09 acres. Open space would total 9.25 acres and
17 roadway area would total 1.76 acres.
- 18 • **Area U (7 lots).** The proposed development site consists of an area totaling 22.28 acres in the
19 Pebble Beach Planning Area (Figure 2-24). The parcel area would be subdivided to provide
20 seven residential lots ranging in size from 0.71 to 0.83 acre, averaging 0.78 acre, and totaling
21 5.48 acres. The residential lots would be located on the south side of and fronting Drake Road,
22 with the Equestrian Center to the south and open space preserve areas to the east and west
23 (also in Area U) and across Drake Road to the north (in Area N). Open space would total 16.69
24 acres.
- 25 • **Area V (14 lots).** The proposed development site is a 23.06-acre parcel in the Pebble Beach
26 Planning Area (Figure 2-25) and currently being used for the Pebble Beach Driving Range, which
27 would be relocated to Collins Field as previously described. The parcel would be subdivided to
28 provide 14 residential lots ranging in size from 0.47 to 0.5 acre, averaging 0.49 acre, and totaling
29 6.82 acres. Open space would total 15.47 acres and roadway area would total 0.77 acre.
- 30 • **Collins Residence (4 lots/2 new lots).** The proposed development site consists of 3.85 acres,
31 currently subdivided into two legal lots of record, in the Pebble Beach Planning Area with
32 frontage on Alva Lane to the west and the relocated driving range to the east (Figure 2-26). The
33 two existing residential units on the site would be demolished. The site would be subdivided to
34 provide four residential lots ranging in size from 0.75 to 0.91 acre, averaging 0.84 acre, and
35 totaling 3.34 acres, for an increase of two lots over existing conditions.
- 36 • **Corporation Yard (10 lots).** The proposed development site is a 22.46-acre parcel area at the
37 PBC Corporation Yard site (Figure 2-27). The parcel area would be subdivided to provide 10
38 residential lots ranging in size from 0.38 acre to 0.60 acre, averaging 0.47 acre, and totaling 4.7
39 acres. The PBC offices and maintenance facilities to the south would remain in use. Maintenance
40 activities would continue to occur, but would be relocated from the site to an area east of the
41 offices. A landscaped berm would be installed along the south side of the residential
42 development to provide a buffer from activity in the Corporation Yard. The Corporation Yard
43 area would total 7.42 acres. The portion of the parcel along the northwestern edge adjacent to
44 the HHNHA would remain open space and passive recreation (e.g., playing Frisbee, dog walking)
45 would be allowed, but there would be no formal recreation structures. Open space for passive

1 recreation would total 1.45 acres. Open space preserve area would total 6.96 acres. Trails are
2 proposed along existing dirt roads to connect this residential subdivision to the trail system in
3 the HHNHA.

4 **Roadway Improvements**

5 The proposed project includes several roadway improvements to facilitate traffic flow. The locations
6 of the proposed roadway improvements are shown on Figure 2-28. The improvements include SR
7 1/SR 68/17-Mile Drive Intersection Reconfiguration and four internal intersection improvements.
8 The improvements are described generally in this section, and the plans are provided in Appendix B.

- 9 ● **SR 1/SR 68/17-Mile Drive Intersection Reconfiguration.** Proposed improvements to the SR
10 1/SR 68/17-Mile Drive intersection are shown in Figure 2-29. The elements of the
11 improvements are:
 - 12 ○ Demolish existing raised median; pave and restripe at SR 68 within project limits; and
13 construct an additional right-turn lane in the eastbound direction within the project limits
14 by adding a lane on the south side. The additional eastbound right-turn lane would end at a
15 mandatory right-turn lane to the Pebble Beach entrance, and a right-turn onto the SR 1
16 southbound on-ramp.
 - 17 ○ Widen the SR 1 southbound off-ramp to accommodate one exclusive right-turn lane, one
18 through lane, and one left-turn lane.
 - 19 ○ Improve the southbound SR 1 on-ramp/Pebble Beach entrance by reconfiguring the
20 intersections with SR 68, and forming a five-legged intersection to separate the Pebble
21 Beach entrance from the SR 1 on-ramp entrance.
 - 22 ○ Modify the SR 1 southbound on-ramp.
 - 23 ○ Construct a retaining wall along the SR 1 southbound on-ramp.
 - 24 ○ Maintain and improve the access from the Pebble Beach entrance directly to the southbound
25 SR 1 on-ramp. This on-ramp would be separate from the main on-ramp entrance at SR 68.
 - 26 ○ Modify signals at the SR 1/SR 68 intersection.

27 The proposed intersection improvements are a subset of the Highway 68 Widening Project, a
28 regional transportation project that widens SR 68 eastbound from one to two lanes from east of
29 the Scenic Drive overcrossing to the ramp terminal intersection with SR 1; widens the SR 1
30 southbound off-ramp to provide a left-turn lane; and reconfigures the SR 1 southbound on-ramp
31 to separate Pebble Beach-related and highway-related traffic.

32 Regional transportation plans are prepared and maintained by the Transportation Agency for
33 Monterey County (TAMC) and the Association of Monterey Bay Area Governments (AMBAG).
34 The current Regional Transportation Plan (RTP) recommends widening of SR 68 from 0.1 mile
35 west of the Community Hospital of Monterey Peninsula to south of the SR 1/SR 68/17-Mile
36 Drive intersection. The intent of the project described in the Project Study Report (PSR) is to
37 relieve existing and future traffic congestion on SR 68, and to improve traffic safety and
38 vehicular access to the Pebble Beach entrance, Community Hospital of the Monterey Peninsula,
39 and Beverly Manor Complex. Due to the lack of available funding, this improvement is listed as
40 an unconstrained project in the RTP. A PSR was completed and approved by Caltrans in 2000 to
41 facilitate future funding opportunities should they become available.

1 The applicant proposes to implement a portion of the PSR project, referred to as the Phase 1B
2 Interim Improvement. The element is included with the overall proposed project analyzed in
3 this document. This project element (SR 1/SR 68/17-Mile Drive Intersection Reconfiguration)
4 would be implemented through an encroachment permit to be obtained from Caltrans. This
5 document provides CEQA analysis for the proposed improvements to support the encroachment
6 permitting project through Caltrans.

7 The project includes the following internal intersection improvements.

- 8 • **Congress Road/17-Mile Drive Intersection Improvement.** This intersection is located at the
9 entrance to the Inn at Spanish Bay. Proposed improvements are re-striping to incorporate
10 pedestrian crosswalks at the intersections (connecting the new employee parking in Area B with
11 the pedestrian facilities at The Inn at Spanish Bay) and a 50-foot left-turn lane from 17-Mile
12 Drive to the entry drive for The Inn at Spanish Bay. Handicap ramps are incorporated into the
13 proposed intersection design to assist pedestrians at the delineated crosswalks. Stop-sign
14 controls are incorporated into the proposed intersection design so that all intersection
15 approaches are stop controlled.
- 16 • **Congress Road/Lopez Road Intersection Improvement.** The proposed improvement to this
17 intersection is a realignment to eliminate the acute intersecting angle and improve sight
18 distance. The proposed realignment includes realigning a portion of Congress Road, cutting the
19 bank along Lopez Road, and widening a portion of Lopez Road.
- 20 • **Lopez Road/Sunridge Road Intersection Improvement.** This intersection is located at the
21 entrance to the Corporation Yard. Proposed improvements are lane channelization and minor
22 realignment to improve sight distance and turning radii, and to more clearly delineate the
23 intersection.
- 24 • **Portola Road/Stevenson Drive Intersection Improvement.** Proposed improvement is a
25 realignment of Portola Road at Stevenson Drive to eliminate the acute intersecting angle,
26 improve sight distance, and provide improved channelization.

27 Trail Improvements

28 There are approximately 31.5 miles of existing hiking and equestrian trails within Del Monte Forest.
29 The proposed project would add 2.4 miles of trails, for a total of 33.9 miles (Figure 2-30). The areas
30 of existing, relocated, and new trails are shown in Figure 2-30. The areas of new and relocated trails
31 are described below.

- 32 • **Area F-2.** Because future residential development proposed for Area F-2 would remove 1,870
33 linear feet of existing trail, the project includes 1,890 linear feet of replacement trail to the east
34 of the existing trail along the Poppy Hills Golf Course. The net increase is 20 linear feet.
- 35 • **Area I-2.** Because future residential development proposed for Area I-2 would remove of 3,400
36 linear feet of existing trail, the project includes 3,470 linear feet of replacement trail to the north
37 of the existing trail along the Poppy Hills Golf Course. The net increase is 70 linear feet.
- 38 • **Area J.** Future residential development proposed for Area J requires relocation of existing trail
39 so it is outside of the new lots. The net increase is 130 linear feet.
- 40 • **Area K.** Future residential development proposed for Area K requires relocation of existing trail
41 so it is outside of the new lots. The net increase is 56 linear feet net increase in trail.

- 1 • **Area PQR.** Create 1.36 miles of new trails in the Pescadero planning area. Most of this would be
2 along existing dirt and fire roads; however, 0.25 mile would be a new trail connection between
3 fire road #20 and fire road #21.
- 4 • **Corporation Yard Area.** Create 0.15 miles of new trails on existing dirt fire roads to connect the
5 proposed residential lot subdivision to the network of trails in the HHNHA and SFB Morse
6 Preserve.
- 7 • **HHNHA.** Create 0.59 miles of new trails following the existing Haul Road.
- 8 Additionally, the project would include dedicating bicycle lanes along approximately 9.4 miles (4.7
9 miles in each direction) of existing roadway (17-Mile Drive, Spyglass Hill Road, and Stevenson Drive
10 to the Peter Hay Golf Course and back to the Pacific Grove Gate), as shown in Figure 2-30.

11 Infrastructure Improvements

12 Most of the development sites would be served by existing water, sewer, and reclaimed water lines.
13 The applicant proposes to irrigate the new landscaping with water from the Carmel Area
14 Wastewater District (CAWD)/Pebble Beach Community Services District (PBCSD) reclamation plant.
15 New infrastructure lines would be installed as described below, and the associated grading and any
16 tree removal has been included in the calculations for the relevant development shown in Table 2-3.

- 17 • **Water Lines.** On-site water line extensions would be installed at development sites to provide
18 connections to existing water lines. Approximately 3,300 linear feet of new off-site water lines
19 would be installed as described below to serve proposed development. The linear feet indicated
20 are estimates.
- 21 ○ Area F-2. Install 230 feet of 8-inch-diameter water line and connect to a 12-inch water main
22 in Lopez Road.
- 23 ○ Area K. Install 2,500 linear feet of 6-inch-diameter water line and connect to a 6-inch water
24 main in Stevenson Drive.
- 25 ○ Area L. Install 400 linear feet of 6-inch-diameter water line and connect to an 8-inch water
26 main in 17-Mile Drive.
- 27 ○ Area V. Install 100 linear feet of 8-inch-diameter water line and connect to a 6-inch water
28 main in Forest Lake Road.
- 29 • **Sewer Lines.** On-site sewer line extensions would be installed at development sites to provide
30 connections to existing sewer lines. Approximately 6,300 linear feet of new off-site sewer lines
31 would be installed as described below to serve proposed residential development and Fairway
32 One Complex. The linear feet indicated are estimates.
- 33 ○ Collins Residence. Install 530 linear feet of 10-inch-diameter sewer line in Alva Lane.
- 34 ○ Corporation Yard. Install 875 linear feet of 4-inch-diameter sewer line in Sunridge Road.
- 35 ○ Area I-2. Install 1,340 linear feet of 8-inch-diameter sewer line in Viscaino Road and connect
36 to an existing manhole in Viscaino road, and install 390 linear feet of 8-inch-diameter sewer
37 line in Viscaino Road and connect to an existing manhole at the intersection of Viscaino
38 Road and Ronda Road.
- 39 ○ Area J. Install 310 linear feet of 6-inch-diameter sewer line in Spyglass Woods Drive.
- 40 ○ Area K. Install 1,020 linear feet of 8-inch-diameter sewer line in Stevenson Drive.

- 1 ○ Area L. Install 40 linear feet of 6-inch-diameter sewer line in Dune Road.
- 2 ○ Area M (Option 1 and 2). Install 1,000 linear feet of 8-inch-diameter sewer line in Spyglass
- 3 Hill Road.
- 4 ○ Area U. Install 230 linear feet of 8-inch-diameter sewer line in Drake Road for residential
- 5 subdivision. Additionally, install 330 linear feet of 6-inch-diameter sewer line through the
- 6 Area U subdivision utility easement to Drake Road for the proposed Equestrian Center
- 7 reconstruction.
- 8 ○ Fairway One Complex. Install 1,100 linear feet of 8-inch-diameter sewer line and connect to
- 9 the existing 10-inch-diameter main located parallel to the 18th fairway on the Pebble Beach
- 10 Golf Links.
- 11 ● **Reclaimed Water Lines.** On-site reclaimed water lines would be installed to carry reclaimed
- 12 water to irrigation areas.
- 13 ● **Storm Drains.** New off-site storm drains would be installed to serve proposed developments.
- 14 Retention basins are planned at the proposed Residential Subdivisions in Areas F-2, I-2, J, K, L, U,
- 15 V, Collins Residence, and Corporation Yard. Retention basins are also planned for the new
- 16 employee parking in Area B at The Inn at Spanish Bay, for the new resort hotel in Area M
- 17 Spyglass Hill, the reconstructed Equestrian Center, and the relocated driving range (from Area V
- 18 to Collins Field).

19 **Preservation Areas**

20 There are currently 685 acres of undeveloped open space that is formally preserved (either in fee

21 title or easement) through the Del Monte Forest Foundation in Del Monte Forest (Figure 2-2). The

22 applicant proposes to formally dedicate or preserve an additional 627 acres of undeveloped areas,

23 comprised of Monterey pine forest and other native habitat, in Del Monte Forest through the Del

24 Monte Forest Foundation. Additionally, the applicant proposes conservation easements for

25 approximately 8 acres that comprise smaller buffer areas and setbacks around development areas

26 and along roadways. These areas are summarized in Table 2-4 and shown in Figures 2-2 and 2-31.

27 Preservation of these lands is proposed to be accomplished through amendments to the LCP to

28 change land uses and densities, dedication of conservation easements to the Del Monte Forest

29 Foundation, and management of the newly dedicated lands by PBC for the benefit of biological

30 resources. For purposes of the proposed project and EIR analysis, the 635 acres of dedication areas

31 and conservation areas are considered the proposed preservation areas.

Table 2-3. Summary of Grading and Tree Removal for Proposed Development

Proposed Development	Grading (cubic yards)			Tree Removal									Total Trees
				Monterey Pine			Coast Live Oak			Other Tree Types			
	Cut	Fill	Net	< 12"	> 12"	Total	< 12"	> 12"	Total	< 12"	> 12"	Total	
The Lodge at Pebble Beach													
Meeting Facility Expansion	0	0	0	0	0	0	0	2*	2	0	0	0	2
New Colton Building	5,500	0	5,500	0	0	0	2*	2*	4	0	1*	1	5
Fairway One Reconstruction	4,600	4,300	300	0	5	5	27*	29*	56	2*	3*	5	66
Parking and Circulation Reconstruction	9,000	600	8,400	4*	10*	14	20	18	38	0	0	0	52
The Inn at Spanish Bay													
Conference Center Expansion	0	0	0	0	0	0	0	0	0	0	0	0	0
New Guest Cottages	2,400	2,400	0	177	128	305	14	3	17	0	0	0	322
New Employee Parking	7,300	7,300	0	68	105	165	44	25	69	0	0	0	234
Collins Field-Equestrian Center-Special Events Area													
Pebble Beach Links Driving Range	36,500	27,800	8,700	44	88	132	0	0	0	0	0	0	132
Equestrian Center Reconstruction	5,800	6,800	-1,000	44	68	112	5	10	15	5*	16*	21	148
Special Events Staging Area Grading and Expansion	8,700	400	8,300	122	123	245	15	2	17	0	8*	8	270
Area M Spyglass Hill													
New Resort Hotel (Option 1)	99,800	51,500	48,300	90	299	389	0	0	0	0	0	0	389
New Residential Lots (Option 2)	48,500	38,700	9,800	58	177	285	0	0	0	0	0	0	285
Residential Lot Subdivisions													
Area F-2 (16 Lots)	1,500	1,500	0	764	462	1226	0	0	0	0	0	0	1,226
Area I-2 (16 Lots)	100	100	0	201	287	488	0	0	0	0	0	0	488
Area J (5 Lots)	100	100	0	54	190	244	127	9	136	0	0	0	380
Area K (8 Lots)	300	300	0	422	303	725	191	32	223	0	0	0	948
Area L (10 Lots)	1,500	1,500	0	594	426	1020	269	45	314	0	0	0	1,334
Area U (7 Lots)	0	6,000	-6,000	169	170	339	21	2	23	0	0	0	362
Area V (14 Lots)	800	16,480	-15,680	82	83	165	10	1	11	0	0	0	176
Collins Residence (4 Lots)	0	7,800	-7,800	0	2	2	9	16	25	0	0	0	27
Corporate Yard (10 Lots)	58,000	75,000	-17,000	2	6	8	1	0	1	0	0	0	9
Roadway Improvements													
SR 1/SR 68/17-Mile Drive Intersection Reconfiguration	621	402	219	25 ^a	28 ^{*1}	53	0	0	0	0	0	0	53
Congress Road/17-Mile Drive Intersection Improvements	0	0	0	0	0	0	0	0	0	0	0	0	0
Congress Road/Lopez Road	4,100	350	3,750	15	20	35	1	0	1	0	0	0	36
Sunridge Road/Lopez Road Intersection Improvements	40	10	30	1	6	7	0	0	0	0	0	0	7
Portola Road/Stevenson Drive Intersection Improvements	50	50	0	0	0	0	0	0	0	0	0	0	0
Total Option 1 (rounded estimate)	246,711 (247,000)	210,692 (211,000)	36,019 (36,000)	2,878	2,808	5,686	756	196	952	7	28	35	6,674 (6,700)
Total Option 2 (rounded estimate)	195,411 (196,000)	197,892 (198,000)	-2,481 (-2,000)	2,846	2,686	5,532	756	196	952	7	28	35	6,520 (6,500)

Source:
Pebble Beach Company 2011.

Notes:
The estimates in this table include grading associated with proposed infrastructure improvements. There would be no grading associated with proposed trail improvements.

^a LSA 2001.

* Tree was planted.

1 **Table 2-4. Summary of Proposed Preservation**

Preservation Area	Current LUP Designation	LUP Designation with LCP Amendment	New Dedication Area (acres)	New Conservation Easements (acres)^a	Total
Area B	MDR, OF	OF	19.45	0.29	19.74
Area C	MDR, OF	OF	29.05	0.83	29.88
Area F-1	MDR, OF	OF	9.77	0.47	10.24
Area F-3	MDR	OF	16.81	0.31	17.12
Area G	MDR, OF	OF	59.97	0.56	60.53
Area H	MDR, OF	OF	49.81	1.08	50.89
Area I-1	LDR, MDR, OF	OF	38.16	0.66	38.82
Area I-2	OF	OF	0.28	0	0.28
Area J-1	MDR	OF	3.19	0.05	3.24
Area J-2	MDR	OF	1.59	0.26	1.85
Area J-3	MDR	OF	0.8	0.16	0.96
Area K	MDR	OF	4.7	1.14	5.84
Area L	MDR	OF	8.51	0.74	9.25
Area M	MDR, OS, OF	OS	34.12	0	34.12
Area N	LDR	OF	48.87	0	48.87
Area O	MDR, OF	OF	19.5	0.48	19.98
Area PQR	LDR, OF	OF	245.89	0	245.89
Area U	LDR	OF	16.69	0.75	17.44
Area V	MDR	OF	12.56	0.2	12.76
Corporation Yard Area	OF	OF	6.96	0	6.96
Total			626.68 (627)	7.98 (8)	634.66 (635)

Note:

LDR = low-density residential; MDR = medium-density residential; VSC = visitor-serving commercial; CGC = coastal general commercial; OR = open space recreation; OF = open space forest; OS = open space shoreline (including dune habitat).

^aThe conservation easements are for smaller buffer areas and setbacks around development, as opposed to the larger preservation areas. For purposes of the proposed project and EIR analysis, the 635 acres of dedication areas are considered the preservation areas.

2
3 In order to provide for integrated resource management of the proposed preservation areas, a
4 Master Resource Management Plan (Master RMP) for implementing resource management has been
5 developed by the County with technical assistance from ICF (Appendix C). The Master RMP is
6 considered part of the proposed project because it is a necessary component to managing the
7 preservation areas for the benefit of biological resources. The Master RMP establishes a framework
8 for the development of site-specific RMPs for each preservation area. The site-specific RMPs will
9 include the CEQA mitigation identified in this EIR. The Master RMP establishes a framework for
10 development and approval of work plans for restoration activity, monitoring, and adaptive
11 management of all dedicated areas. Through this framework, the habitat value of the dedicated

1 lands can be preserved in perpetuity with an appropriate context of monitoring, funding, and
2 oversight.

3 **Project Construction**

4 This section describes the anticipated construction associated with the proposed development.

- 5 • **Grading.** To accommodate proposed development, grading would occur at some of the
6 development sites, and there is an associated grading plan. As shown in Table 2-3, it is estimated
7 that the project would result in up to approximately 247,000 cubic yards of cut material and up
8 to approximately 211,000 cubic yards of fill material. Much of the fill material would be supplied
9 from cut material either from the same or another project development site. Borrow sites for cut
10 and fill material would be located on the former quarry site (Spyglass Pit) in Area M Spyglass
11 Hill or in the Special Events Staging Area. Cut material that is not used for fill would be
12 transported to the Marina Landfill. Truck routes for hauling cut and fill material would include
13 SR 1 northbound via the SR 1 Gate, or SR 68 eastbound to SR 1 northbound via the SFB Morse
14 Gate.
- 15 • **Tree Removal.** Proposed development would result in the removal of up to approximately
16 6,700 trees⁵. Of the trees removed, approximately 45% are 12 inches in diameter or more and
17 85% are Monterey pine trees (Table 2-3). All removed trees for Pebble Beach Company's resort,
18 recreational, and infrastructure projects would be taken to the Corporation Yard wood
19 processing facility. These trees would be processed for use as firewood or chipped for use in
20 various on-site landscaping projects. Residential lot owners would be responsible for tree
21 removal and disposal as part of their normal construction process, as separately reviewed and
22 approved by the County for each lot.
- 23 • **Duration.** Project construction is estimated to occur in four phases over ten years with Phase I
24 beginning in September 2012 and Phase IV ending in August 2022. Table 2-5 includes the
25 estimated construction duration, timeframes, and range of daily workers for each of
26 development sites. Construction activity and construction traffic characteristics are discussed in
27 further detail in the Section 3.11, Transportation and Circulation.
- 28 • **Construction Hours.** Construction activities would be limited to between the hours of 8 am and
29 6 pm, Monday through Saturday. There would be no construction on Sundays or national
30 holidays.
- 31 • **Construction Vehicle Access.** The applicant proposes to limit major construction truck activity
32 to key collector roads in the forest. Construction truck access to The Lodge at Pebble Beach
33 would be by the SR 1 Gate. Construction truck access for The Inn at Spanish Bay would be via the
34 SFB Morse Gate. Internal construction truck traffic between improvement areas would generally
35 use Congress Road, Lopez Road, and Forest Lake Road.

36 The roadway improvements along Congress Road and at Lopez Road, as previously described,
37 would be completed prior to the rest of the construction to facilitate construction access.

⁵ For the purpose of environmental review, this amount presumes a worst-case scenario of the total clearing of 15,000 sf on each of the proposed residential lots, which would not occur. For each residential lot, the County would review the proposed residence design and coordinate with the property owner to minimize tree removal. The total number of trees removed would likely be substantially fewer.

1 **Table 2-5. Preliminary Construction Duration and Workers for Proposed Development**

Phase	Project Element (Location)	Duration (months)	Timeframe		Estimated Daily Workers
			Begin	End	
I	Congress Road/Lopez Road Intersection Improvements	2	September 2012	October 2012	10
	Congress Road/17-Mile Drive Intersection Improvements	2	September 2012	October 2012	10
	New Employee Parking Lot (Inn at Spanish Bay)	4	September 2012	December 2012	10–20
	Residential Lot Subdivisions (66 lots in Areas F-2, I-2, J, K, L, U, Collins Residence)	6	September 2012	February 2013	3–56
	Pebble Beach Driving Range Relocation (Collins Field)	8	March 2013	October 2013	10–40
	SR 1/SR 68/17-Mile Drive Intersection Reconfiguration	9	March 2013	November 2013	20
	Parking and Circulation Reconstruction (Lodge at Pebble Beach)	9	March 2013	November 2013	20–50
II	Lopez Road/Sunridge Road Intersection Improvements	2	March 2014	April 2014	10
	Portola Road/Stevenson Drive Intersection Improvements	2	March 2014	April 2014	10
	Residential Lot Subdivisions (10 lots at Corporation Yard)	6	March 2014	August 2014	15
	Equestrian Center Reconstruction/Special Events Staging Area Grading and Expansion	8	March 2014	October 2014	20–50
	Meeting Facility Expansion (Lodge at Pebble Beach)	10	March 2014	December 2014	20–40
	New Colton Building (Lodge at Pebble Beach)	10	March 2014	December 2014	20–40
	Conference Center Expansion (meeting rooms) (Inn at Spanish Bay)	10	March 2014	December 2014	10–20

Phase	Project Element (Location)	Duration (months)	Timeframe		Estimated Daily Workers
			Begin	End	
III	Conference Center Expansion (ballroom) (Inn at Spanish Bay)	10	March 2015	December 2015	10-20
	Fairway One Reconstruction (Lodge at Pebble Beach)	16	March 2015	June 2016	20-75
	New Guest Cottages (Inn at Spanish Bay)	16	March 2017	June 2018	20-75
IV	Residential Lot Subdivisions (14 lots in Area V)	5	March 2020	July 2020	10
	Option 1 Hotel Resort (Area M Spyglass Hill)	29	March 2020	July 2022	30-200
	Option 2 Residential Lots (Area M Spyglass Hill)	6	March 2020	August 2020	10

1

1 **Monterey County Local Coastal Program Amendments**

2 **Background**

3 The state mandates two planning programs: the Local Coastal Program (LCP), required by the
4 California Coastal Act of 1976, and the General Plan Program mandated by the General Planning
5 Provisions of the California Government Code.

6 Monterey County is comprised of 12 planning areas, which include areas within the Coastal Zone
7 and Inland Areas (outside the Coastal Zone). The Coastal Zone of the County is divided into four
8 areas governed by LUPs and CIPs, which together comprise the LCP for Monterey County. The four
9 LUPs include Big Sur Coast, Carmel Area, Del Monte Forest (coastal portion), and North County
10 Coastal. Monterey County retains land use jurisdiction in these areas, with the Coastal Commission
11 having appeal authority over certain issues and areas.

12 The proposed project is within the Del Monte Forest Planning Area, which is nearly all within the
13 Coastal Zone; and all proposed development is within the coastal zone portion. Therefore, the
14 proposed project is subject to the LUP. The LUP is organized around eight geographic planning areas
15 (Spanish Bay, Spyglass-Cypress, Middle Fork, Pescadero, Huckleberry Hill, Gowen Cypress, Pebble
16 Beach, and Country Club). Within these eight planning areas, are a series of smaller planning areas
17 delineated as Areas A through Y (Figure 2-32). Changes to the LUP are subject to certification by the
18 CCC as an LCP amendment.

19 In the Coastal Zone, the four certified LUPs function as the General Plan (GP), as supplemented by
20 the 1982 GP for matters not addressed by the LUP. The County's General Plan was updated in
21 October 2010, but only for the Inland Areas which does not include most of Del Monte Forest. None
22 of the proposed project occurs in the Inland Area, and thus the updated 2010 General Plan does not
23 directly apply to the proposed project area. However, the 2010 General Plan does apply to roadways
24 within the Inland Area; thus where the project affects traffic in the Inland Areas, the 2010 General
25 Plan policies apply. The prior General Plan (sometimes referred to as the 1982 General Plan) still
26 applies within the Coastal Zone.

27 Monterey County and the CCC also have been preparing an LCP amendment to amend, delete, and
28 add text to policies of the LUP and amend, delete, and add text to the regulations of the CIP. This
29 amendment would facilitate the proposed project by specifying allowable uses consistent with the
30 proposed project. The LCP amendment is exempt from CEQA evaluation because it is processed
31 through the CCC's certified regulatory program, which is considered a functional equivalent to
32 CEQA. Where this EIR analyzes the proposed project, it also discloses the environmental effects of
33 the Concept Plan included in the LCP amendment, but the LCP amendment is not formally part of the
34 "project" analyzed in this EIR.

35 **Proposed Amendments**

36 The proposed project includes amendments to the Del Monte Forest LCP to amend, delete, and add
37 text to policies of the LUP and to amend, delete, and add text to the regulations of the CIP, Parts 1
38 and 5. The LCP Amendment is included in Appendix D of this Draft EIR.

39 The purposes of the LCP Amendments are as follows:

- 1 • To allow the proposed project to be implemented as a balance of focusing remaining
2 development adjacent to or within existing developed areas while requiring preservation of
3 large intact contiguous areas of forest and other sensitive habitat areas.
- 4 • To update the LCP to reflect the changes in conditions in Del Monte Forest since the original
5 adoption of the LCP in the 1980s.
- 6 • To focus the LUP as a policy document, while moving implementing detail into the CIP.

7 The key changes in the proposed LUP relative to the proposed project are as follows:

- 8 • The proposed amendment to the Del Monte Forest LCP would reclassify the land use
9 designations and zoning classifications at multiple locations as shown in Table 2-2 and Table 2-
10 4. These changes facilitate the development and preservation of the proposed project, which is
11 referred to in the LCP Amendment as the Pebble Beach Company Concept Plan.
- 12 • Project-specific development standards for the Concept Plan development areas related to
13 policies concerning environmentally sensitive habitat areas (ESHAs), wetlands, dunes, streams,
14 and riparian corridors are provided. Project-specific setback/buffer requirements, applicable to
15 ESHA, wetlands, dunes, streams, and riparian corridors are provided.
- 16 • Residential lots in the Concept Plan shall not be further subdivided and shall be so restricted by
17 deed restrictions and B-6 zoning upon their initial subdivision.
- 18 • Easements over all preservation areas shown on the Concept Plan shall be dedicated to the Del
19 Monte Forest Foundation in perpetuity through Open Space Conservation easements.
- 20 • The resource constraint overlays for the Concept Plan development would be removed due to
21 changes in circumstances from the time period in which the overlays were applied to the zoning
22 and land use maps. The B-8 (building site) overlay was applied at a time in which water supply
23 and sewer capacity was a constraint to development and when highway capacity and circulation
24 solutions had not been agreed upon and adopted. PBC subsequently constructed a water
25 reclamation facility and is currently in possession of a water entitlement. The wastewater
26 collection and treatment system subsequently was expanded, resulting in adequate capacity for
27 sewage. Traffic solutions, both inside Del Monte Forest and for adjacent portions of Highway 68,
28 have been agreed upon and adopted (see further discussion in Chapter 3.11, Transportation and
29 Circulation).

30 The key changes in the proposed LUP that are not related (or not exclusively related) to the Pebble
31 Beach Company Project include the following:

- 32 • Chapter 1, Introduction. The introduction, background, and history would be revised and
33 streamlined to delete material no longer relevant to the LCP and to update the description of the
34 relationships between the LCP and the California Coastal Act.
- 35 • Chapter 2, Resource Management Element. This chapter would be revised and updated to
36 current conditions. A major change is proposed to allow for exceptions to ESHA and other
37 resource policies, but only for Concept Plan development areas. A major proposed change would
38 require the identification and delineation of ESHAs to be based on current physical conditions
39 and current evaluation of sensitivity, whereas the existing LCP defines ESHA in terms of a
40 defined list of habitats. Other changes include moving technical detail to the CIP concerning tree
41 removal requirements and grading, the addition of new policies seeking to minimize shoreline
42 armoring and bluff protection, and a number of other changes.

- 1 • Chapter 3. Land Use and Development Element. This chapter would be revised and updated to
2 current conditions, and the Concept Plan would be added to the LUP. The most substantive
3 change to this chapter is to add the Concept Plan as a specifically allowed development in Del
4 Monte Forest, including exceptions to certain ESHA and other requirements. Other key changes
5 include amending the zoning code to limit parcels to only one accessory unit, to amend site
6 coverage in the Pescadero watershed, to prohibit golf courses in areas designated residential,
7 and to prohibit development at the Sawmill Gulch quarry area. Key process changes include
8 deletion of Table A (which showed allowable units by planning area) in favor of the Concept
9 Plan and county zoning outside the Concept Plan areas, the addition of a reference to PBC's
10 water entitlement as providing water supply, deletion of a reference to site-specific access
11 requirements and the Del Monte Forest Open Space Management Plan (OSAC Plan) in the LUP
12 (see discussion below), and other clarifications.
- 13 • Chapter 4. Land Use Support Elements. This chapter is proposed to be updated to reflect current
14 circulation, water, and wastewater conditions, and to streamline policies. Key changes include
15 language describing the status of water supply relative to PBC's water entitlement, existing
16 wastewater treatment capacities, new policies requiring proof of adequate long-term water
17 supply and wastewater treatment capacity for new development, deletion of a low priority for
18 water and wastewater capacity for residential use, deletion of obsolete water allocation
19 language and Table B, new policies concerning Carmel Bay water quality and new development,
20 and other clarifications and modifications.
- 21 • Chapter 5. Public Access. This chapter is proposed to be updated to reflect current status of
22 access improvements and to clarify policies. One key change in this chapter is to eliminate the
23 existing reference to site-specific access improvements (which have been completed), access
24 recommendations, and design in favor of a new public access management plan (required as
25 part of the Concept Plan). The new plan will establish the requirements for protection and
26 maintenance of existing public access and the expansion of new public access (where
27 appropriate). The new plan must be approved by the County and the Coastal Commission. The
28 purpose of creating a new plan is that the prior plan is out of date, does not reflect all the access
29 improvements installed in the last 20 years, and does not reflect the new access included in the
30 Concept Plan.
- 31 • Chapter 6. Implementation and Administration. This chapter was updated to reflect current
32 practices in implementing the LCP. References to the OSAC Plan and site-specific shoreline
33 public access design criteria were deleted (see discussion below).
- 34 • Chapter 7. Del Monte Forest Open Space Management Plan. This chapter would be removed in
35 favor of policies in the LUP that provide for forest protection and in favor of an implementation
36 plan to be developed outside the LUP (making the LUP document more of a policy document and
37 leaving technical detail to other documents). The existing OSAC Plan will be used as a key
38 resource for development of a new forest management plan that will be prepared with the
39 participation of the same interested groups (e.g., County, CCC, PBC, OSAC, CNPS, Del Monte
40 Forest Foundation) that originally helped to develop the OSAC Plan.
- 41 • Appendix A, List of Environmentally Sensitive Habitats. Appendix A is proposed to be deleted
42 because the proposed change to ESHA identification and delineation would no longer be based
43 on a specific list of habitats (see the discussion of proposed changes to Chapter 2).
- 44 • Appendix B, Site-Specific Access Recommendations. As described in the discussion of proposed
45 changes to Chapter 5, the existing site-specific access recommendations are proposed to be

1 deleted because they have been completed and a new access plan will be developed to manage
2 public access going forward.

3 Table 2-6 provides a more detailed summary of proposed changes to the LUP. The proposed LUP is
4 included in Appendix D of this Draft EIR. The proposed LUP changes, shown in Table 2-6, would
5 facilitate the Pebble Beach Company Project Concept Plan, which is analyzed in this EIR. Thus, the
6 impacts of the proposed changes relative to the Concept Plan on the environment are disclosed in
7 this Draft EIR. For changes to the LUP that are unrelated to the Concept Plan, as described in Table
8 2-6, these changes are not expected to increase development potential in areas outside the Concept
9 Plan in Del Monte Forest or lessen protection of environmental resources, and are more likely to
10 result in reduction of environmental impact overall compared to the policies in the existing LUP. As
11 such, the analysis of environmental impacts in this Draft EIR is focused on the impacts of the Pebble
12 Beach Company Project (the Concept Plan), without further need to analyze the environmental
13 impact of the LUP changes not related to the Concept Plan.

14 The key changes in the proposed CIP Part 5 are similar in intent and scale to those proposed for the
15 LUP. Because the revised LUP prohibits golf courses in areas designated residential, changes to CIP
16 Part 1 (Title 20 Zoning Ordinance) are necessary. Sections 20.12.050.Z and 20.14.050.D allow golf
17 courses as a Conditional Use with a Coastal Development Permit within the Medium Density
18 Residential and Low Density Residential Zoning Districts in Del Monte Forest only. These two
19 sections will be deleted and the following subsections will be re-lettered. The proposed CIP is
20 included in Appendix D of this Draft EIR.

21 **Intended Uses of the EIR**

22 The EIR is an informational document for decision makers. CEQA requires that decision makers
23 review and consider the EIR in their consideration of the proposed project. The County is the Lead
24 Agency responsible for certifying the EIR and for approving the project's land use permits and for
25 local approval of the changes to the LCP. Agencies with permit review or approval authority over the
26 project are summarized in Table 2-7. These are the responsible agencies under CEQA that will use
27 the EIR as the environmental basis of decisions. Required county permits for each development area
28 are also identified in Table 2-8.

29

1 **Table 2-6. Summary of Key Changes to the Land Use Plan**

Existing LUP Section	Proposed LUP Section/Policy	LUP Changes	Discussion
Chapter 1. Introduction			
Introductory material	Introductory material	Reworded discussion of California Coastal Act, Monterey County LCP and Del Monte Forest LUP updated to clarify the relationships of the Coastal Act, the LCP, and the LUP. Reworded organization summary and deletion of Chapter 7, OSAC Plan. Updated definitions.	No change in level of development or environmental protection. Regarding Chapter 7, OSAC Plan, see discussion below.
Policy Guidance Statements	Key Policies	<p>Minor rewordings to Key Policies for Freshwater and Marine Resources, Forest Resources, scenic and Visual Resources, and Circulation, and Public Access.</p> <p>Key Policy for Environmentally Sensitive Habitat Areas modified to allow for exceptions to ESHA policies where specifically and explicitly authorized by the LUP.</p> <p>Key Policy for Cultural Resources acknowledges that in certain cases impacts may be unavoidable.</p> <p>Key Policy for Land Use and Development changed to remove requirement to designate all ESHA as open space.</p> <p>Key Policy for Waste and Wastewater changed to add requirement for long-term public water supplies and wastewater treatment capacities.</p> <p>Key Policy for Housing changed to acknowledge protection of affordable housing both with the Forest and in outlying areas.</p>	<p>No change in level of development or environmental protection.</p> <p>ESHA exemptions only apply to the PBC Concept Plan, which is included in the project analyzed in this EIR.</p> <p>Cleanup of prior practice which always recognized that unavoidable impacts may be possible.</p> <p>Intent of entirety of existing LCP was not to require designation of open space for all ESHA. Removal of requirement does not result in more impact on ESHA separate from PBC Concept Plan Areas.</p> <p>Additional requirements strengthen resources protection by requiring long-term water and wastewater treatment capacity.</p> <p>No change of intent to apply the County's Housing Element within all of Monterey County.</p>

Existing LUP Section	Proposed LUP Section/Policy	LUP Changes	Discussion
Chapter 2. Resource Management Element			
Introduction	Introduction	Reworded introduction. Added description of the PBC Concept Plan as integral part of the overall LUP that balances certain impacts to ESHA, wetlands, dunes, streams and riparian corridors in concentrated development areas near existing developed areas for the benefit of preserving larger contiguous areas off forest, dunes, and open space.	Changes facilitate PBC Concept Plan which is included in project analyzed in this EIR.
Freshwater and Marine Resources Policy Guidance Statement and Policies	Freshwater and Marine Resources Key Policy and Policies 1, 2, 4, 5, 6, 7	Minor rewordings of Key Policy and policies without substantial change in intent.	Changes do not increase development potential or environmental protection requirements.
Freshwater and Marine Resources Policy 3	Freshwater and Marine Resources Policy 3	Policy amended to delete prohibition of grading greater than 1 acre/100 cubic yards in winter.	Technical edit to make the LUP a policy document versus a technical document. Technical detail moved to the CIP, and also regulatory language in the County's grading code. The CIP contains the same prohibition so no change in substance.
ESHA Introduction	ESHA Introduction	Added Yadon's piperia, California, red-legged frog, portions of the native Monterey pine forest and maritime chaparral as examples of ESHA in Del Monte Forest. Require ESHA to be defined based on evaluation of current resources on the ground and their current sensitivity. Deletion of Appendix A.	Changes will increase level of environmental protection by requiring assessment of sensitivity and delineation of ESHA to be based on current conditions as opposed to a static definition of ESHA. Specifically increases protection of Yadon's piperia, California red-legged frog, portion of the native Monterey pine forest and maritime chaparral which are not called out as ESHA in existing LCP.
	Key Policy	Reference to OSAC Plan deleted from Policy Guidance Statement. Allowance of defined exceptions to LCP (for PBC Concept Plan).	See discussion below on OSAC Plan. PBC Concept Plan analyzed as project in this EIR.
ESHA Policies 8, 9, 10, 11, 12, 13, 14, 15, 18, 19, 21, 22, 23, 24, 25, 27, 29.	ESHA Policies 8, 9, 10, 11, 12, 13, 14, 15, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27.	Minor changes were made to these ESHA policies without change in resource protection intent. Reference to OSAC Plan deleted from policies.	No change in level of development potential or resource protection in light of overall LCP requirements and requirements of other applicable resource protection regulations. See discussion below on OSAC Plan.

Existing LUP Section	Proposed LUP Section/Policy	LUP Changes	Discussion
ESHA Policy 17	ESHA Policy 16	Deleted reference to Appendix A, performance standards and ESHA. New policy only concerns survey.	As noted above, ESHA delineations to be based on current conditions and sensitivity which is more protective than existing plan overall.
ESHA Policy 16	ESHA Policy 17	Deletion of reference to development of lots of record in remnant dune habitat.	More protective of dune habitat than existing LCP by deleting reference to lot of record development in dune areas.
ESHA Policy 20	Deleted	Spanish Bay Planning Area.	Prior Policy 20 contained prior requirements for the Spanish Bay planning area that have already been completed.
ESHA Policy 21b	Deleted	Deleted policy regarding acquisition of the Shumway parcel.	Parcel already acquired.
ESHA Policy 26	Deleted	Deleted policy regarding placement of easements over Huckleberry Hill Natural Habitat Area and of allowing public works use of former quarry sites and the haul road.	Easements over HHNHA have been recorded. Deletion of reference to quarry sites consistent with change to prohibit development of Sawmill quarry site. Haul road to be used as trail in PBC Concept Plan.
ESHA Policy 28	Deleted	Deleted policy that previously subdivided land is subject to the same ESHA requirements as new residential development or subdivisions. Deleted policy that development is not allowed on any parcel that is entirely ESHA, except as provided in Policy 74 (Policy 74 allowed access improvements in ESHA is consistent with site-specific requirements).	Within Concept Plan development areas, the deletion of this policy would allow the development included in the project being analyzed in the EIR. All other non-Concept Plan new development would still be subject to ESHA policies which limit development in ESHA as required by the California Coastal Act. Other policies in the Land Use Plan, including those found in the proposed amendments to the LUP, are equally protective of ESHA, making the old policy redundant in protecting these biological resources. Prior Policy 28 would have resulted in constitutional takings if applied in a manner to preclude any development whatsoever on a parcel and thus could not have been legally enforced.
ESHA Policy 30	ESHA Policy 28	Changed protected pupping season from April through July to April 1 to June 1.	Changed to make policy consistent with PBC-USFWS agreement negotiated subsequent to existing LCP.
ESHA Policy 30a	ESHA Policy 29	Deleted specific permit requirements relative to water quality.	Water quality permits already require all of the substantive requirements reflected in existing language.

Existing LUP Section	Proposed LUP Section/Policy	LUP Changes	Discussion
Forest Resources Introduction Policy Guidance Statement	Forest Resources Introduction Key Policy	Rewording on text, with substantial additions characterizing the Monterey pine forests and other forests in Del Monte Forest. Includes concept of ESHA forests as more intact forested areas vs. non-ESHA forests including less intact aggregations of trees.	Existing LCP does not define Monterey pine as ESHA except in limited circumstances and thus definitions within this introduction actually expand the applicability of ESHA within forests in Del Monte Forest.
Forest Resources Policies 31, 33, 34,36, 38	Forest Resources Policies 30, 32, 33, 35, 37	Minor changes were made to these ESHA policies without change in resource protection intent.	No change in level of development potential or resource protection in light of overall LCP requirements.
Forest Resources Policy 32	Forest Resources Policy 31	Deleted specific tree by tree requirements.	Technical edit to make the LUP more of a policy document and leave detail to CIP. CIP edits, new language prohibits tree removal within ESHA unless part of restoration and enhancement, removal of Monterey cypress in its native range, and Coast Live oaks over 24 inches. Monterey pine and other tree removal (where not ESHA) still subject to recommendations of an approved Forest Management Plan. Overall intent of language similarly protective as existing plan.
Forest Resources Policy 35	Forest Resources Policy 34	Policy amended to delete prohibition of grading greater than 1 acre/100 cubic yards in winter.	See discussion above for Policy 3.
Forest Resources Policy 37	Forest Resources Policy 36	Deletion of reference to commercial harvesting allowance. Deletion of Landmark Tree status.	Elimination of allowance is more protective of forest resource than existing LCP. Technical edit to make the LUP a policy document versus a technical document. Technical detail moved to the CIP. Re-written policies offer expanded protection to healthy trees, regardless of size.
Forest Resources Policy 39	Deleted	Deleted policy concerning Forestry Special Treatment Areas and subdivision.	Original language was concerned with preserving commercial timberland. Commercial timbering is no longer an existing or proposed use in the revised LUP and thus this policy is no longer needed.

Existing LUP Section	Proposed LUP Section/Policy	LUP Changes	Discussion
Hazards Intro Policy Guidance Statement Policies 40–45, 48, 49	Hazards Intro Key Policy Policies 38–42, 45, 46	Minor changes were made to these policies without change in intent to hazard regulation. Specific content of site stability evaluation deleted.	No change in level of development potential or resource protection in light of overall LCP requirements. County code (Section 20.147.060.A.9) contains requirements for site stability evaluation report.
Hazards Policy 42	Deleted	Deleted policy stating that new development must comply with the Seismic Safety element of the County General Plan.	Development is subject to the General Plan so this policy was superfluous.
Hazards New Policies 46 and 47	Hazards New Policies 43 and 44	New constraints and requirements regarding shoreline protection added to LCP.	New requirements promote avoidance of the need for shoreline armoring or alternations to the minimum feasible. This is more protective than the existing LCP of shoreline resources.
Scenic and Visual Resources Introduction Policy Guidance Statement Policies 51–59	Scenic and Visual Resources Introduction Key Policy Policies 48–56	Minor changes were made to these policies without change in resource protection intent.	No change in level of development potential or resource protection in light of overall LCP requirements.
Scenic and Visual Resources Policy 50	Scenic and Visual Resources Policy 47	Deletion of requirement to designate land along SR 68 and 17-Mile Drive as outdoor recreation, low-density residential or open space only.	New policy is more restrictive. Existing policy is limited to those areas identified on the Visual Resources Map. New policy requires site-by-site determination, with no limitation to area of applicability.
Archaeological Resources Introduction Policy Guidance Statement Policies 60–62, 65–67	Cultural Resources Introduction Key Policy Policies 57 to 59, 61–63	Minor rewording of background information. Key Policy changed to acknowledge possible mitigation as opposed to prior plan that called only for avoidance.	Existing policy unrealistic and unreflective of actual practice. Policies, as proposed, maintain same level of protection but more clearly acknowledge actual process of cultural resource protection.

Existing LUP Section	Proposed LUP Section/Policy	LUP Changes	Discussion
Archaeological Resources Policy 63	Cultural Resources Policy 60	Change to acknowledge possible mitigation as opposed to prior plan that called only for avoidance.	See above discussion.
Archaeological Resources Policy 64	Deleted	Deleted policy prohibiting categorical exemptions for projects with potential to damage an archaeologically sensitive area.	CEQA requirements already preclude this possibility so policy is superfluous.
Chapter 3. Land Use and Development			
Introduction Policy Guidance Statement Policies 68, 68a 68b, 69, 70, 72, 74-78, 79-83, 85, 89, 90, 93	Introduction Key Policy Policies 64-68, 70, 72-75, 78-84, 85, 88, 89, 90, 93	Minor rewording and deletion of OSAC Plan. Rewording of certain policies without increase of development potential or decrease of resource protection. Deletion of reference to OSAC Plan and Site-Specific Public Access Design Criteria.	No change in level of development potential or resource protection in light of overall LCP requirements. See below for discussion of OSAC Plan and Site-Specific Public Access Design Criteria.
Policy 71	Policy 69	Allowance of provision of parking requirements off-site.	Clarifying language. Reflection of past and current practice.
Policy 73	Deleted	Deletion of reference to Site-Specific Access Recommendations (Appendix B) and replacement with Del Monte Forest Public Access Management Plan to be developed later.	Appendix B Site Specific Recommendations deleted because items completed. Technical edit to make the LUP a policy document versus a technical document. The intent of the new Public Access Management Plan is to consolidate and update all of the existing technical agreements that were mostly written in the 1980s. No functional change to public access requirements.
Policy 78a	Policy 76	Deleted 850 SF limit on accessory dwelling unit and deleted limitation of only one caretaker unit per parcel.	Title 20 amended to replace caretaker units and senior units with a single accessory unit. Where a parcel could currently have the potential for one caretaker unit and one senior unit, they would only be able to have one accessory dwelling unit, which is more restrictive than current LCP.

Existing LUP Section	Proposed LUP Section/Policy	LUP Changes	Discussion
Not in existing plan	Policy 77	Allowance of employee housing for recreational equestrian uses.	Clarifying language added to reflect the existing interpretation that Coastal Act established recreation as a priority use. Current LUP language is not exclusive of recreational uses.
Not in existing plan	Policy 77	New policy to require Pescadero watershed development site coverage limit to 9,000 square feet.	No current site coverage limit in LUP. Intended to help control water quality in runoff to Carmel Bay.
Policy 84	Policy 84	Reduction of Area B setback from 200 feet to 100 feet.	The setback requirement of 200 feet was meant to screen structural development from public view. Development in Area B will only include a surface parking lot that will be screened by vegetation along 17-Mile Drive and Congress Road. Reference to Area B deleted because it is part of the Concept Plan. No impacts beyond that in the Concept Plan which is being analyzed in this EIR.
Policy 86	Policy 86	Deletion of allowing golf courses in residential designations.	This change eliminates the potential of allowing golf courses in residentially-designated areas which is more protective than the existing LCP. Title 20 Sections 20.12.050.Z and 20.14.050.D will be deleted.
Policy 87	Policy 87	Deletion of reference to hospital and neighborhood commercial at quarry site and addition of residential use.	This change is relevant to the PBC Concept Plan. This is a change in the type of development allowed at the quarry site but does not increase overall development potential. Impacts of residential at site included in project analyzed in this EIR.
Policy 91	Policy 91	Allowance of low-intensity visitor-serving facilities (such as restaurant, golf-related shops) at all Del Monte Forest golf courses (not just Poppy Hills).	This has been practice to date. Prior language did not prohibit such facilities at other locations. Cleaned up language.
Policy 92	Policy 92	Addition of residential development as allowance in formerly mined areas and deletion of neighborhood commercial.	This change is relevant to the Concept Plan. This is a change in the type of development allowed at the quarry site but does not increase overall development potential. Impacts of residential at site included in project analyzed in this EIR.

Existing LUP Section	Proposed LUP Section/Policy	LUP Changes	Discussion
Policy 94	Policy 94	New policy allowing a hotel at Spyglass Quarry site or low-density single-family residences.	Part of PBC Concept Plan analyzed in this EIR. Existing LCP allows use of previously mined areas for development.
Not in existing LUP	Policy 95	Prohibition of development of Sawmill Gulch quarry site.	More protective than existing LCP which had more potential for development at some portions of the former quarry.
Policy 95	Policy 96	Allowance of residential and deletion of neighborhood commercial at Corporation Yard.	This change is relevant to the PBC Concept Plan. This is a change in the type of development allowed at the quarry site but does not increase overall development potential. Impacts of residential at site included in project analyzed in this EIR.
Land Use Designations	Land Use Designations	<p data-bbox="726 672 1262 699">Deletion of residential use being allowed in VSC.</p> <p data-bbox="726 786 1304 846">Added mention of high density residential use up to 15 units/acre.</p> <p data-bbox="726 927 1304 987">Addition to OSR of driving ranges, clubhouses, trails and neighborhood parks.</p> <p data-bbox="726 1036 1115 1063">Deletion of reference to OSAC Plan.</p> <p data-bbox="726 1240 1262 1300">Deletion of reference to restoration of shoreline areas in the County Club Planning Area.</p> <p data-bbox="726 1317 1293 1406">Use of fee for low-cost visitor-serving accommodations in the Coastal Zone (instead of in Del Monte Forest).</p>	<p data-bbox="1360 672 1976 764">Reflects practice to date of prioritizing visitor-serving uses only in VSC areas. Does not increase development potential.</p> <p data-bbox="1360 786 1997 911">Mention of high-density is to acknowledge existing high density uses in locations such as condominiums north of Inn at Spanish Bay. Amendment does not designate new high-density residential areas that do not already exist.</p> <p data-bbox="1360 927 1976 1019">Addition of recognized recreational uses reflects character of recreational use in Del Monte Forest and is Consistent with existing LUP language.</p> <p data-bbox="1360 1036 1997 1219">Maintenance is still under the OSAC plan but plan will now function as guidance outside the LUP. The Open Space Management Plan will be updated with a Forest Management Plan that will be prepared with the participation of interested groups (e.g., County, CCC, PBC, OSAC, PBCSD, CNPS, Del Monte Forest Foundation).</p> <p data-bbox="1360 1240 1955 1268">Restoration previously required has been completed.</p> <p data-bbox="1360 1317 1955 1406">Part of the Del Monte Forest Agreement between the CCC and PBC. No broader application beyond PBC Concept Plan, which is analyzed in this EIR.</p>

Existing LUP Section	Proposed LUP Section/Policy	LUP Changes	Discussion
Land Use by Planning Area	Land Use by Planning Area	Table A showing units per area deleted. Planning area descriptions revised to recognize completed development and Concept Plan, Deletes reference to OSAC Plan.	Table A now outdated in light of completed development and proposed Concept Plan. Development on non-Concept Plan areas governed by County zoning code. See discussion of OSAC Plan below. Change would not alter allowable development on non-Concept Plan lands. Concept Plan analyzed in this EIR.
Not in existing LUP	Concept Plan Introduction	Introduces Concept Plan.	Reflects project analyzed in the EIR.
Not in existing LUP	Concept Plan Requirements Applicable to ESHA, Wetlands, Dunes, Streams, and Riparian Corridors	New text describes that notwithstanding the presence of ESHA, wetlands, dunes, streams and riparian corridors, development located in Concept Plan development areas shall be allowed subject to certain setbacks and buffers.	Reflects project analyzed in the EIR.
Not in existing LUP	Concept Plan Requirements Applicable to Certain Setbacks/Buffers	New text describes specific setbacks and buffers for Concept Plan development areas.	Reflects project analyzed in the EIR.
Not in existing LUP	Concept Plan Requirements Applicable to Further Subdivision	New text describes that no further subdivision is allowed in the residential areas included in the Concept Plan.	Reflects project analyzed in the EIR.
Not in existing LUP	Concept Plan Requirements Applicable to Preservation Areas	New text describes that easements shall be dedicated for Concept Plan preservation areas accompanied by comprehensive forest and resource management plan, adequate funding, and protection and management in perpetuity.	Reflects project analyzed in the EIR.
Not in existing LUP	Concept Plan requirements Applicable to Forest Management on Residential Lots	New text described requirements for forest management on Concept Plan residential lots.	Reflects project analyzed in the EIR. Dedication of Preservation Areas noted in the Concept Plan provides the required forest habitat and tree replacement for Concept Plan development.

Existing LUP Section	Proposed LUP Section/Policy	LUP Changes	Discussion
Not in existing LUP	Concept Plan requirements Applicable to Traffic and Circulation	New text describes that Concept Plan development must be conditional on improvement to the SR 1/SR 68/17-Mile Drive intersections, and improvements to the Lodge area parking and circulation and any traffic and circulation requirements identified during project review.	Reflects project analyzed in the EIR.
Not in existing LUP	Concept Plan requirements Applicable to Water and Wastewater	New text describes that concept plan development can use water from the Pebble Beach Water Entitlement and that adequate water is available to meet expected demand. New text described that adequate wastewater treatment capacity is available for concept plan development, and that new development is conditional on compliance with all requirements for wastewater impact.	Reflects project analyzed in the EIR.
Not in existing LUP	Concept Plan Requirements Applicable to Public Access and Recreation	New text requires preparation of a Del Monte Forest Public Access Management Plan subject to review and approval by the County and the Executive Director of the Coastal Commission. Plan is intended as comprehensive plan for all public access in Del Monte Forest. New text clarifies public access requirements and responsibilities.	Replaces prior Policy 145 and Appendix B and related requirements. Any new public access improvements not included in the project will require separate permit and environmental review.
Not in existing LUP	Concept Plan Requirements Applicable to Low-Cost Visitor-Serving Facilities	Requires provision for lower-cost overnight visitor-serving accommodations as a condition of approval of the first development in the concept plan that provides overnight visitor-serving accommodations. Allow condition to be satisfied by payment of a fee to an organization to provide lower-cost visitor accommodations in the coastal zone.	New visitor-serving accommodations shall require separate permit and environmental review by the County, in coordination with the California Coastal Commission.
Not in existing LUP	Concept Plan Requirements Applicable to Affordable Housing	New text notes that the concept plan is subject to the County’s Inclusionary Housing Ordinance.	Reflects current County policy.

Existing LUP Section	Proposed LUP Section/Policy	LUP Changes	Discussion
Not in existing LUP	Concept Plan Implementation	New text describes that all other requirements of the LCP apply to the concept plan, except as specifically noted in policies in this or other sections. Notes that the LCP is to be read that the concept plan residential development is ultimately allowable consistent development of similar residential lots in Del Monte Forest.	Reflects project analyzed in the EIR.
Chapter 4. Land Use Support Element			
Introduction Planned Circulation Improvements Policy Guidance Statement Circulation Policies 96-97, 99, 101-108	Introduction Planned Circulation Improvements Key Policy Circulation Policies 97-99, 101-110	Introductory language updated to reflect current circulation conditions. Minor rewording of circulation policies. Reference to site-specific access recommendations deleted in favor of new access plan noted above and due to completion of prior access improvements. Clarified gate access fees.	No change in level of development potential or mitigation of traffic impacts in light of overall LCP requirements. See below for discussion of site-specific access recommendations.
Policy 98	Policy 100	Reworded requirements relative to requirements for impact on SR 68 and the SR 1 gate and other circulation impacts.	No change in level of development potential or mitigation of traffic impacts.
Policy 100	Deleted	Existing policy concerned the requirement to construct the SFB Morse Gate as a condition of building the Inn at Spanish Bay. The gate has been built and thus this policy is no longer needed.	No change in level of development potential or mitigation of traffic impacts.
Waste and Wastewater Services Considerations Policy Guidance statement Policies 110, 111, 113-114	Waste and Wastewater Services Considerations Key Policy Policies 112, 113, 115, 116	Introductory language updated to current conditions and status. Minor updates to policy language. Added requirement for proof of adequate long-term public water supply and public wastewater treatment capacity.	No change in level of development potential. Resource protection enhanced by requirements for long-term public water supply and wastewater treatment capacity.

Existing LUP Section	Proposed LUP Section/Policy	LUP Changes	Discussion
Policy 109	Policy 111	Deletion of language that stated that residential development was not a priority for water and wastewater capacity.	Existing policy stated that residential development was not a priority. Deletion of policy will facilitate Concept Plan use of PBC water entitlement and use of PBC water entitlement by other residential development. Concept Plan development analyzed in this EIR. Other residential development subject to individual project processing. Use of the PBC water entitlement in part for residential use will not result in water supply impacts due to reduction in water use that resulted from granting of entitlement.
Policy 112	Policy 114	Deletion of reserving water from allocations for present lot owners.	Allocations are obsolete.
Policy 115	Deleted	Deleted policy supporting reclamation projects.	Reclamation project completed.
N/A	Policy 117	New policy supporting wastewater disposal to minimize or eliminate Carmel Bay pollution.	More protective than existing LCP.
N/A	Policy 118	New policy requiring new development to demonstrate additional wastewater discharge will not significantly affect coastal resource, in particular Carmel Bay.	More protective than existing LCP.
Housing Intro Policy Guidance Statement	Housing Intro Key Policy	Introductory language updated and minor rewording of circulation policies.	No change in level of development potential or resource protection in light of overall LCP requirements.
Policy 116	Deleted	Deleted prior policy regarding specific goals for affordable housing in Del Monte Forest.	Affordable housing is protected by the County's adopted housing element.
Policy 117	Deleted	Deleted prior policy regarding protection of loss of affordable housing due to deterioration, demolition, and conversion.	Affordable housing is protected by the County's adopted housing element.
Policy 118	Policy 119	Reworded policy and noted that accessory dwelling units may further affordable housing provision.	Policy intent same as prior policy.

Existing LUP Section	Proposed LUP Section/Policy	LUP Changes	Discussion
Policy 119	Policy 120	Expanded prior policy prohibition on timeshares to include quasi-residential visitor-serving uses.	New policy more stringent than prior policy.
Chapter 5. Public Access Element			
Introduction Policy Guidance Statement Policies 120, 124-144	Introduction Key Policy Policies 122, 124 - 145	Updated to reflect completion of access improvements since original adoption of the LCP. Updated language/minor rewording of policies. Deleted reference to site-specific access requirements due to completion of prior access improvements and in favor of new access plan.	Specific access requirements removed because items completed. Technical edit to make the LUP a policy document versus a technical document. The intent of the new Public Access Management Plan will be to consolidate and update all of the existing technical agreements that were mostly written in the 1980s. No functional change to public access requirements.
Policy 120	Policy 121	Public and shoreline access information consolidated with recreational information on new LUP Figure 8 (Public Access and Recreational Facilities).	LUP figures updated.
Policy 122	Policy 123	Visual Resources are identified on new LUP Figure 3.	LUP figures updated.
Policy 123	Deleted	Deletion of Existing Policy 123 allowing bluff top and lateral access as appropriate shoreline use.	Deletion of policy is more restrictive than current LCP.
Policy 145	Deleted	Deletion of the Site-Specific Access Recommendations (Appendix B and Old Policy 145) and replacement with Del Monte Forest Public Access Management Plan to be developed later.	Specific list removed because items completed. Technical edit to make the LUP a policy document versus a technical document. The intent of the new Public Access Management Plan is to consolidate and update all of the existing technical agreements that were mostly written in the 1980s. No functional change to public access requirements.
Chapter 6. Implementation			
Implementation	Implementation	Deleted reference to OSAC Plan and site-specific shoreline public access design criteria. Rewording of language.	See discussion below about OSAC Plan. See discussion above regarding deletion of prior site-specific access requirements due to completion of prior improvements and in favor of new access plan.

Existing LUP Section	Proposed LUP Section/Policy	LUP Changes	Discussion
Water and Sewer Allocations by Development Area Table B	Timing of Development	Deletion of water and sewer allocations by development area.	The allocations are obsolete. LUP updated with current information about water supply and wastewater capacity. Concept Plan development served by available water supply and wastewater capacity. Other new development must demonstrate capacity.
Chapter 7. Del Monte Forest Open Space Management Plan (OSAC) (Deleted)			
Open Space Management Plan	Open Space Management Plan	OSAC Plan (Section 7) deleted from LUP.	<p>The OSAC Plan has been replaced with policy requirements that achieve the same result. The purpose of technical edit to make the LUP a policy document versus a technical document.</p> <p>The OSAC Plan will be updated with a Forest Management Plan that will be prepared with the participation of interested groups (e.g.; County, CCC, PBC, OSAC, CNPS, Del Monte Forest Foundation).</p>
Appendix A. List of Environmental Sensitive Habitats (Deleted)			
Appendix A	Deleted	Deleted	As noted above, ESHA is proposed to be delineated based on current conditions and sensitivity rather than limited to a defined list, which is considered more protective of ESHA than the existing plan.
Appendix B. Site-Specific Access Recommendations (Deleted)			
Appendix B	Deleted	Access Recommendations deleted.	As noted above, the prior access recommendations have been implemented and will be replaced by the new access plan required to be developed as a condition for the Concept Plan.

1 **Table 2-7. Summary of Local, State, and Federal Discretionary Actions**

Agency	Permit/Review Required
Monterey County	<ul style="list-style-type: none"> • CEQA Lead Agency • Tentative Subdivision Maps • General Development Plan Approvals • Coastal Development Permits • Combined Development Permits • Design approval of all structures • Monterey County Water Resources Agency approval • Local approval of LCP amendments
California Coastal Commission	<ul style="list-style-type: none"> • State approval of LCP amendments
California Department of Fish and Game	<ul style="list-style-type: none"> • Incidental take permit, if state-listed species affected • Streambed Alteration Permit, if required
Caltrans	<ul style="list-style-type: none"> • Encroachment Permit for work in SR 1 and SR 68 rights-of-way
Regional Water Quality Control Board	<ul style="list-style-type: none"> • Section 402 of the Federal Clean Water Act (compliance with construction general stormwater discharge permit) • Section 401 of the Clean Water Act water quality certification (if federal jurisdictional waters are affected) • Waste Discharge Requirements (if state jurisdictional waters are affected)
U.S. Army Corps of Engineers	<ul style="list-style-type: none"> • Permit under Section 404 of the Clean Water Act (if federal jurisdictional waters or wetlands are affected)
U.S. Fish and Wildlife Service	<ul style="list-style-type: none"> • Approval of incidental take permit (under Section 10 of the federal Endangered Species Act) if potential exists for impact on federally listed wildlife species • Consultation under Section 7 of the federal Endangered Species Act if Corps permit is required and potential exists for impact on federally listed species
State Historic Preservation Office	<ul style="list-style-type: none"> • Possible compliance with Section 106 of the National Historic Preservation Act if a Corps permit is required and there is a potential for effect on cultural resources.

2

1 **Table 2-8. Summary of County Permits Required for Proposed Pebble Beach Company Project**

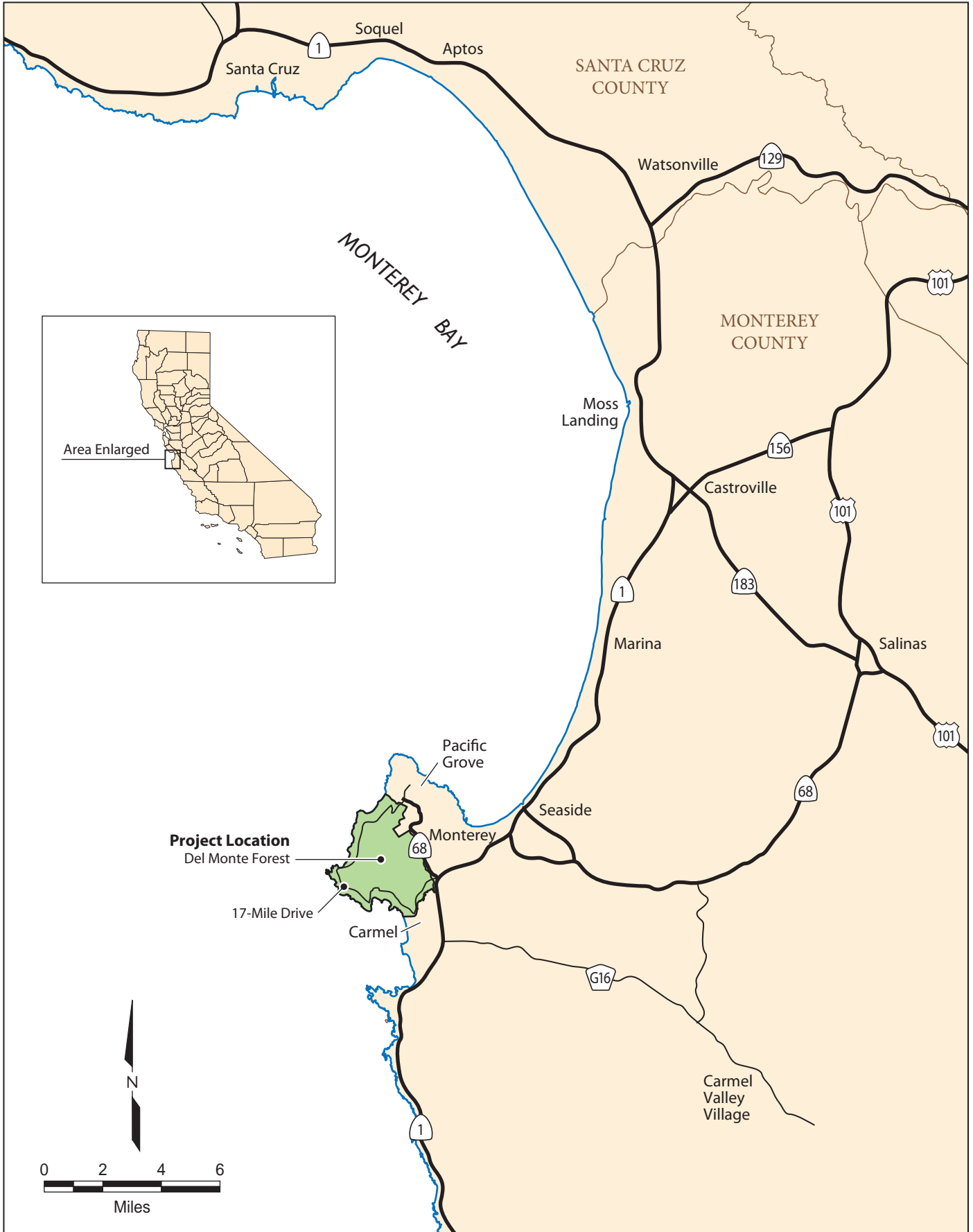
Permit Action	Area M Spyglass Hill						Roadway Improvements		
	Lodge at Pebble Beach	Inn at Spanish Bay	Collins Field/Equestrian Center	Option 1 Resort Hotel	Option 2 Residential Lots	Residential Subdivisions	SR 1/SR 68/17-Mile Drive Intersection Reconfiguration	Internal Intersection Improvements	Preservation
Amendment to a Combined Development Permit Application	NA	No	NA	NA	NA	NA	NA	NA	NA
General Development Plan	NA	NA	Yes	Yes	NA	NA	NA	NA	NA
Amendment to General Development Plan	Yes	Yes	NA	NA	NA	Yes ^a	NA	NA	NA
Coastal Development Permit for Lot Line Adjustment	Yes	Yes	Yes	NA	NA	NA	NA	NA	NA
Coastal Development Permit for Vesting Tentative Map	NA	Yes	Yes	Yes	Yes	Yes	NA	NA	Yes
Coastal Development Permit for Demolition and/or Construction	Yes	Yes	Yes	Yes	Yes ^b	Yes ^b	Yes	Yes	NA
Design Approval for Construction	Yes	Yes	Yes	Yes	NA	NA	Yes	Yes	NA
Coastal Development Permit for Development on Slopes >30%	Yes	Yes	Yes	Yes	Yes	Yes	○ Yes	Yes	NA
Coastal Development Permit for Development within 100 feet of ESHA	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA
Coastal Development Permit for Development within 750 feet of a known archaeological resource	Yes	Yes	NA	NA	NA	NA	NA	Yes	NA

Permit Action	Area M Spyglass Hill			Roadway Improvements					
	Lodge at Pebble Beach	Inn at Spanish Bay	Collins Field/Equestrian Center	Option 1 Resort Hotel	Option 2 Residential Lots	Residential Subdivisions	SR 1/SR 68/17-Mile Drive Intersection Reconfiguration	Internal Intersection Improvements	Preservation
Grading Permit	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA
Tree Removal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA

Notes:

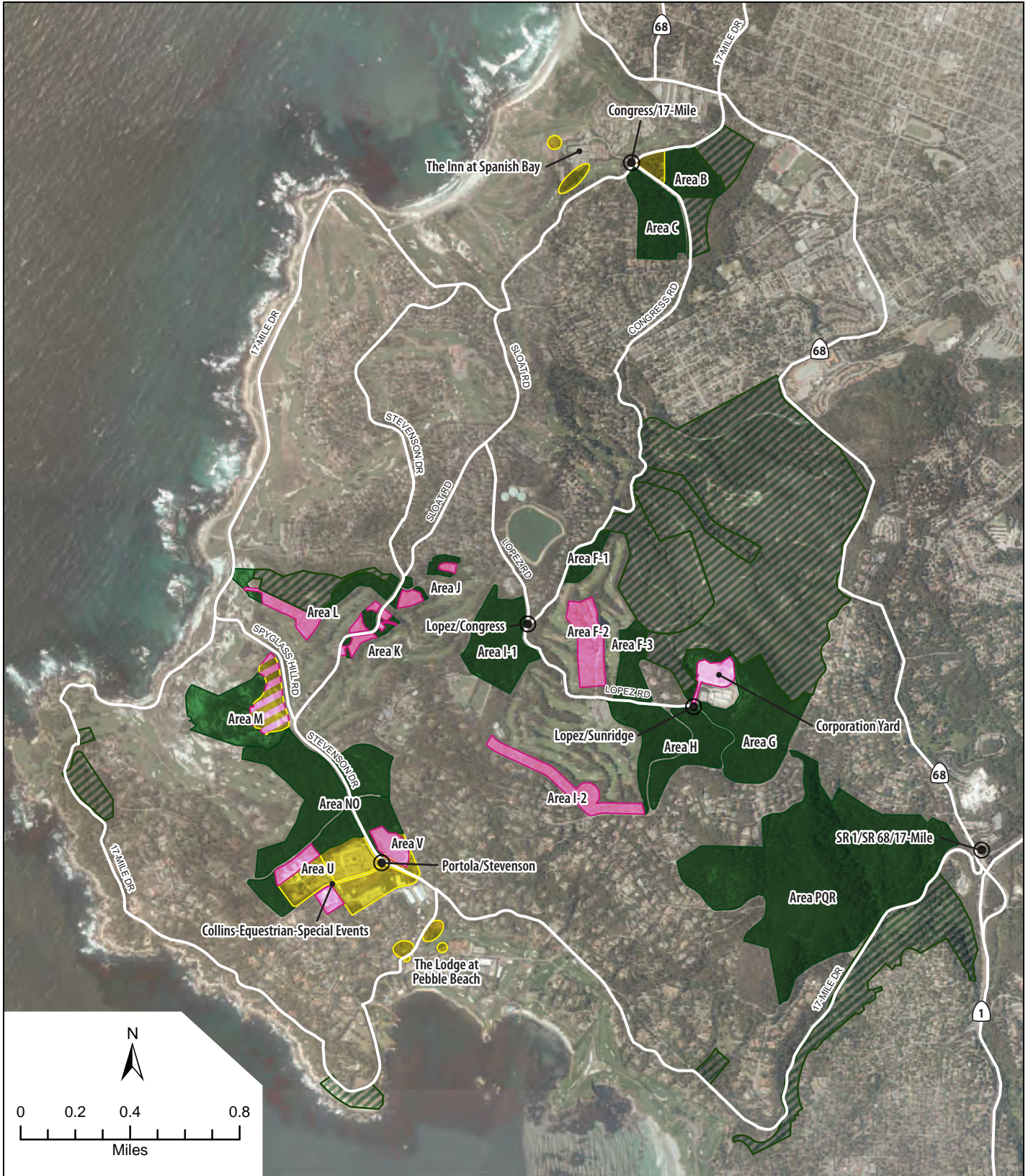
^a Corporation Yard PC92-173

^b Infrastructure









Graphics ... 00106.11 (10-11)

**Figure 2-1
Project Location**

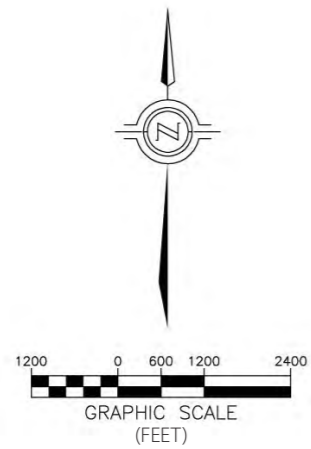
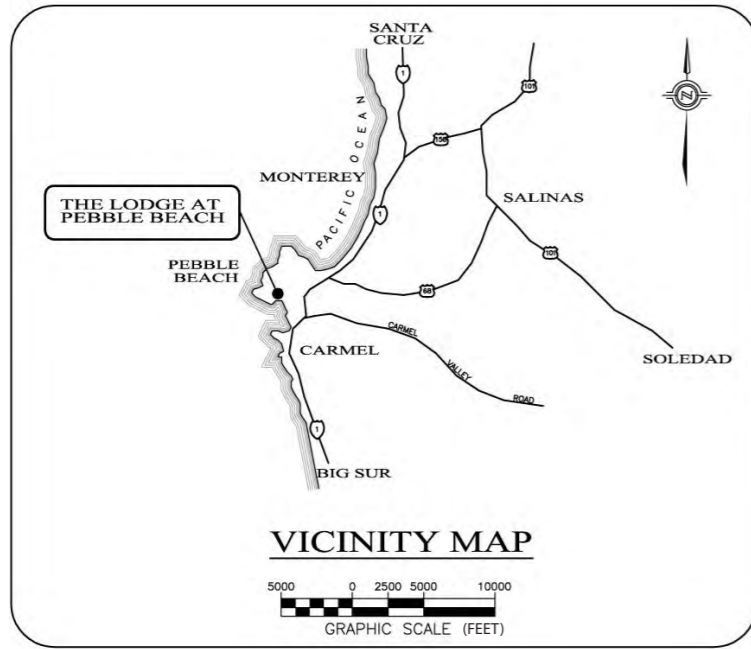


Legend

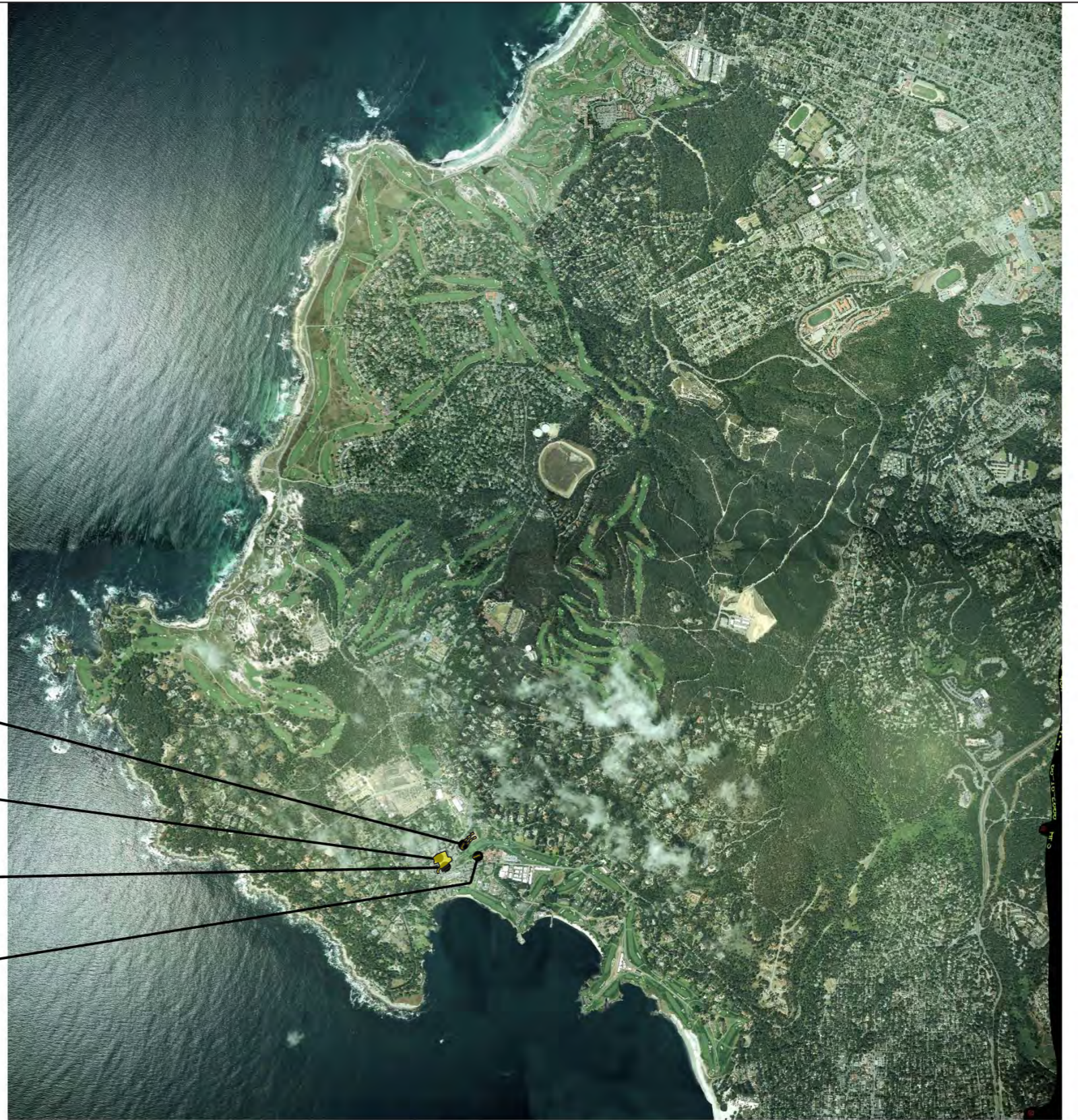
- | | | | |
|---|--|---|----------------------------------|
|  | Residential Lot Subdivision |  | Roadway Intersection Improvement |
|  | Visitor-Serving/Recreation |  | Preservation Area |
|  | Area M Spyglass Hill
Option 1: Visitor-Serving
Option 2: Residential Lot Subdivision |  | Existing Preservation Area |

Pebble Beach Company Project

**Figure 2-2
Development and Preservation Areas**



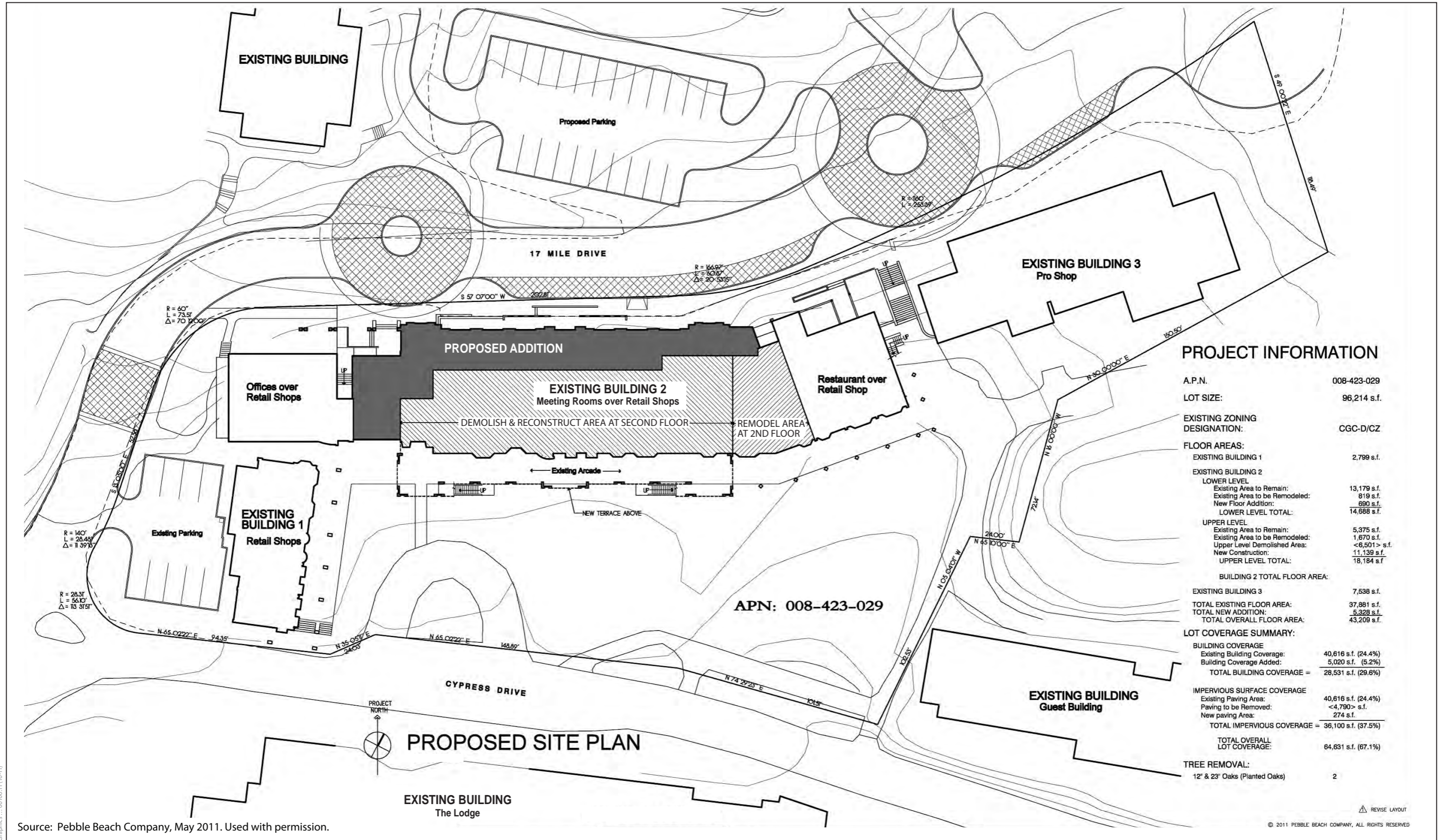
- Fairway One Reconstruction
- Parking and Circulation Reconstruction
- Meeting Facility Expansion
- New Colton Building



PROJECT SITE MAP

Source: Pebble Beach Company, May 2011. Used with permission.

**Figure 2-3
Proposed Development at The Lodge at Pebble Beach**



PROJECT INFORMATION

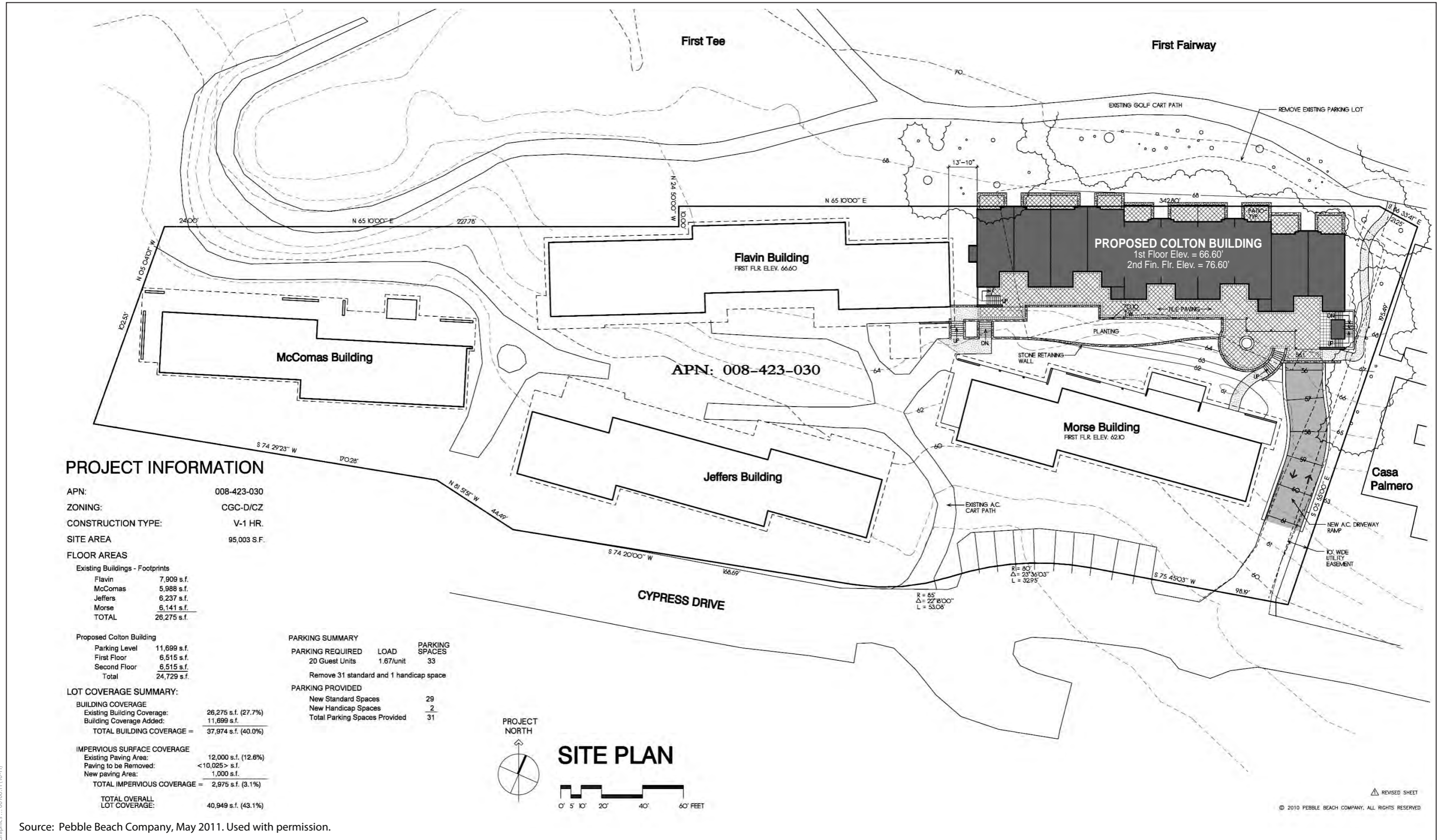
A.P.N.	008-423-029
LOT SIZE:	96,214 s.f.
EXISTING ZONING DESIGNATION:	CGC-D/CZ
FLOOR AREAS:	
EXISTING BUILDING 1	2,799 s.f.
EXISTING BUILDING 2	
LOWER LEVEL	
Existing Area to Remain:	13,179 s.f.
Existing Area to be Remodeled:	819 s.f.
New Floor Addition:	690 s.f.
LOWER LEVEL TOTAL:	14,688 s.f.
UPPER LEVEL	
Existing Area to Remain:	5,375 s.f.
Existing Area to be Remodeled:	1,670 s.f.
Upper Level Demolished Area:	<6,501> s.f.
New Construction:	11,139 s.f.
UPPER LEVEL TOTAL:	18,184 s.f.
BUILDING 2 TOTAL FLOOR AREA:	
EXISTING BUILDING 3	7,538 s.f.
TOTAL EXISTING FLOOR AREA:	37,881 s.f.
TOTAL NEW ADDITION:	5,328 s.f.
TOTAL OVERALL FLOOR AREA:	43,209 s.f.
LOT COVERAGE SUMMARY:	
BUILDING COVERAGE	
Existing Building Coverage:	40,616 s.f. (24.4%)
Building Coverage Added:	5,020 s.f. (5.2%)
TOTAL BUILDING COVERAGE =	28,531 s.f. (29.6%)
IMPERVIOUS SURFACE COVERAGE	
Existing Paving Area:	40,616 s.f. (24.4%)
Paving to be Removed:	<4,790> s.f.
New paving Area:	274 s.f.
TOTAL IMPERVIOUS COVERAGE =	36,100 s.f. (37.5%)
TOTAL OVERALL LOT COVERAGE:	64,631 s.f. (67.1%)
TREE REMOVAL:	
12' & 23' Oaks (Planted Oaks)	2

PROPOSED SITE PLAN

EXISTING BUILDING
The Lodge

Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-4
Meeting Facility Expansion at The Lodge at Pebble Beach



Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-5
New Colton Building at The Lodge at Pebble Beach

PROJECT INFORMATION

A. P. N. 008-423-019, 008-423-002

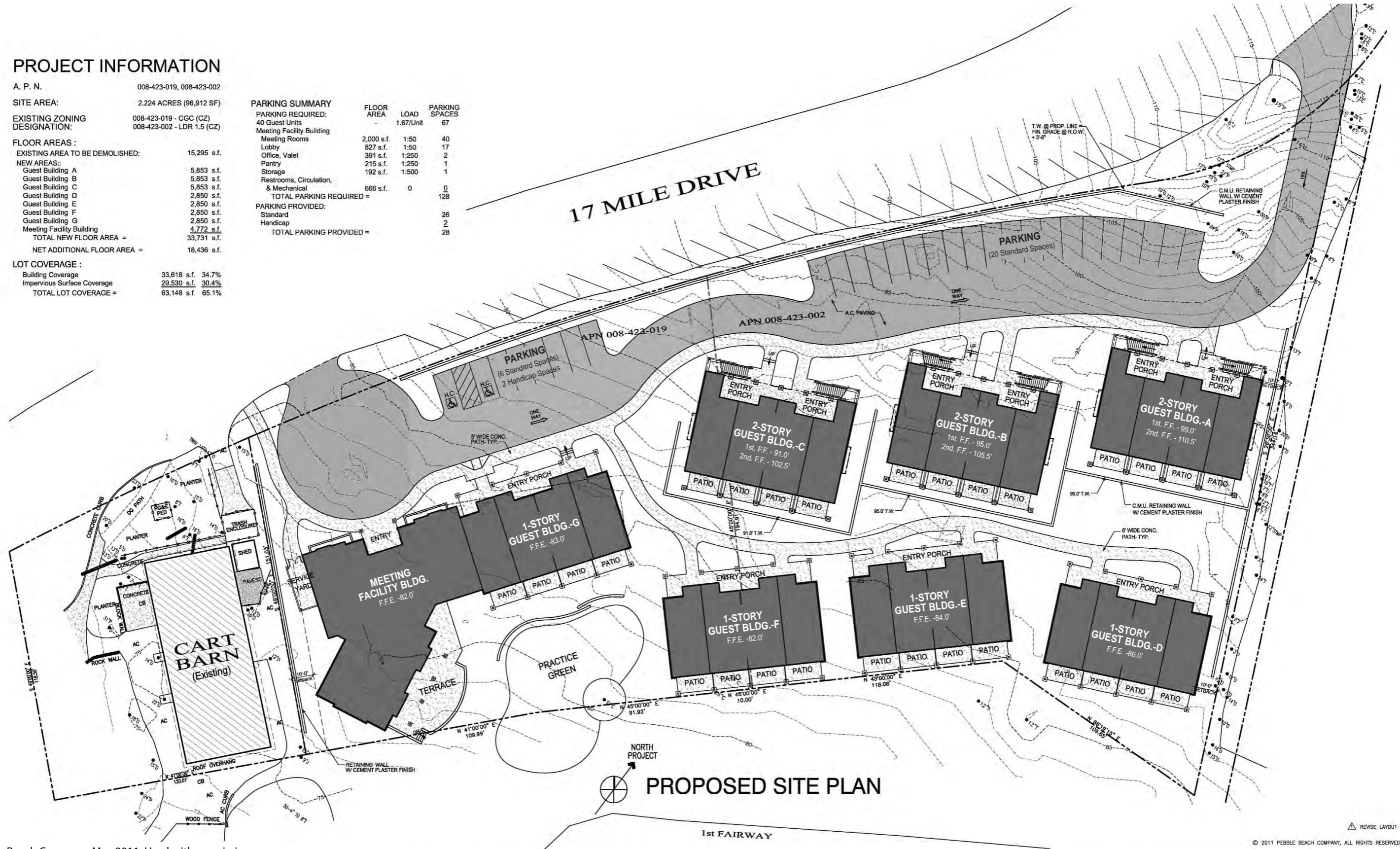
SITE AREA: 2.224 ACRES (96,912 SF)

EXISTING ZONING 008-423-019 - CGC (CZ)
 DESIGNATION: 008-423-002 - LDR 1.5 (CZ)

FLOOR AREAS :
 EXISTING AREA TO BE DEMOLISHED: 15,295 s.f.
 NEW AREAS:
 Guest Building A 5,853 s.f.
 Guest Building B 5,853 s.f.
 Guest Building C 5,853 s.f.
 Guest Building D 2,850 s.f.
 Guest Building E 2,850 s.f.
 Guest Building F 2,850 s.f.
 Guest Building G 2,850 s.f.
 Meeting Facility Building 4,772 s.f.
 TOTAL NEW FLOOR AREA = 33,731 s.f.
 NET ADDITIONAL FLOOR AREA = 18,436 s.f.

LOT COVERAGE :
 Building Coverage 33,618 s.f. 34.7%
 Impervious Surface Coverage 29,530 s.f. 30.4%
 TOTAL LOT COVERAGE = 63,148 s.f. 65.1%

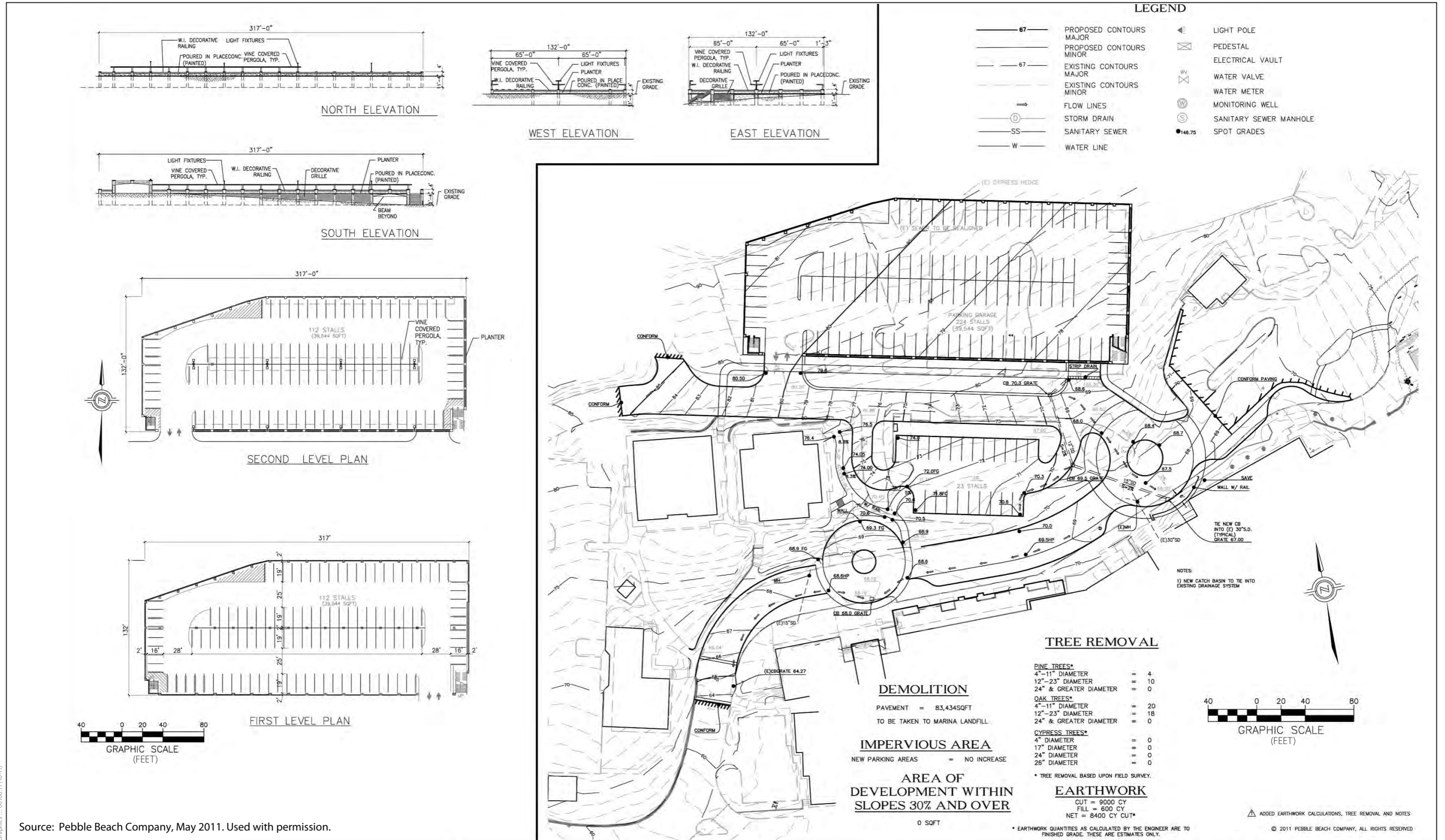
PARKING SUMMARY			
	FLOOR AREA	LOAD	PARKING SPACES
PARKING REQUIRED:			
40 Guest Units		1.67/Unit	67
Meeting Facility Building			
Meeting Rooms	2,000 s.f.	1:50	40
Lobby	827 s.f.	1:50	17
Office, Valet	391 s.f.	1:250	2
Pantry	215 s.f.	1:250	1
Storage	192 s.f.	1:500	1
Restrooms, Circulation, & Mechanical	666 s.f.	0	0
TOTAL PARKING REQUIRED =			128
PARKING PROVIDED:			
Standard			26
Handicap			2
TOTAL PARKING PROVIDED =			28



PROPOSED SITE PLAN

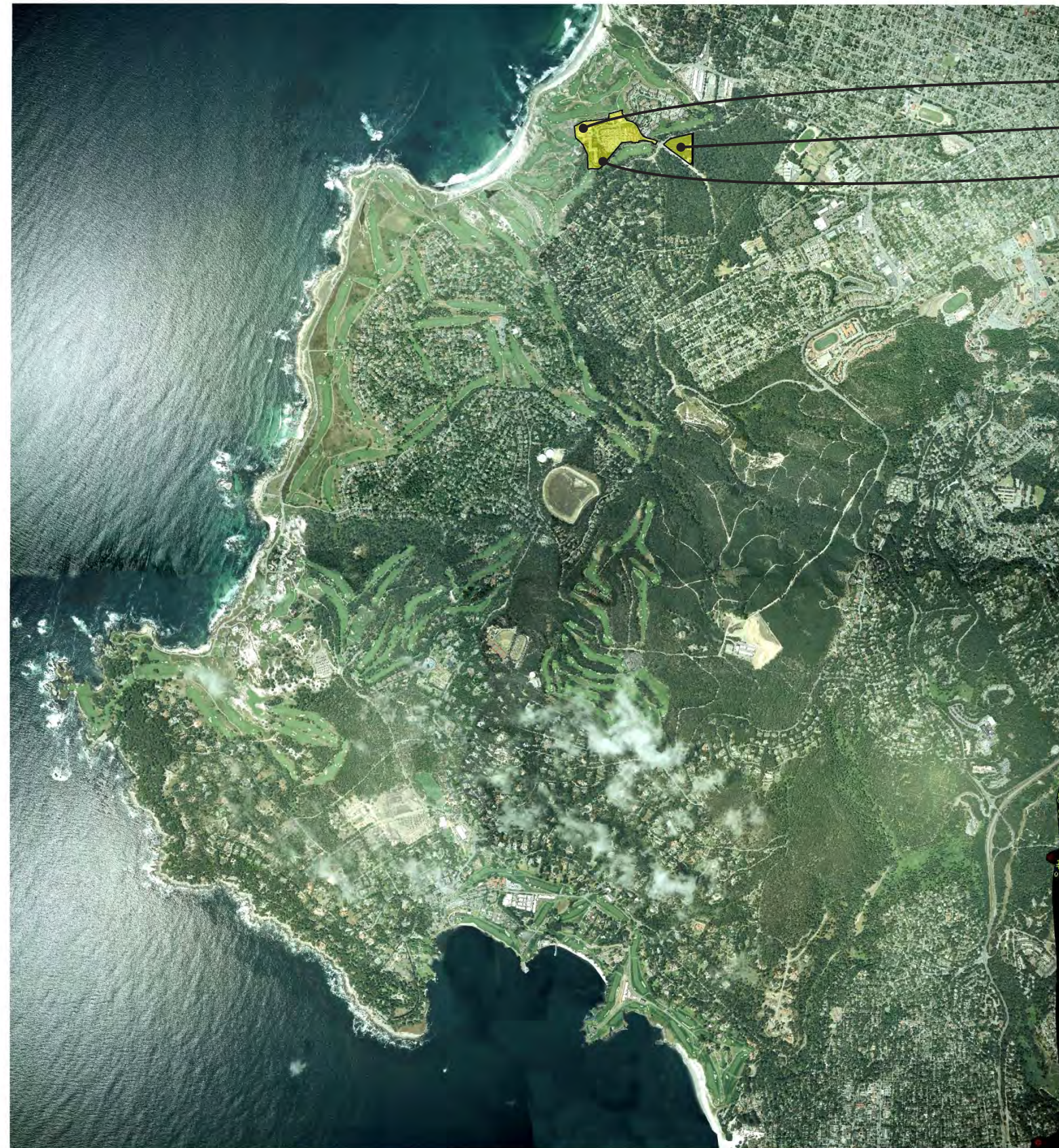
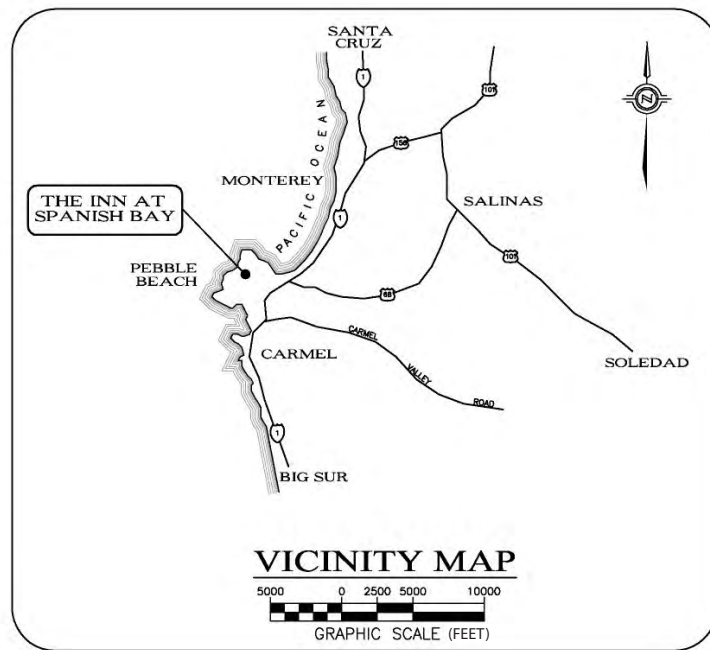
Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-6
 Fairway One Reconstruction at The Lodge at Pebble Beach

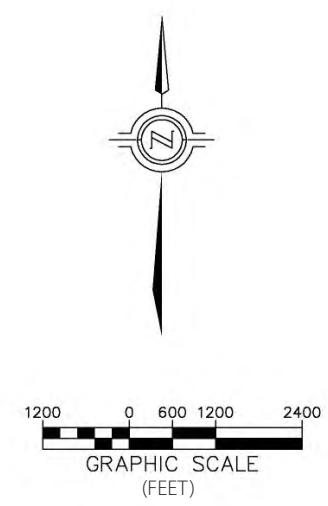


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Figure 2-7
Parking and Circulation Reconstruction at The Lodge at Pebble Beach



- Conference Center Expansion
- New Employee Parking
- New Guest Cottages

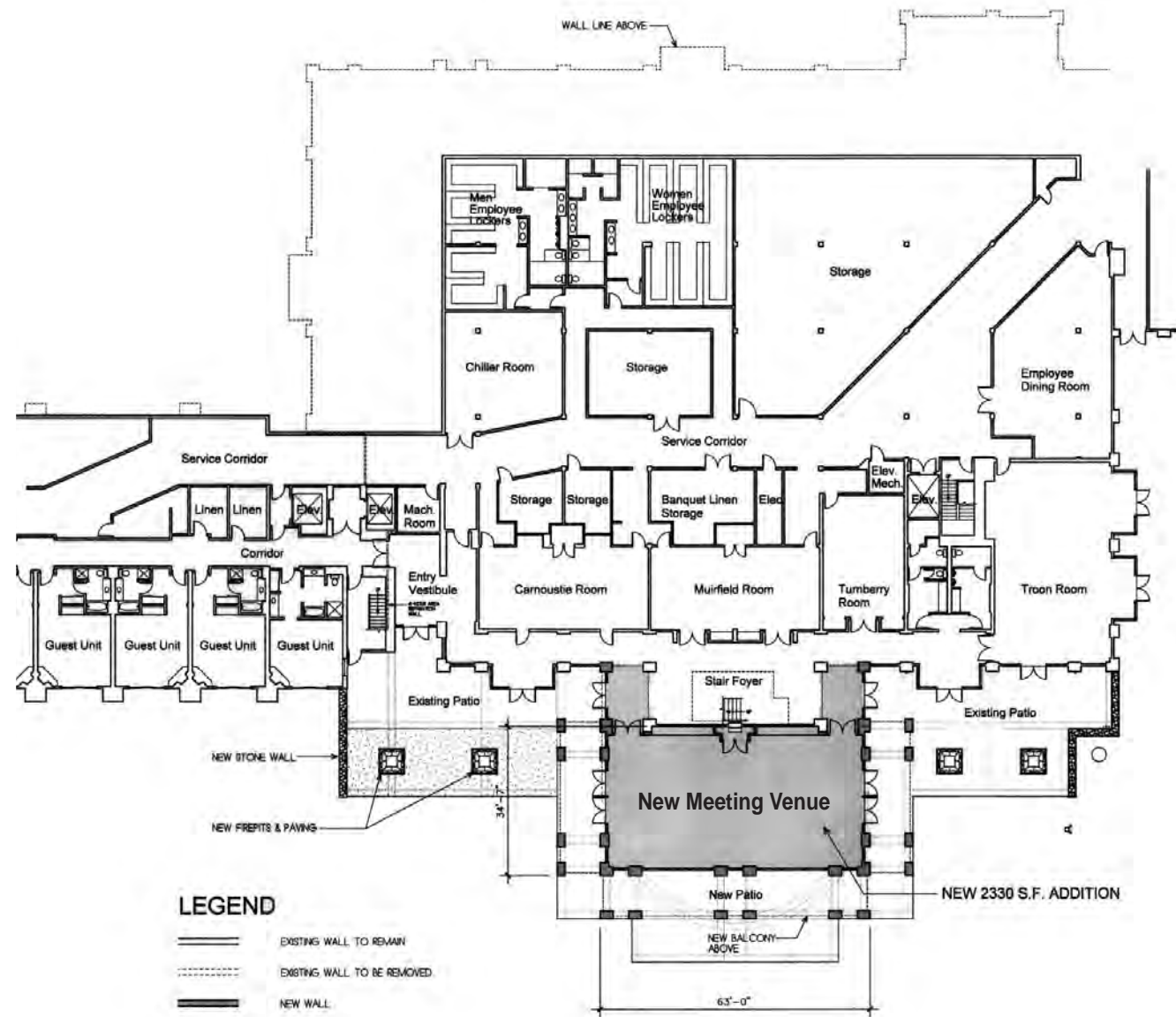


PROJECT SITE MAP

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**Figure 2-8
Proposed Development at The Inn at Spanish Bay**



LEGEND

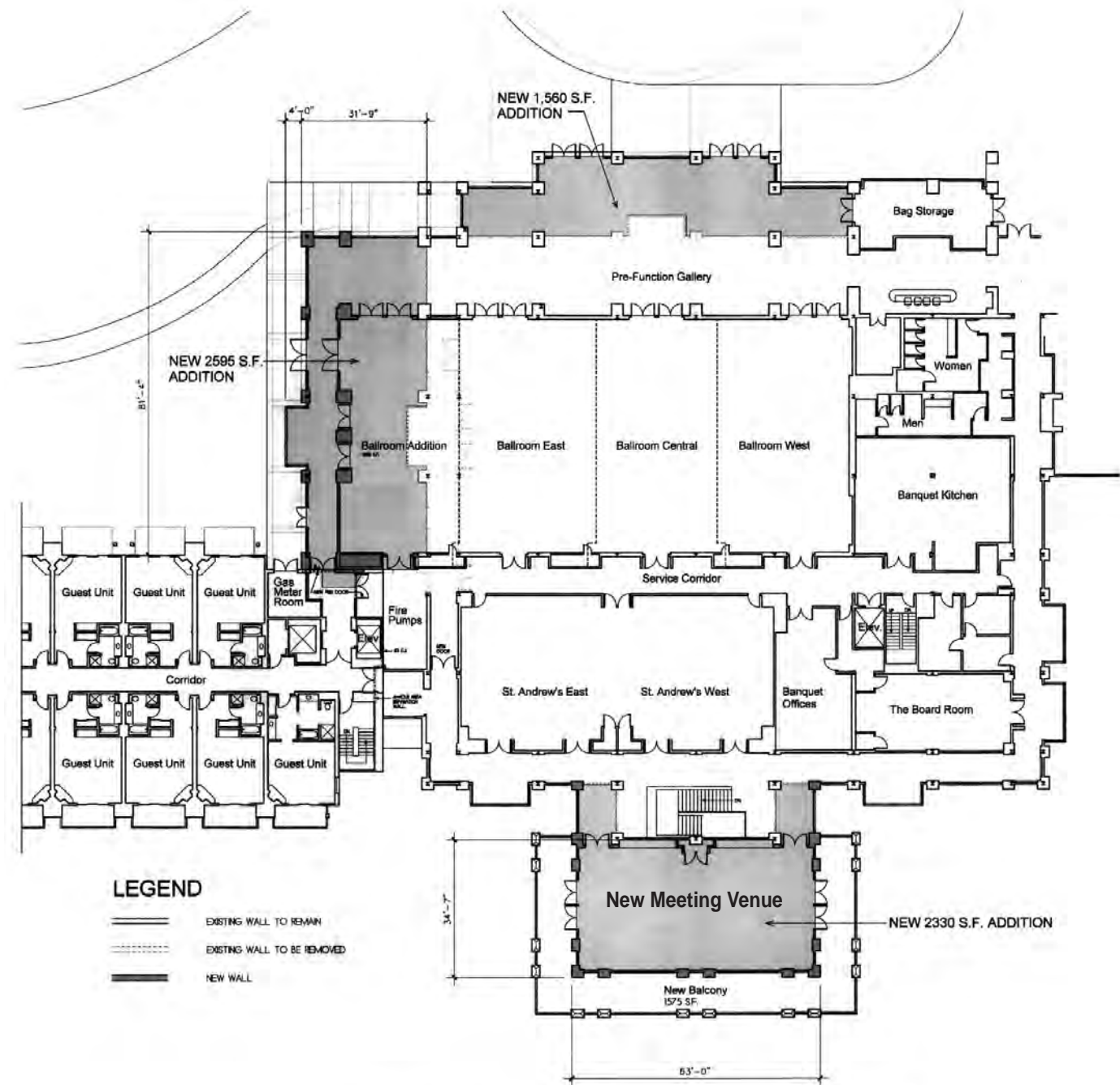
- EXISTING WALL TO REMAIN
- - - EXISTING WALL TO BE REMOVED
- NEW WALL



PROPOSED FAIRWAY LEVEL FLOOR PLAN

SCALE 1/8" = 1'-0"

2,330 SF, ADDITIONAL GROSS FLOOR AREA



LEGEND

- EXISTING WALL TO REMAIN
- - - EXISTING WALL TO BE REMOVED
- NEW WALL

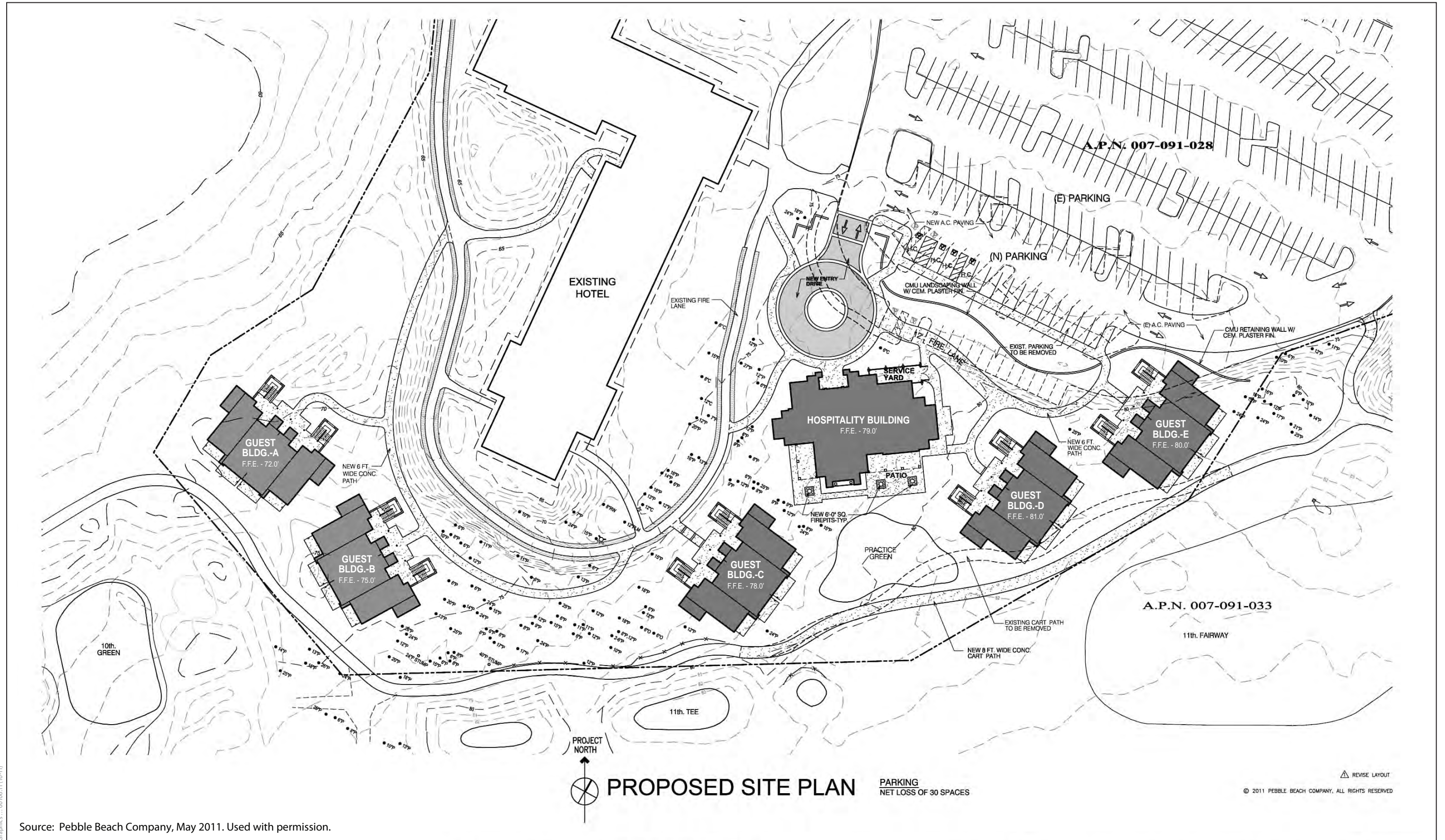


PROPOSED FIRST FLOOR PLAN

SCALE 1/8" = 1'-0"

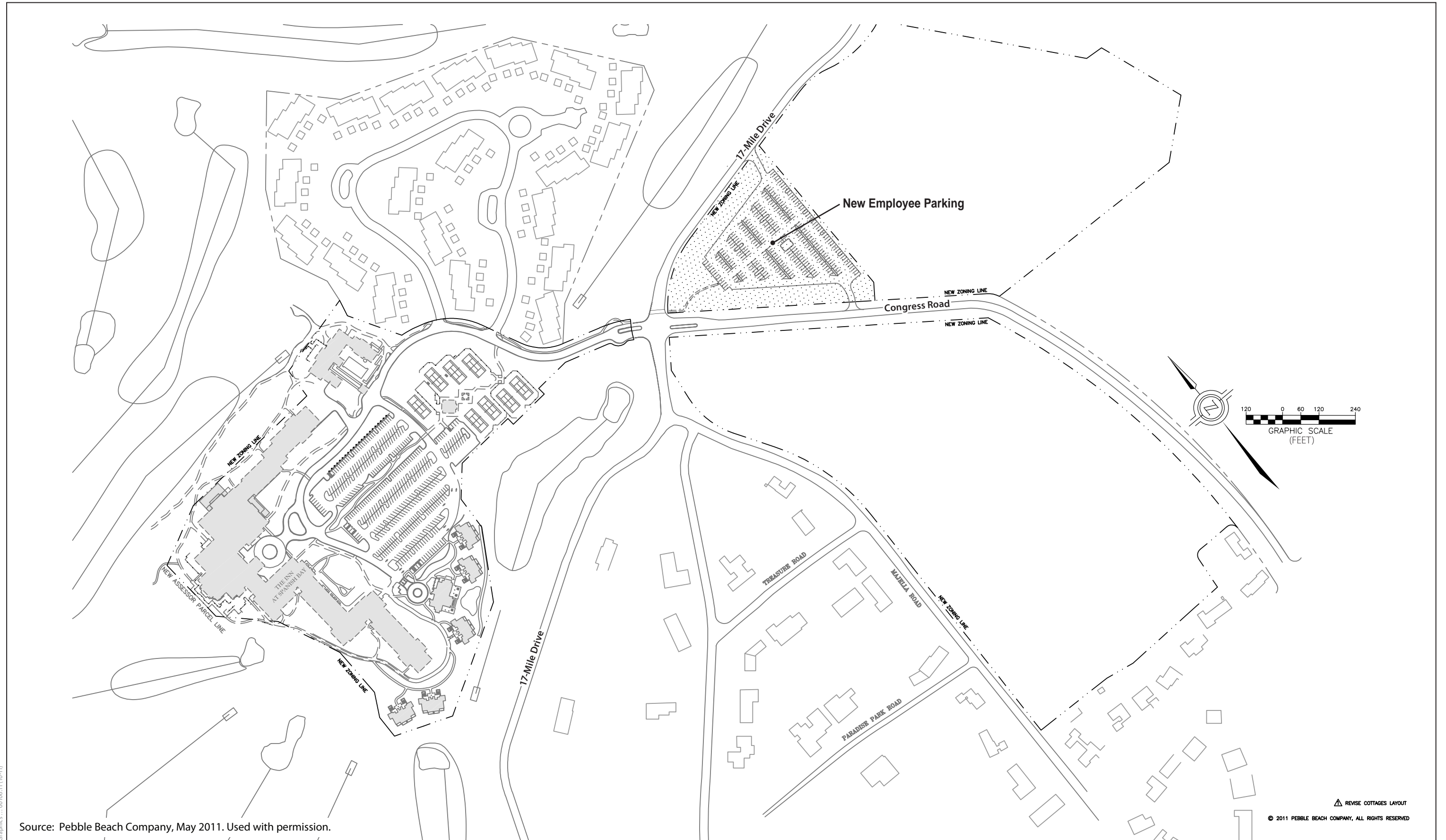
6,485 SF, ADDITIONAL GROSS AREA

Figure 2-9
Conference Center Expansion at The Inn at Spanish Bay



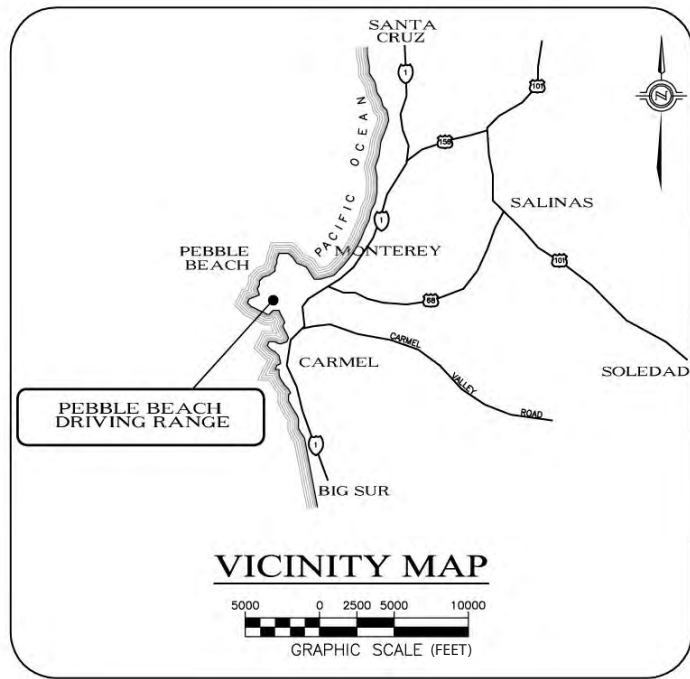
Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-10
New Guest Cottages at The Inn at Spanish Bay



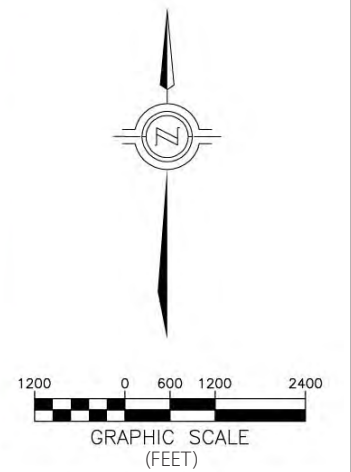
Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-11
New Employee Parking for The Inn at Spanish Bay



Equestrian Center Reconstruction and
Special Events Staging Area Grading and Expansion

Pebble Beach Driving Range Relocation
from Area V to Collins Field



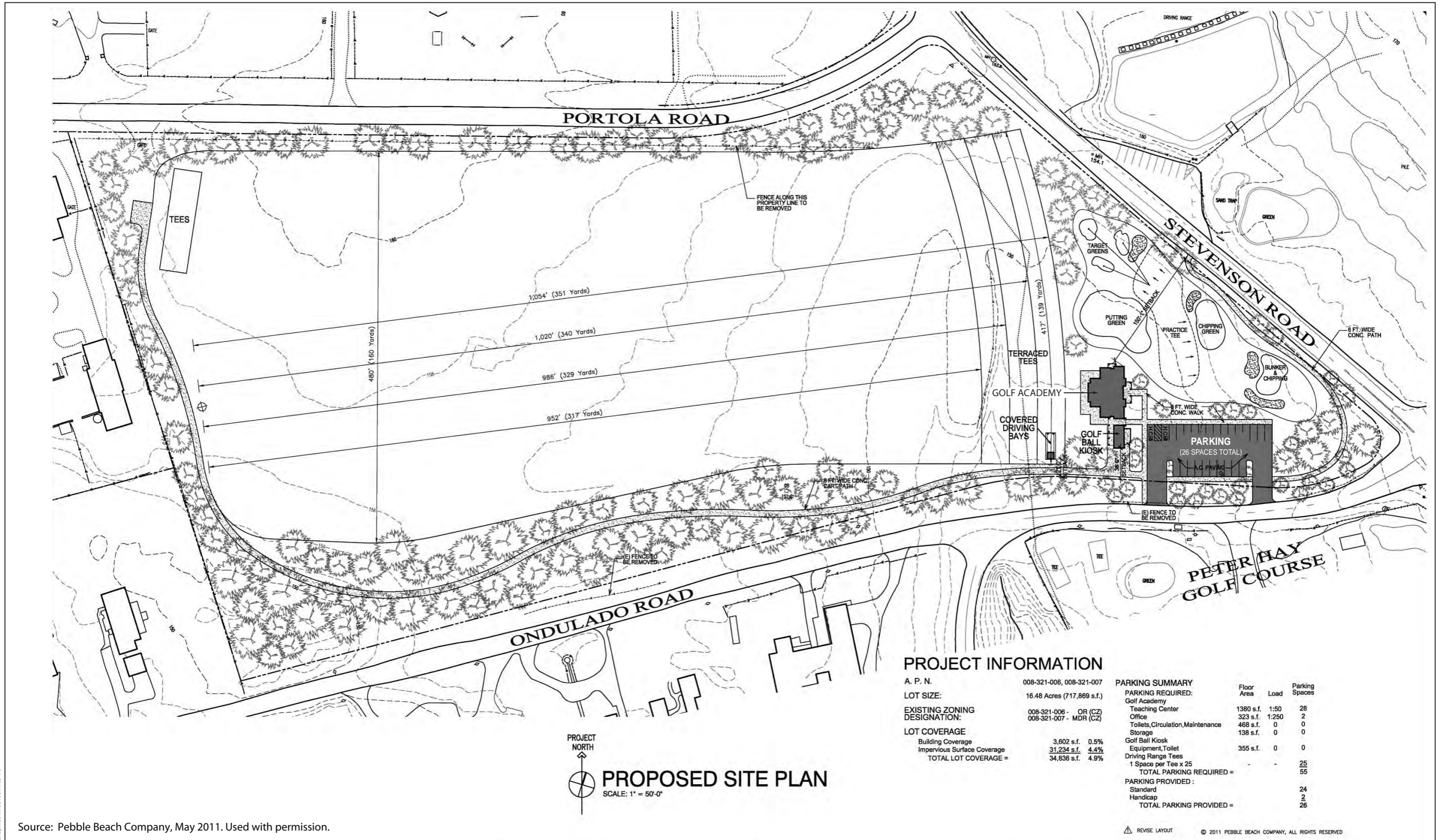
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Graphics...00106.11 (11-11)

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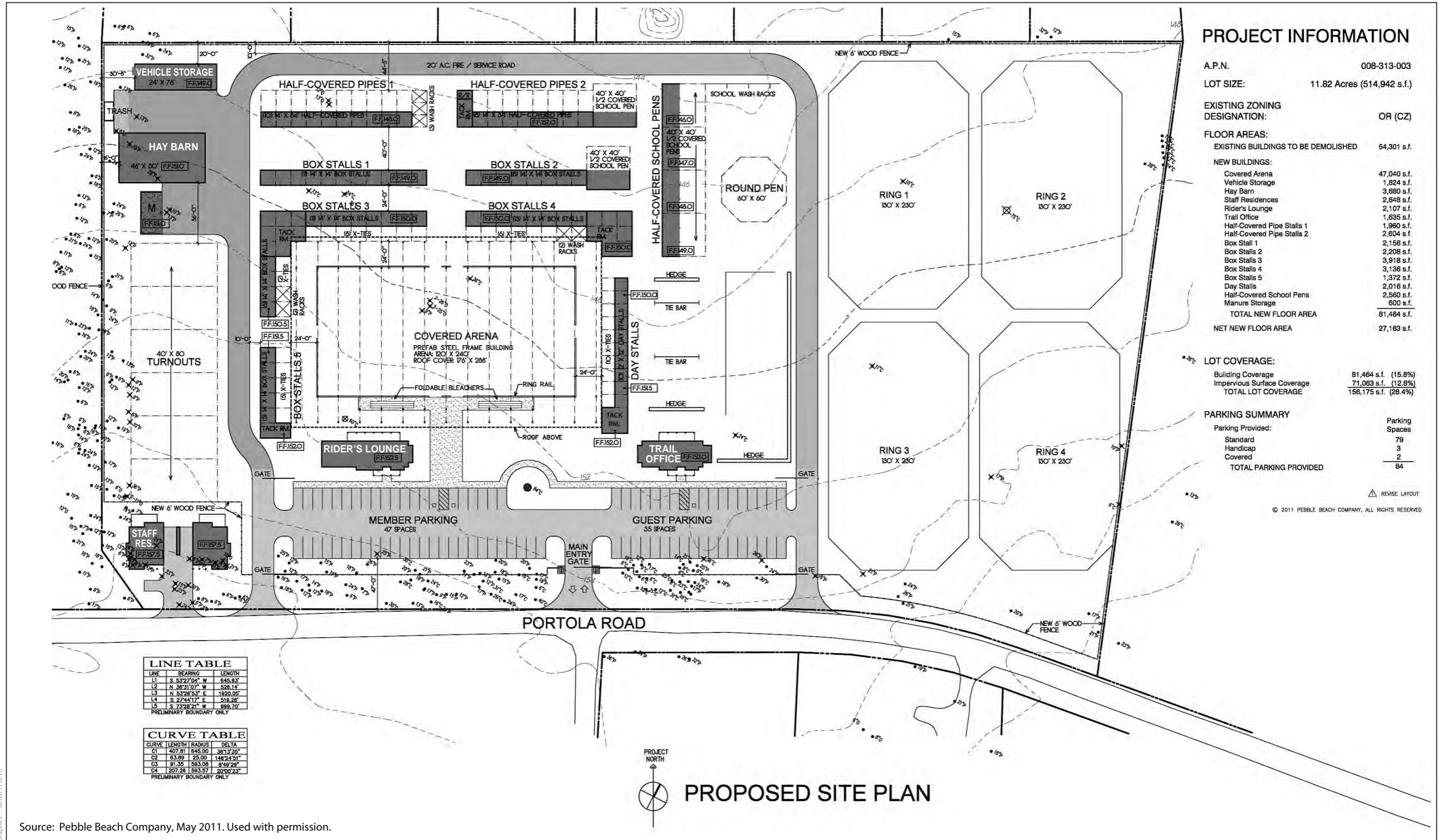
Figure 2-12
Collins Field – Equestrian Center – Special Events Area



Source: Pebble Beach Company, May 2011. Used with permission.

REVISION LAYOUT © 2011 PEBBLE BEACH COMPANY, ALL RIGHTS RESERVED

Figure 2-13
Pebble Beach Driving Range Relocation



Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-14
Equestrian Center Reconstruction

TREE REMOVAL

PINE TREES*	
6"-11" DIAMETER	= 13
12"-23" DIAMETER	= 39
24" & GREATER DIAMETER	= 17
OAK TREES*	
6"-11" DIAMETER	= 4
12"-23" DIAMETER	= 1
24" & GREATER DIAMETER	= 2
CYPRESS TREES*	
6"-11" DIAMETER	= 0
12"-23" DIAMETER	= 3
24" & GREATER DIAMETER	= 5

* TREE REMOVAL BASED UPON FIELD SURVEY.

EARTHWORK

CUT = 8700 CY
 FILL = 400 CY
 NET = 8300 CY CUT*

* CUT MATERIAL TO GO TO ADJACENT COLLINS AND AREA U SUBDIVISION SITES

IMPERVIOUS AREA

NO IMPERVIOUS AREA PROPOSED

AREA OF DEVELOPMENT WITHIN SLOPES 30% AND OVER

0 SOFT

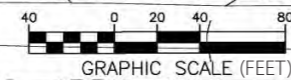
ALL TREES TO BE PROTECTED IN PLACE UNLESS SHOWN OTHERWISE.
 ✖ TREE TO BE REMOVED

ALL EXISTING BUILDINGS AND EQUESTRIAN CENTER CORRALS TO BE DEMOLISHED AND REMOVED FROM SITE

SEE SHEET R-7 FOR ROAD REALIGNMENT

LEGEND

--- SS ---	EXISTING SANITARY SEWER	---	EXISTING PROPERTY LINE
SS	NEW SANITARY SEWER	---	NEW PROPERTY LINE
SD	EXISTING STORM DRAIN	---	NEW EDGE OF PAVEMENT
SD	NEW STORM DRAIN	---	EXISTING EASEMENT
SD	NEW STORM DRAIN	---	NEW EASEMENT
---	EXISTING WATER LINE	---	CONTOUR MAJOR (10-FOOT)
---	NEW WATER LINE	---	CONTOUR MINOR (2-FOOT)
---	EXISTING OVERHEAD UTILITY	---	LIMITS OF GRADING
---	SLOPE = 30% OR GREATER		
△ FH	FIRE HYDRANT	A.P. #	ASSESSOR'S PARCEL NUMBER
□ WV	WATER VALVE	AC	ASPHALTIC CONCRETE
□ CB/IB	CATCH BASIN OR JUNCTION BOX	B.E.	BUILDING ENVELOPE
○ CO	CLEANOUT	(C)	DRAINAGE CONNECTION
⊙ SSMH	SANITARY SEWER MANHOLE	LOT X	EXISTING
⊙ SDMH	STORM DRAIN MANHOLE	R/W	RESIDENTIAL LOT/UNIT NUMBER
→	EXISTING DRAINAGE FLOW ARROW	S	PUBLIC UTILITY EASEMENT
→	NEW DRAINAGE FLOW ARROW	TYP	RIGHT OF WAY SEWER CONNECTION
		WS	WATER SERVICE
			WETLAND AREA



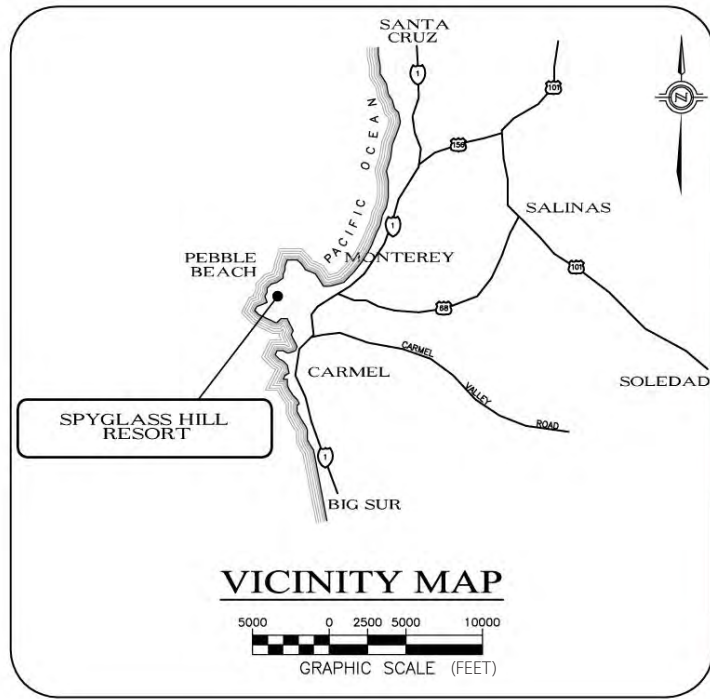
Graphics...00106.11 (10-11)

Source: Pebble Beach Company, May 2011. Used with permission.

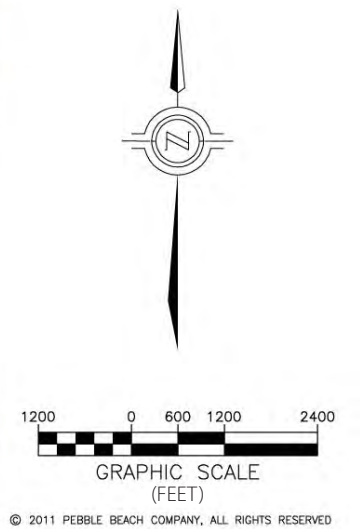
REVISE LAYOUT

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Figure 2-15
Special Events Staging Area Grading and Expansion



Area M Spyglass Hill



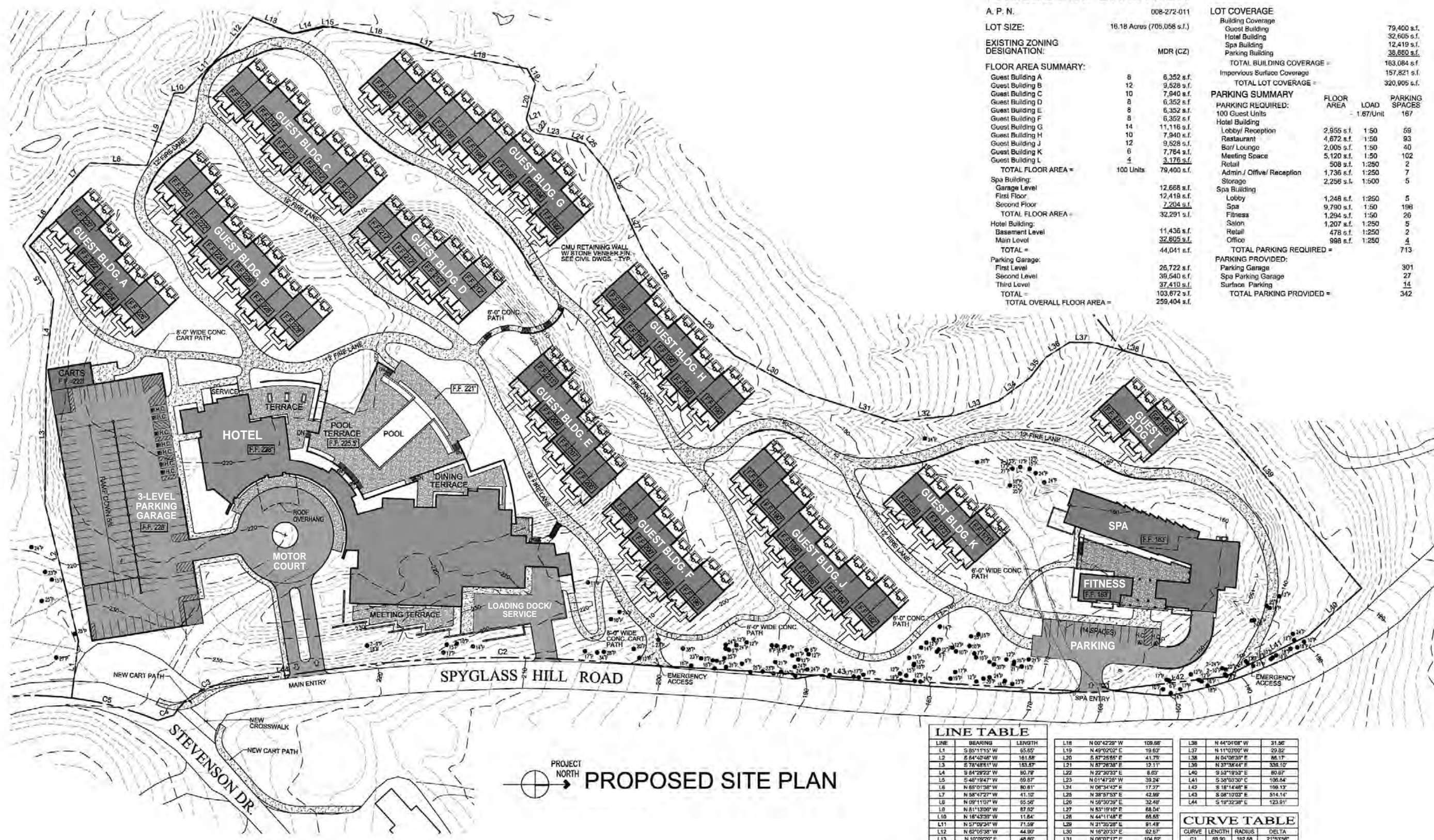
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PROJECT SITE MAP

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**Figure 2-16
Area M Spyglass Hill**

Graphics ... 00106.11 (8-11)



PROJECT INFORMATION

A. P. N. 008-272-011
 LOT SIZE: 16.18 Acres (705,058 s.f.)
 EXISTING ZONING DESIGNATION: MDR (CZ)
 FLOOR AREA SUMMARY:
 Guest Building A: 8, 6,352 s.f.
 Guest Building B: 12, 9,528 s.f.
 Guest Building C: 10, 7,940 s.f.
 Guest Building D: 8, 6,352 s.f.
 Guest Building E: 8, 6,352 s.f.
 Guest Building F: 8, 6,352 s.f.
 Guest Building G: 14, 11,116 s.f.
 Guest Building H: 10, 7,940 s.f.
 Guest Building J: 12, 9,528 s.f.
 Guest Building K: 6, 7,764 s.f.
 Guest Building L: 4, 3,176 s.f.
 TOTAL FLOOR AREA = 100 Units, 79,400 s.f.
 Spa Building: 12,668 s.f.
 Garage Level: 12,419 s.f.
 First Floor: 7,204 s.f.
 Second Floor: 32,291 s.f.
 Hotel Building: 11,436 s.f.
 Basement Level: 32,805 s.f.
 Main Level: 44,041 s.f.
 TOTAL = 259,404 s.f.
 Parking Garage: 26,722 s.f.
 Second Level: 39,640 s.f.
 Third Level: 37,410 s.f.
 TOTAL = 103,672 s.f.
 TOTAL OVERALL FLOOR AREA = 259,404 s.f.

LOT COVERAGE

Building Coverage	79,400 s.f.
Guest Building	32,605 s.f.
Hotel Building	12,419 s.f.
Spa Building	38,880 s.f.
Parking Building	163,084 s.f.
TOTAL BUILDING COVERAGE =	157,821 s.f.
Impervious Surface Coverage	320,905 s.f.
TOTAL LOT COVERAGE =	320,905 s.f.

PARKING SUMMARY

	FLOOR AREA	LOAD	PARKING SPACES
PARKING REQUIRED:		1.67/Unit	167
100 Guest Units			
Hotel Building			
Lobby/ Reception	2,955 s.f.	1:50	59
Restaurant	4,672 s.f.	1:50	93
Bar/ Lounge	2,005 s.f.	1:50	40
Meeting Space	5,120 s.f.	1:50	102
Retail	508 s.f.	1:250	2
Admin./ Office/ Reception	1,736 s.f.	1:250	7
Storage	2,298 s.f.	1:500	5
Spa Building			
Lobby	1,248 s.f.	1:250	5
Spa	9,790 s.f.	1:50	196
Fitness	1,294 s.f.	1:50	26
Salon	1,207 s.f.	1:250	5
Retail	478 s.f.	1:250	2
Office	998 s.f.	1:250	4
TOTAL PARKING REQUIRED =			713
PARKING PROVIDED:			301
Parking Garage			27
Spa Parking Garage			14
Surface Parking			14
TOTAL PARKING PROVIDED =			342

LINE TABLE

LINE	BEARING	LENGTH	L18	L19	L20	L21	L22	L23	L24	L25	L26	L27	L28	L29	L30	L31	L32	L33	L34	L35	L36	L37	L38	L39	L40	L41	L42	L43	L44																											
L1	S 85°11'15" W	65.65'	N 00°42'28" W	109.66'	N 49°02'02" E	19.63'	N 44°01'08" W	31.56'	N 11°07'00" W	29.82'	N 84°08'35" E	86.17'	N 37°38'48" E	338.10'	N 53°19'53" E	80.87'	N 54°03'30" E	106.84'	N 18°44'48" E	106.13'	N 08°34'42" E	17.27'	N 38°57'53" E	42.99'	N 56°30'39" E	32.49'	N 81°13'09" W	87.82'	N 18°43'39" W	11.64'	N 44°11'48" E	86.85'	N 57°09'24" W	71.58'	N 31°35'28" E	81.49'	N 62°05'38" W	44.90'	N 10°09'20" E	48.80'	N 08°07'17" E	104.82'	N 17°28'04" W	71.00'	N 09°48'02" W	13.65'	N 30°20'48" W	51.72'	N 09°00'44" W	97.24'	N 48°02'00" W	44.38'	N 10°28'59" E	18.29'	N 63°26'18" W	30.01'

CURVE TABLE

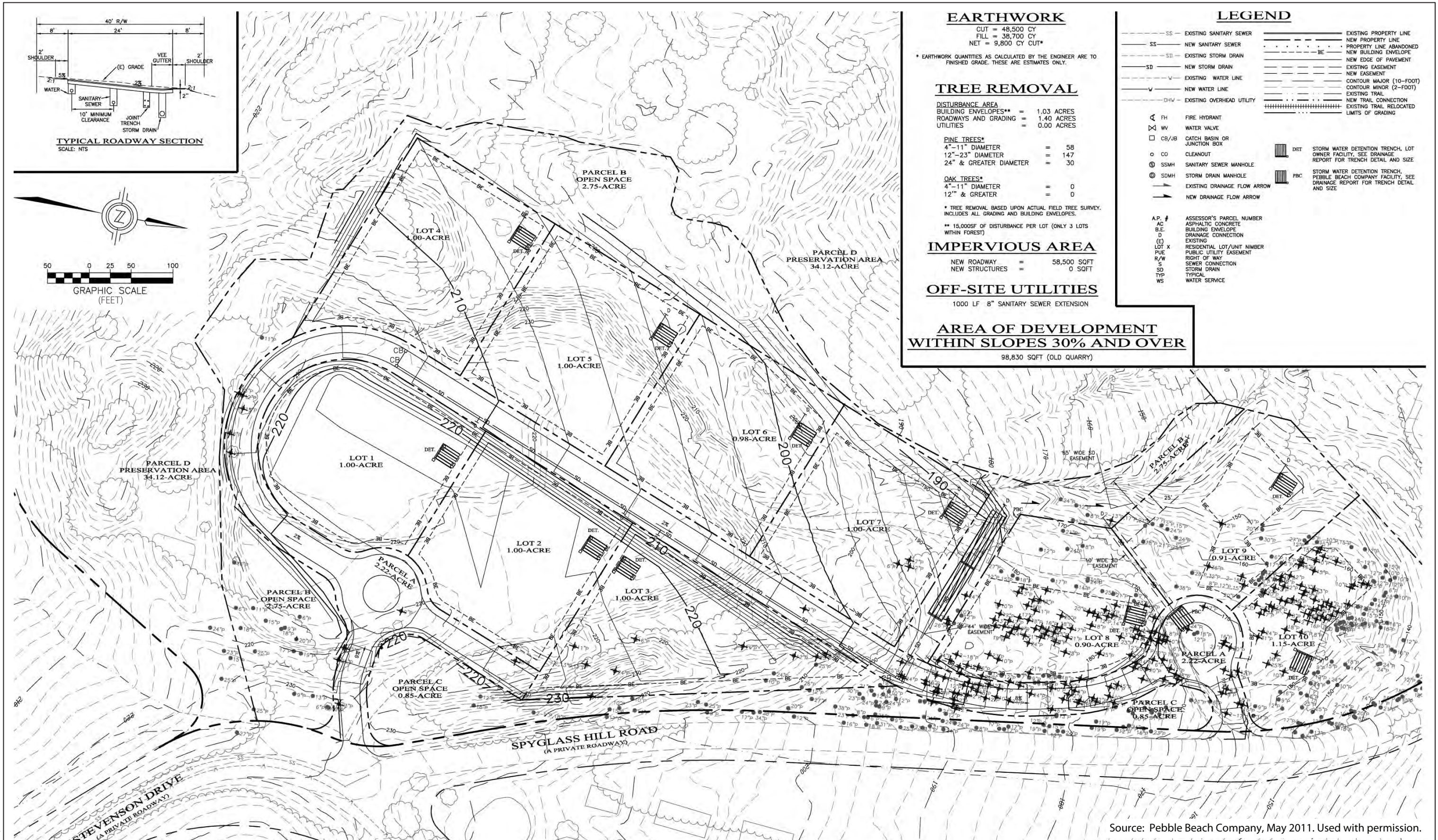
CURVE	LENGTH	RADIUS	DELTA
C1	89.90	182.68	21°53'56"
C2	328.67	1384.06	13°25'20"
C3	74.40	75.95	56°07'25"
C4	18.45	8301277.73	0°00'01"
C5	101.85	378.84	18°32'21"

PROPOSED SITE PLAN



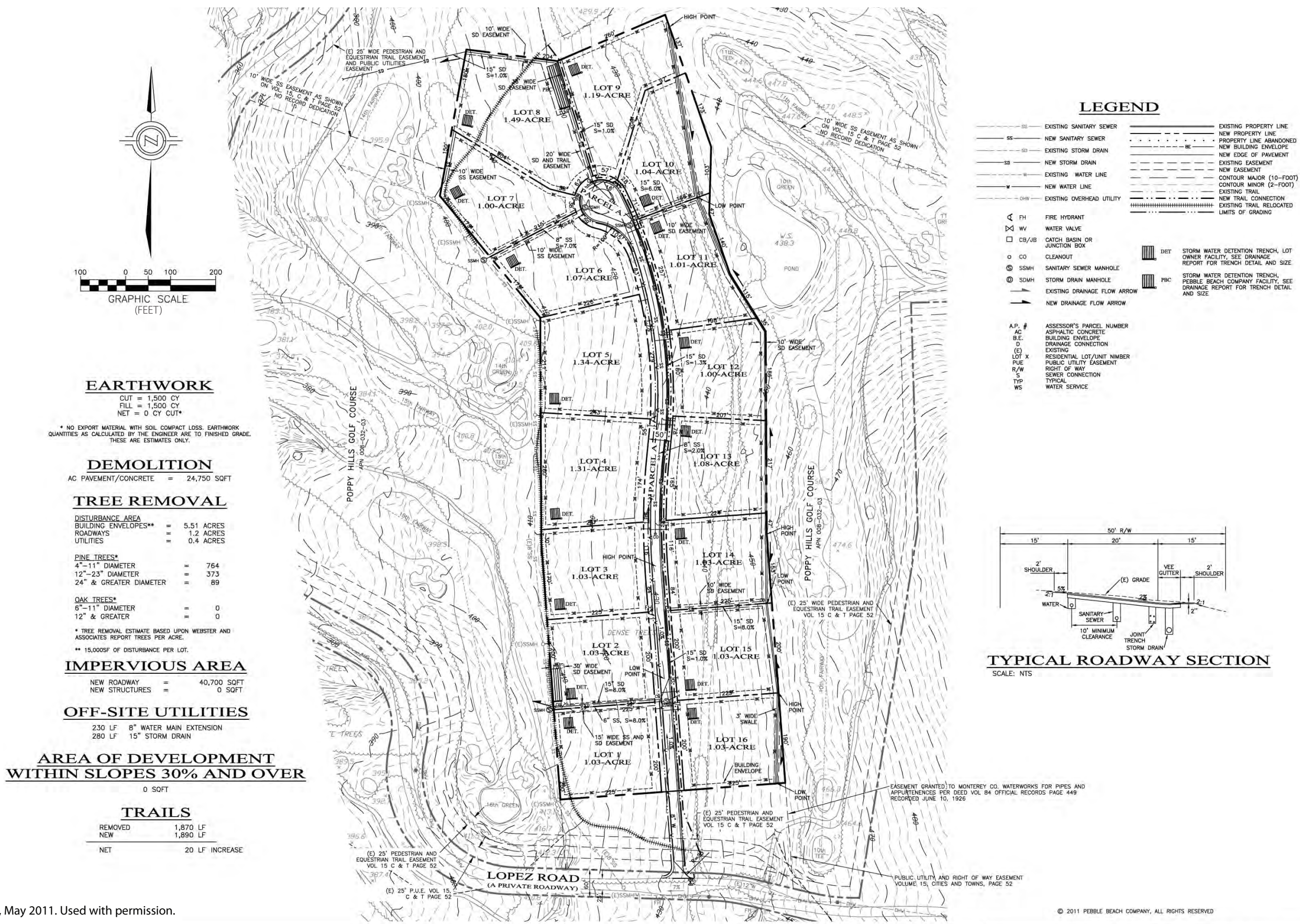
Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-17
New Resort Hotel (Option 1)



Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-18
New Residential Lots (Option 2)



Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-19 Residential Lot Subdivision Area F-2 (16 Lots)

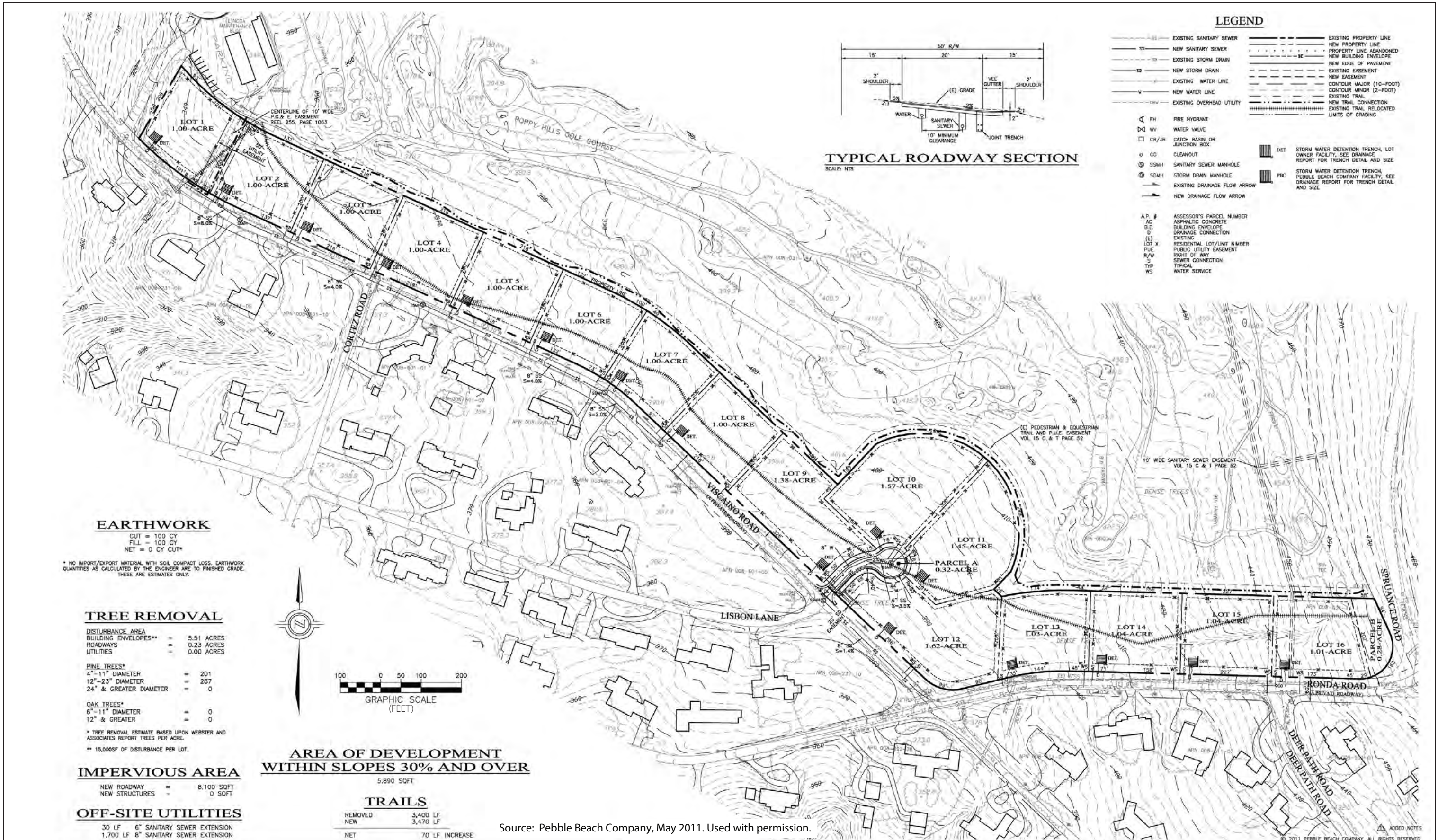


Figure 2-20 Residential Lot Subdivision Area I-2 (16 Lots)

LEGEND

- SS — EXISTING SANITARY SEWER
- NS — NEW SANITARY SEWER
- SD — EXISTING STORM DRAIN
- NSD — NEW STORM DRAIN
- WL — EXISTING WATER LINE
- NWL — NEW WATER LINE
- OUV — EXISTING OVERHEAD UTILITY
- EP — EXISTING PROPERTY LINE
- NPL — NEW PROPERTY LINE
- P — PROPERTY LINE ABANDONED
- NBE — NEW BUILDING ENVELOPE
- NEOP — NEW EDGE OF PAVEMENT
- EE — EXISTING EASEMENT
- NE — NEW EASEMENT
- CM — CONTOUR MAJOR (10'-FOOT)
- CM2 — CONTOUR MINOR (2'-FOOT)
- ET — EXISTING TRAIL
- NCT — NEW TRAIL CONNECTION
- ETR — EXISTING TRAIL RELOCATED
- L — LIMITS OF GRADING
- F — FEMA 1% ANNUAL FLOOD LINE
- RA — RIPARIAN AREA, SEE SHEET 1, NOTE 14
- WA — WETLAND AREA, SEE SHEET 1, NOTE 14
- FH — FIRE HYDRANT
- WV — WATER VALVE
- CB/JSB — CATCH BASIN OR JUNCTION BOX
- CO — CLEANOUT
- SSMH — SANITARY SEWER MANHOLE
- SDMH — STORM DRAIN MANHOLE
- E — EXISTING DRAINAGE FLOW ARROW
- N — NEW DRAINAGE FLOW ARROW
- A.P. # — ASSESSOR'S PARCEL NUMBER
- AC — ASPHALTIC CONCRETE
- BE — BUILDING ENVELOPE
- D — DRAINAGE CONNECTION
- (E) — EXISTING
- LOT X — RESIDENTIAL LOT/UNIT NUMBER
- PUC — PUBLIC UTILITY EASEMENT
- R/W — RIGHT OF WAY
- S — SEWER CONNECTION
- TYP — TYPICAL
- WS — WATER SERVICE
- DET — STORM WATER DETENTION TRENCH, LOT OWNER FACILITY, SEE DRAINAGE REPORT FOR TRENCH DETAIL AND SIZE
- FBC — STORM WATER DETENTION TRENCH, PEBBLE BEACH COMPANY FACILITY, SEE DRAINAGE REPORT FOR TRENCH DETAIL AND SIZE

EARTHWORK

CUT = 100 CY
 FILL = 100 CY
 NET = 0 CY CUT*

* NO EXPORT MATERIAL WITH SOIL COMPACT LOSS. EARTHWORK QUANTITIES AS CALCULATED BY THE ENGINEER ARE TO FINISHED GRADE. THESE ARE ESTIMATES ONLY.

TREE REMOVAL

DISTURBANCE AREA = 1.72 ACRES
 BUILDING ENVELOPES** = 0.09 ACRES
 ROADWAYS = 0.09 ACRES
 UTILITIES = 0.00 ACRES

PINE TREES*
 4"-11" DIAMETER = 54
 12"-23" DIAMETER = 172
 24" & GREATER DIAMETER = 18

OAK TREES*
 4"-11" DIAMETER = 127
 12" & GREATER = 9

* TREE REMOVAL ESTIMATE BASED UPON WEBSTER AND ASSOCIATES REPORT TREES PER ACRE.
 ** 15,000SF OF DISTURBANCE PER LOT.

IMPERVIOUS AREA

NEW ROADWAY = 2,200 SQFT
 NEW STRUCTURES = 0 SQFT

OFF-SITE UTILITIES

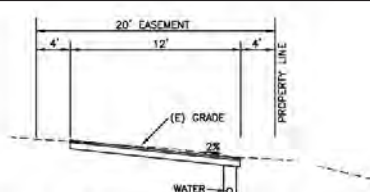
310 LF 6" SANITARY SEWER EXTENSION

AREA OF DEVELOPMENT WITHIN SLOPES 30% AND OVER

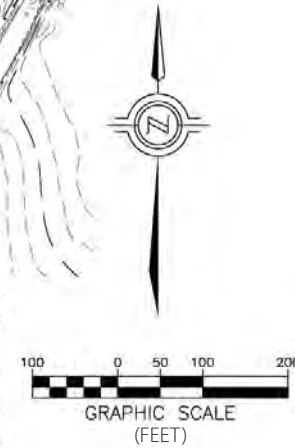
0 SQFT

TRAILS

REMOVED 610 LF
 NEW 740 LF
 NET 130 LF INCREASE



LOT 4 & 5 DRIVEWAY SECTION
 SCALE: NTS



Graphics...00106.11 (8-11)

Source: Pebble Beach Company, May 2011. Used with permission.

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Figure 2-21 Residential Lot Subdivision Area J (5 Lots)

EARTHWORK
 CUT = 200 CY
 FILL = 200 CY
 NET = 0 CY CUT*

* NO EXPORT MATERIAL WITH SOIL COMPACT LOSS. EARTHWORK QUANTITIES AS CALCULATED BY THE ENGINEER ARE TO FINISHED GRADE. THESE ARE ESTIMATES ONLY.

TREE REMOVAL

DISTURBANCE AREA
 BUILDING ENVELOPES** = 1.72 ACRES
 ROADWAYS = 0.29 ACRES
 UTILITIES = 0.0 ACRES

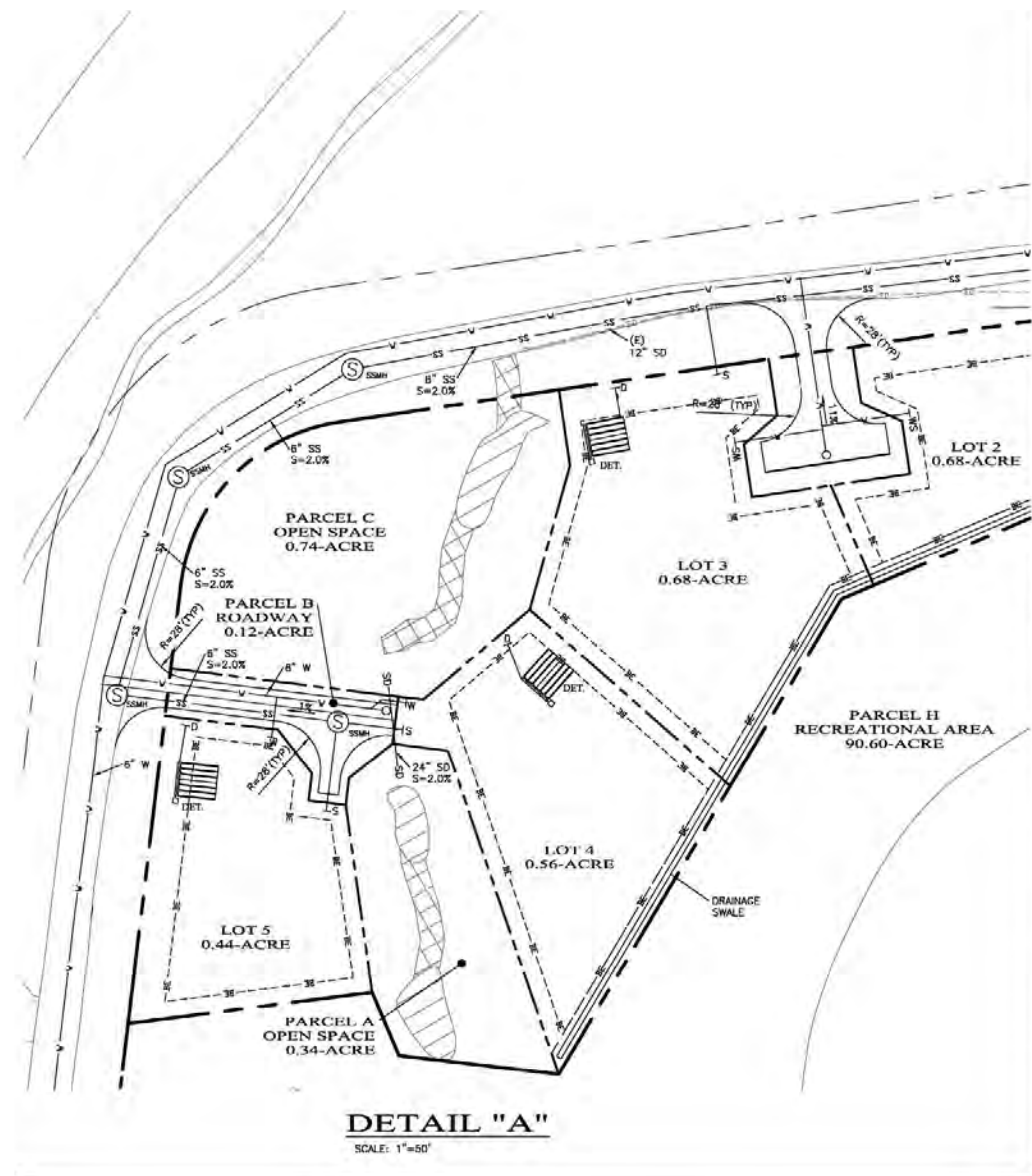
PINE TREES*
 4"-11" DIAMETER = 267
 12"-23" DIAMETER = 181
 24" & GREATER DIAMETER = 10

DAK TREES*
 4"-11" DIAMETER = 121
 12" & GREATER = 20

* TREE REMOVAL ESTIMATE BASED UPON WEBSTER AND ASSOCIATES REPORT TREES PER ACRE.
 ** 15,000SF OF DISTURBANCE PER LOT.

IMPERVIOUS AREA
 NEW ROADWAY = 7,600 SQFT
 NEW STRUCTURES = 0 SQFT

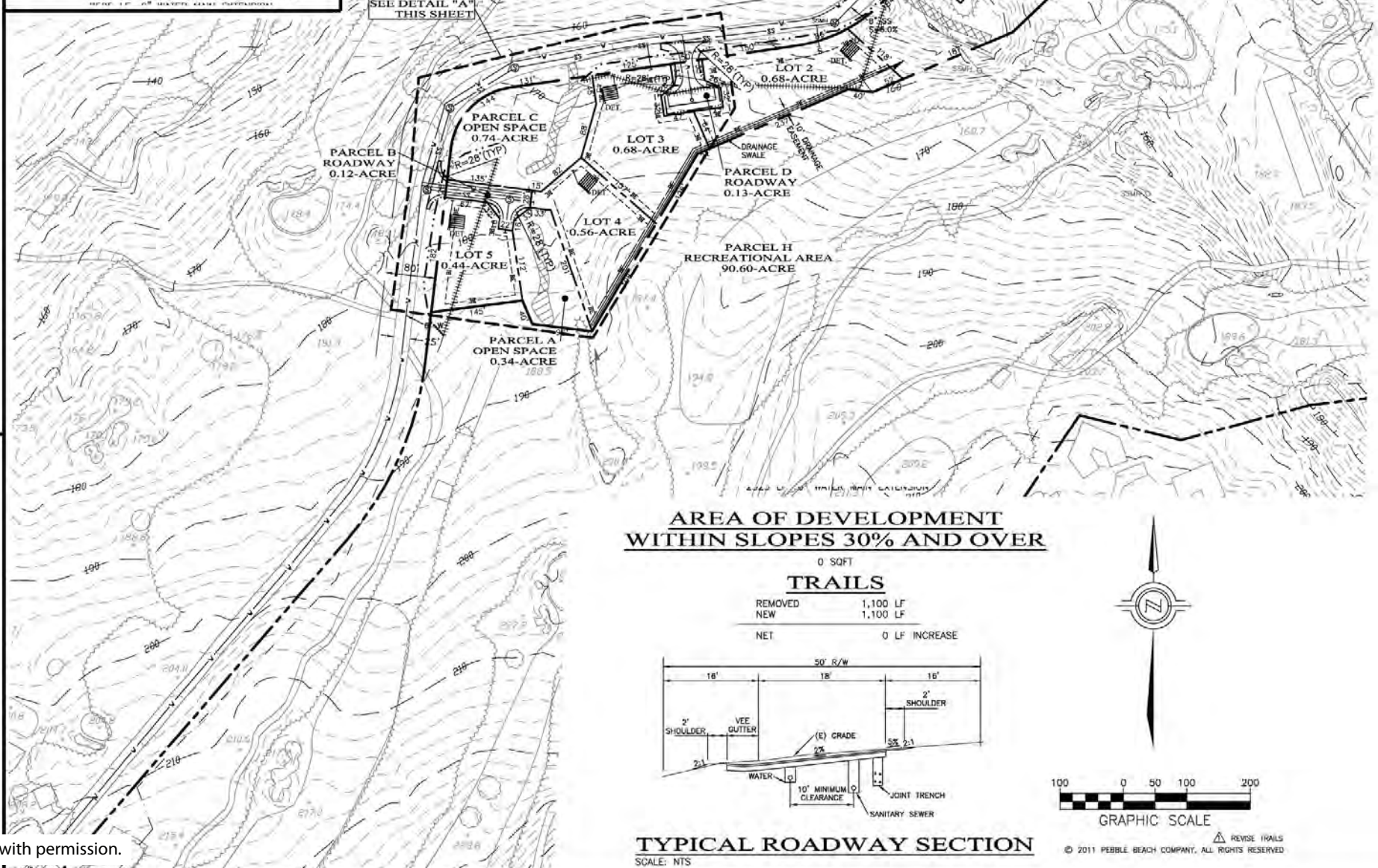
OFF-SITE UTILITIES
 1020 LF 8" SANITARY SEWER EXTENSION
REF. SHEET 1 FOR SANITARY SEWER INSTALLATION



DETAIL "A"
 SCALE: 1"=50'

LEGEND

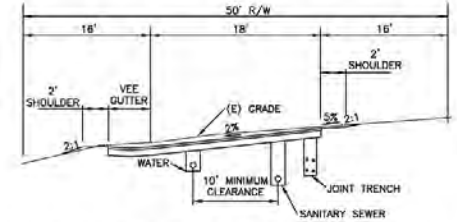
SS	EXISTING SANITARY SEWER	---	EXISTING PROPERTY LINE
SS	NEW SANITARY SEWER	---	NEW PROPERTY LINE
SD	EXISTING STORM DRAIN	---	PROPERTY LINE ABANDONED
SD	NEW STORM DRAIN	---	NEW BUILDING ENVELOPE
SW	EXISTING WATER LINE	---	NEW EDGE OF PAVEMENT
SW	NEW WATER LINE	---	EXISTING EASEMENT
OH	EXISTING OVERHEAD UTILITY	---	NEW EASEMENT
TH	FIRE HYDRANT	---	CONTOUR MAJOR (10-FOOT)
WV	WATER VALVE	---	CONTOUR MINOR (2-FOOT)
CB/JB	CATCH BASIN OR JUNCTION BOX	---	EXISTING TRAIL
CO	CLEANOUT	---	NEW TRAIL CONNECTION
SSMH	SANITARY SEWER MANHOLE	---	EXISTING TRAIL RELOCATED
SDMH	STORM DRAIN MANHOLE	---	LIMITS OF GRADING
DF	EXISTING DRAINAGE FLOW ARROW	---	FEMA 1% ANNUAL FLOOD LINE
NDF	NEW DRAINAGE FLOW ARROW	---	RIPIAN AREA, SEE SHEET 1, NOTE 14
A.P. #	ASSESSOR'S PARCEL NUMBER	---	WETLAND AREA, SEE SHEET 1, NOTE 14
AC	ASPHALTIC CONCRETE	---	
B.E.	BUILDING ENVELOPE	---	
D	DRAINAGE CONNECTION	---	
(E)	EXISTING	---	
LOT X	RESIDENTIAL LOT/UNIT NUMBER	---	
P.U.E.	PUBLIC UTILITY EASEMENT	---	
R/W	RIGHT OF WAY	---	
S	SEWER CONNECTION	---	
TYP	TYPICAL	---	
WS	WATER SERVICE	---	
DET	STORM WATER DETENTION TRENCH, LOT OWNER FACILITY, SEE DRAINAGE REPORT FOR TRENCH DETAIL AND SIZE		
TBC	STORM WATER DETENTION TRENCH, PEBBLE BEACH COMPANY FACILITY, SEE DRAINAGE REPORT FOR TRENCH DETAIL AND SIZE		



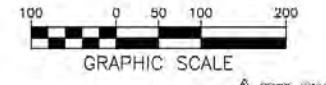
AREA OF DEVELOPMENT WITHIN SLOPES 30% AND OVER

TRAILS

0 SQFT	REMOVED	1,100 LF
	NEW	1,100 LF
	NET	0 LF INCREASE



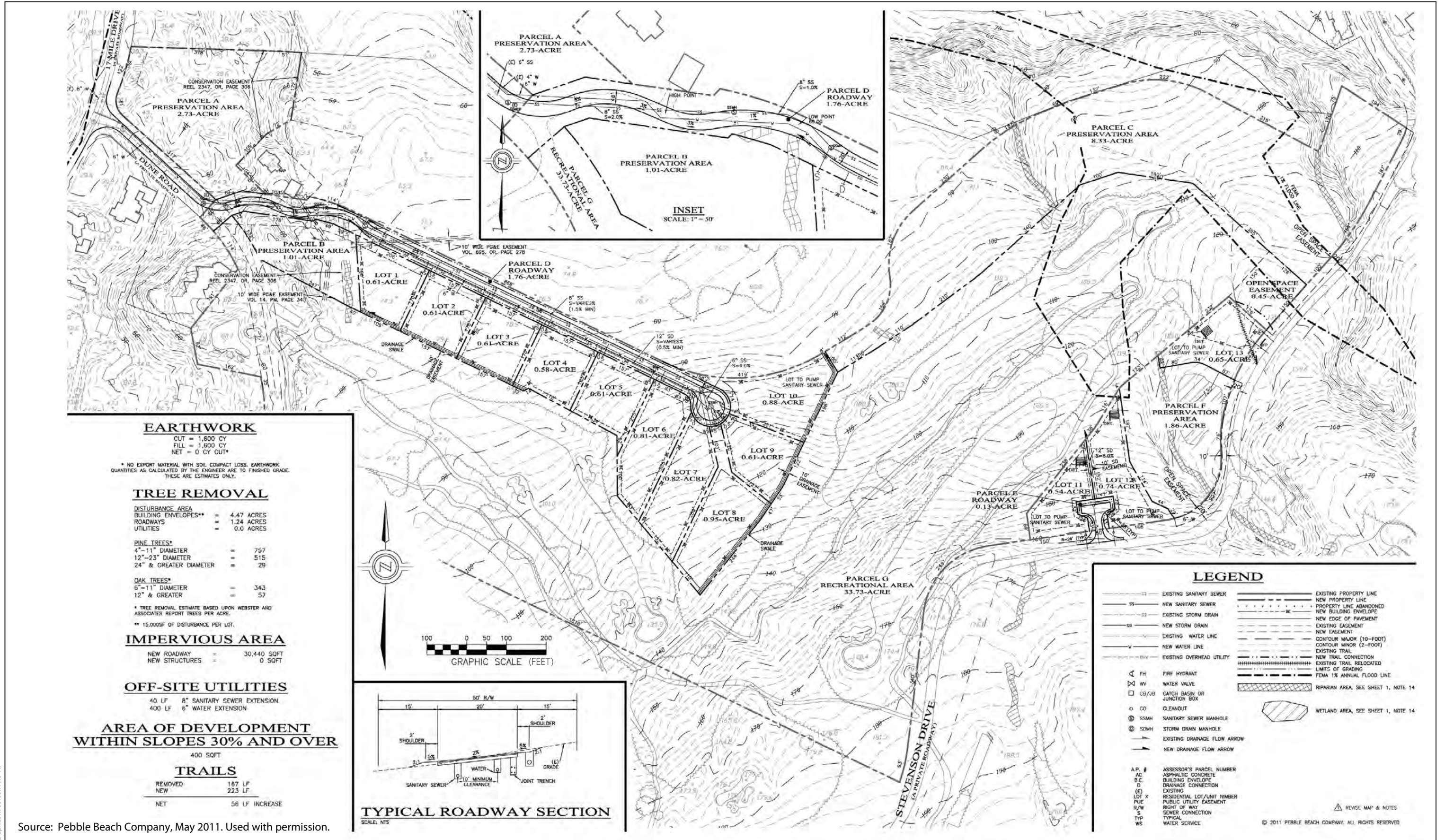
TYPICAL ROADWAY SECTION
 SCALE: NTS



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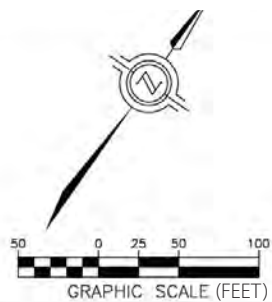
Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-22 Residential Lot Subdivision Area K (5 Lots)



Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-23
Residential Lot Subdivision Area L (10 Lots) and Area K (3 Lots)



**AREA U
SUBDIVISION
ONLY**

EARTHWORK

CUT = 0 CY
FILL = 6000 CY
NET = 6000 CY FILL*

* IMPORT MATERIAL FROM ADJACENT SPECIAL EVENTS SITE. EARTHWORK QUANTITIES AS CALCULATED BY THE ENGINEER ARE TO FINISHED GRADE. THESE ARE ESTIMATES ONLY.

TREE REMOVAL

DISTURBANCE AREA = 2.24 ACRES
BUILDING ENVELOPES = 0.00 ACRES
ROADWAYS = 0.04 ACRES
UTILITIES = 0.04 ACRES

PINE TREES*
4"-11" DIAMETER = 168
12"-23" DIAMETER = 154
24" & GREATER DIAMETER = 16

OAK TREES*
6"-11" DIAMETER = 21
12" & GREATER = 2

* TREE REMOVAL ESTIMATE BASED UPON WEBSTER AND ASSOCIATES REPORT TREES PER ACRE.

IMPERVIOUS AREA

NEW ROADWAY = 0 SQFT
NEW STRUCTURES = 0 SQFT

OFF-SITE UTILITIES

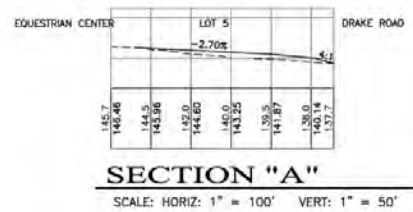
230 LF 6" SANITARY SEWER EXTENSION
50 LF 36" STORM DRAIN

**AREA OF DEVELOPMENT
WITHIN SLOPES 30% AND OVER**

0 SQFT

LEGEND

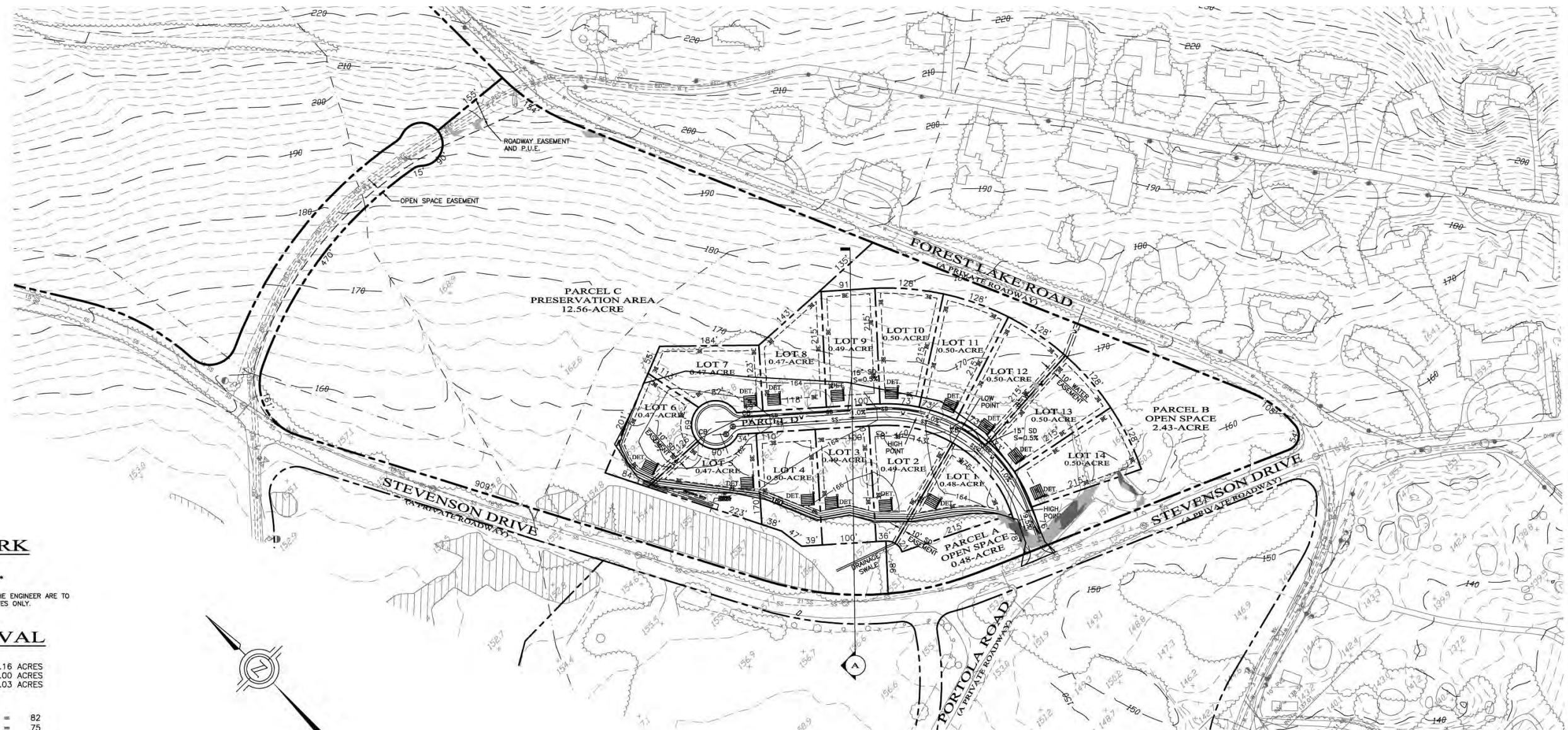
- | | |
|-------------------------------------|---------------------------------|
| --- EXISTING SANITARY SEWER | --- EXISTING PROPERTY LINE |
| SS NEW SANITARY SEWER | --- NEW PROPERTY LINE |
| --- EXISTING STORM DRAIN | --- PROPERTY LINE ABANDONED |
| SS NEW STORM DRAIN | --- NEW BUILDING ENVELOPE |
| --- EXISTING WATER LINE | --- NEW EDGE OF PAVEMENT |
| SS NEW WATER LINE | --- EXISTING EASEMENT |
| --- EXISTING OVERHEAD UTILITY | --- NEW EASEMENT |
| ○ FH FIRE HYDRANT | --- CONTOUR MAJOR (10-FOOT) |
| ⊕ WV WATER VALVE | --- CONTOUR MINOR (2-FOOT) |
| □ CB/JB CATCH BASIN OR JUNCTION BOX | --- EXISTING TRAIL |
| ○ CO CLEANOUT | --- NEW TRAIL CONNECTION |
| ⊙ SSMH SANITARY SEWER MANHOLE | --- EXISTING TRAIL RELOCATED |
| ⊙ SSMH STORM DRAIN MANHOLE | --- LIMITS OF GRADING |
| --- EXISTING DRAINAGE FLOW ARROW | --- FEMA 1% ANNUAL FLOOD LINE |
| --- NEW DRAINAGE FLOW ARROW | --- RIPARIAN AREA, SEE SHEET 14 |
| | --- WETLAND AREA, SEE SHEET 14 |
-
- | |
|--|
| A.P. # ASSESSOR'S PARCEL NUMBER |
| AC ASPHALTIC CONCRETE |
| B.E. BUILDING ENVELOPE |
| D DRAINAGE CONNECTION |
| (E) EXISTING RESIDENTIAL LOT/UNIT NUMBER |
| LOT X PUBLIC UTILITY EASEMENT |
| R/W RIGHT OF WAY |
| S SEWER CONNECTION |
| TYP TYPICAL |
| WS WATER SERVICE |



Graphics...00106.11 (8-11)

Source: Pebble Beach Company, May 2011. Used with permission.

**Figure 2-24
Residential Lot Subdivision Area U (7 Lots)**



EARTHWORK

CUT = 800 CY
 FILL = 16,480 CY
 NET = 15,680 CY FILL*

* EARTHWORK QUANTITIES AS CALCULATED BY THE ENGINEER ARE TO FINISHED GRADE. THESE ARE ESTIMATES ONLY.

TREE REMOVAL

DISTURBANCE AREA = 1.16 ACRES
 BUILDING ENVELOPES** = 0.00 ACRES
 ROADWAYS = 0.00 ACRES
 UTILITIES = 0.03 ACRES

PINE TREES*
 4"-11" DIAMETER = 82
 12"-23" DIAMETER = 75
 24" & GREATER DIAMETER = 8

OAK TREES*
 4"-11" DIAMETER = 10
 12" & GREATER = 1

* TREE REMOVAL ESTIMATE BASED UPON WEBSTER AND ASSOCIATES REPORT TREES PER ACRE.
 ** ASSUMES 75% DISTURBANCE OF FOREST AREA WITHIN LOTS.

IMPERVIOUS AREA

NEW ROADWAY = 20,800 SQFT
 NEW STRUCTURES = 0 SQFT

OFF-SITE UTILITIES

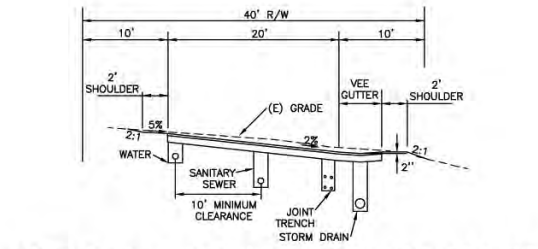
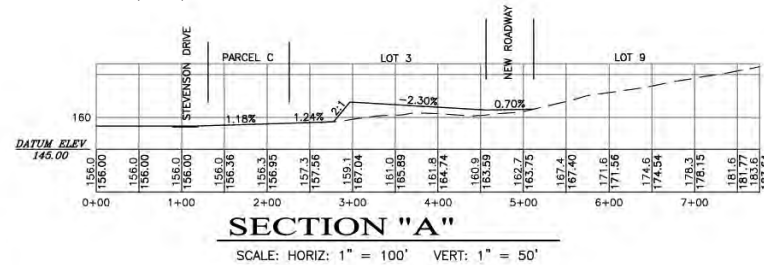
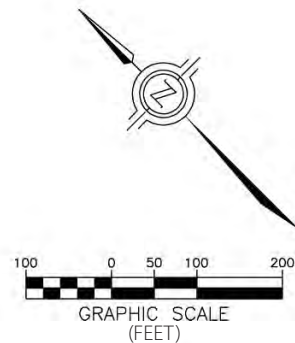
100 LF 8" WATER MAIN EXTENSION

AREA OF DEVELOPMENT WITHIN SLOPES 30% AND OVER

500 SQFT (EXISTING TEE BOX)

TRAILS

REMOVED = 0 LF
 NEW = 0 LF
 NET = 0 LF INCREASE



TYPICAL ROADWAY SECTION
 SCALE: NTS

LEGEND

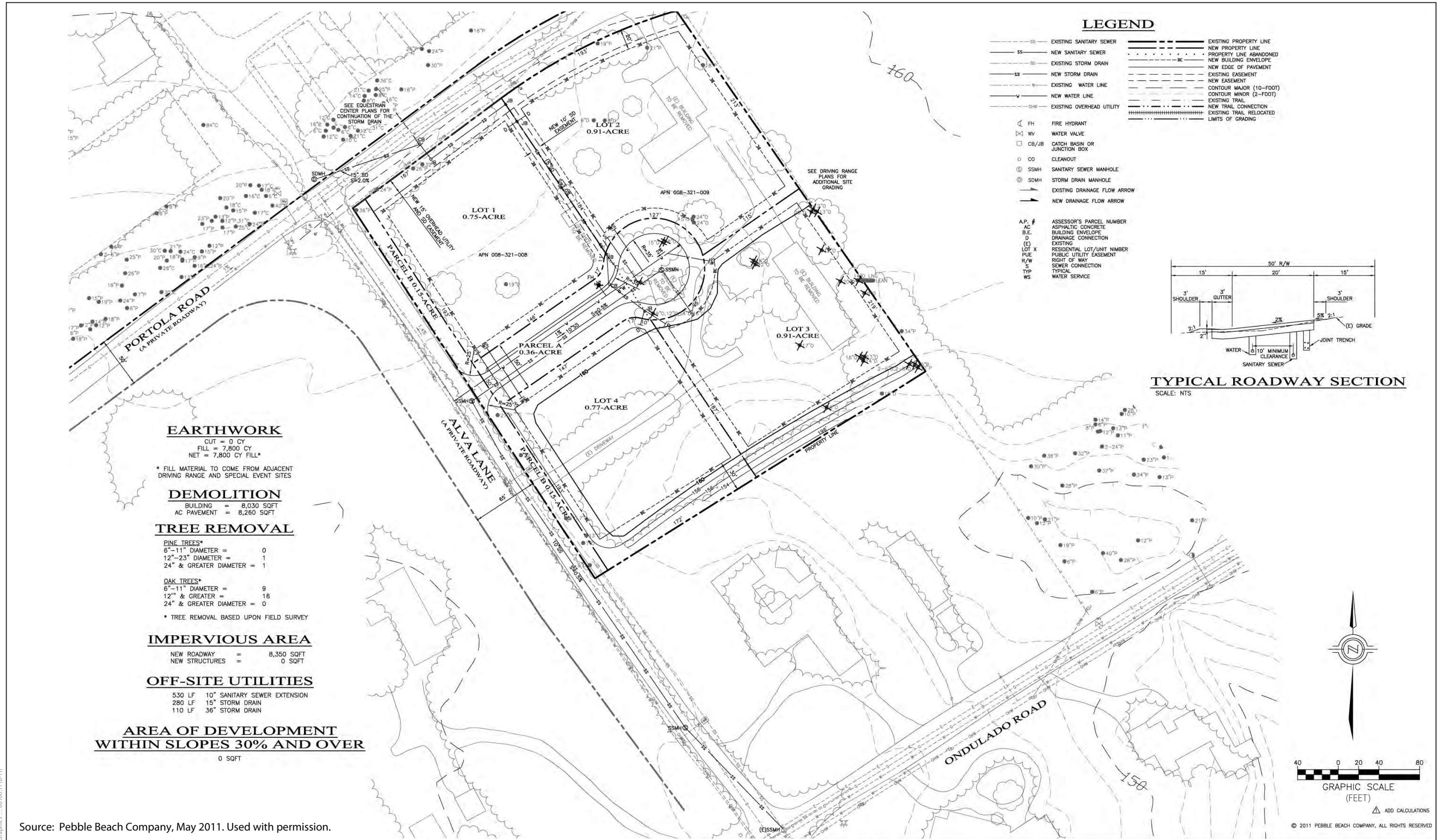
---	EXISTING SANITARY SEWER	---	EXISTING PROPERTY LINE
---	NEW SANITARY SEWER	---	NEW PROPERTY LINE
---	EXISTING STORM DRAIN	---	PROPERTY LINE ABANDONED
---	NEW STORM DRAIN	---	NEW BUILDING ENVELOPE
---	EXISTING WATER LINE	---	NEW EDGE OF PAVEMENT
---	NEW WATER LINE	---	EXISTING EASEMENT
---	EXISTING OVERHEAD UTILITY	---	NEW EASEMENT
---		---	CONTOUR MAJOR (10-FOOT)
---		---	CONTOUR MINOR (2-FOOT)
---		---	EXISTING TRAIL
---		---	NEW TRAIL CONNECTION
---		---	EXISTING TRAIL RELOCATED
---		---	LIMITS OF GRADING
---		---	FEMA 1% ANNUAL FLOOD LINE
---		---	RIPARIAN AREA, SEE SHEET 1, NOTE 14
△	FH FIRE HYDRANT	▨	WETLAND AREA, SEE SHEET 1, NOTE 14
□	WV WATER VALVE	▨	DET STORM WATER DETENTION TRENCH, LOT OWNER FACILITY, SEE DRAINAGE REPORT FOR TRENCH DETAIL AND SIZE
□	CB/JB CATCH BASIN OR JUNCTION BOX	▨	PBC STORM WATER DETENTION TRENCH, PEBBLE BEACH COMPANY FACILITY, SEE DRAINAGE REPORT FOR TRENCH DETAIL AND SIZE
○	CO CLEANOUT		
○	SSMH SANITARY SEWER MANHOLE		
○	SDMH STORM DRAIN MANHOLE		
→	EXISTING DRAINAGE FLOW ARROW		
→	NEW DRAINAGE FLOW ARROW		
A.P. #	ASSESSOR'S PARCEL NUMBER		
AC	ASPHALTIC CONCRETE		
B.C.	BUILDING ENVELOPE		
D	DRAINAGE CONNECTION		
(E)	EXISTING		
LOT X	RESIDENTIAL LOT/LUNIT NUMBER		
P.U.E.	PUBLIC UTILITY EASEMENT		
R/W	RIGHT OF WAY		
S	SEWER CONNECTION		
TYP	TYPICAL		
WS	WATER SERVICE		
		△	REVISE ACREAGE TEXT, ADDED NOTES

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Graphics...00106.11(8-11)

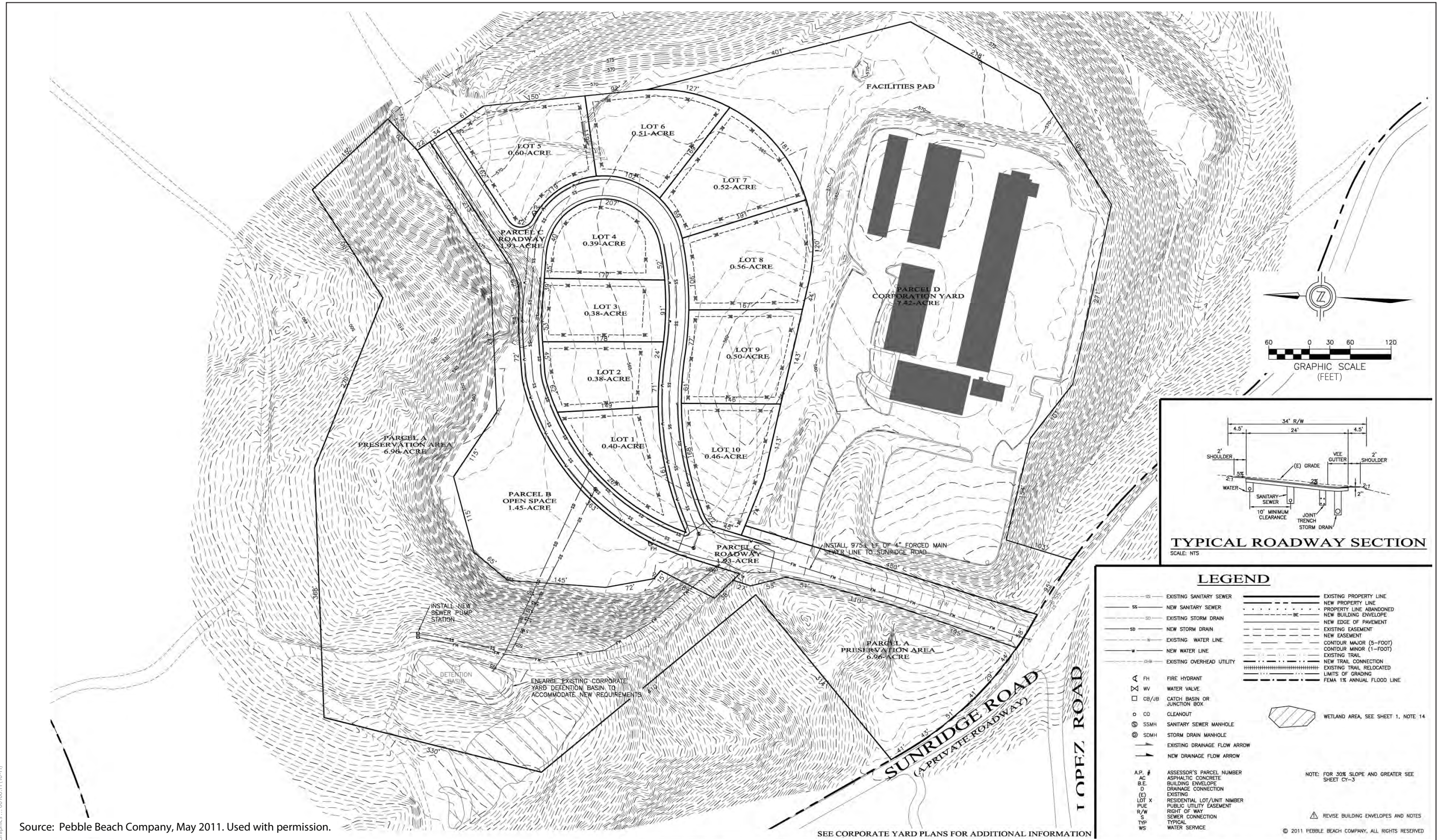
Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-25 Residential Lot Subdivision Area V (14 Lots)



Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-26
Residential Lot Subdivision Collins Residence (4 Lots)



Source: Pebble Beach Company, May 2011. Used with permission.

SEE CORPORATE YARD PLANS FOR ADDITIONAL INFORMATION

Figure 2-27
Residential Lot Subdivision Corporation Yard (10 Lots)

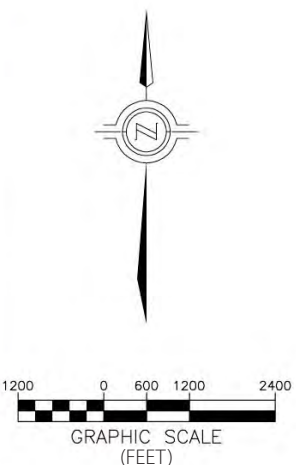
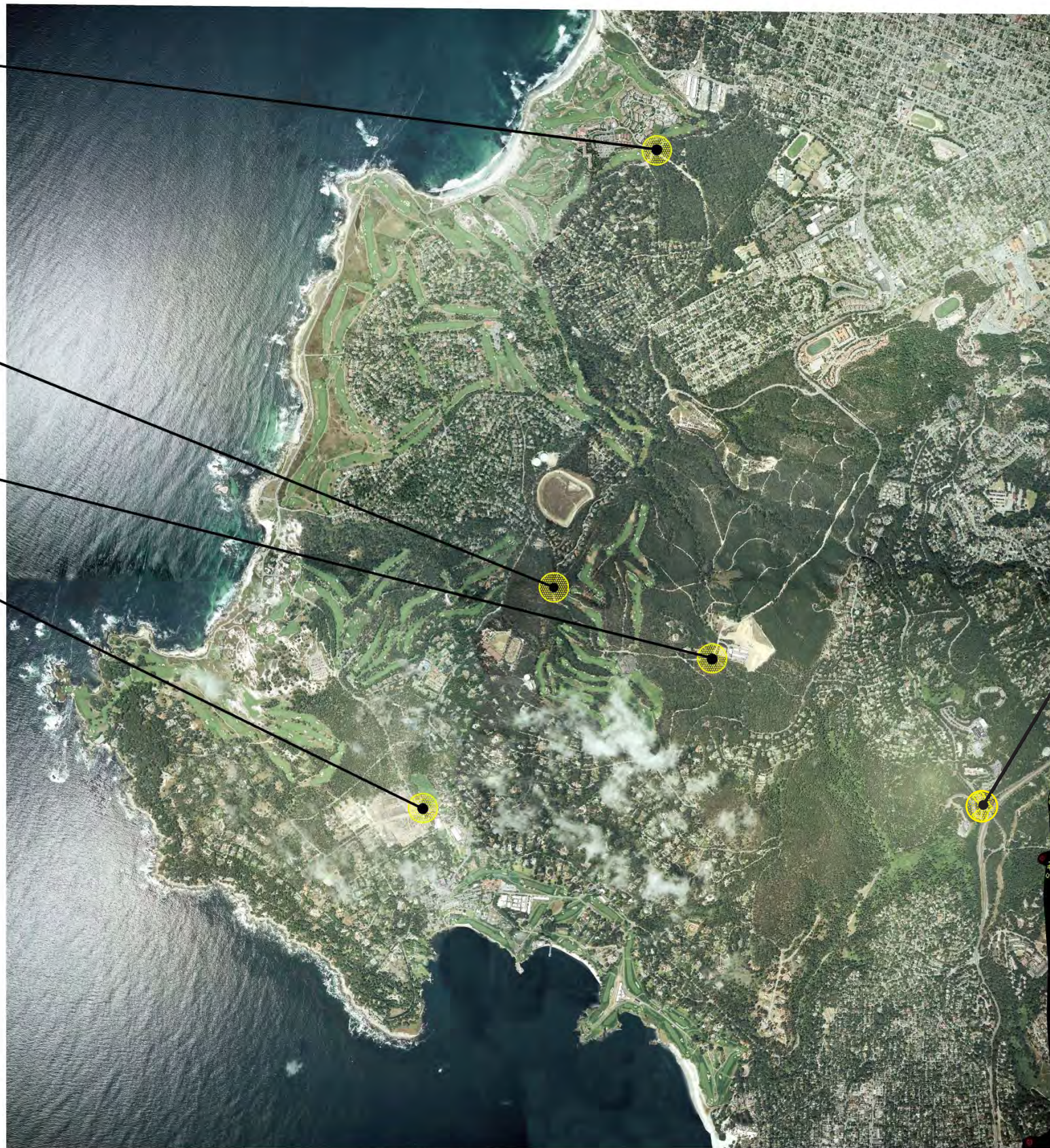
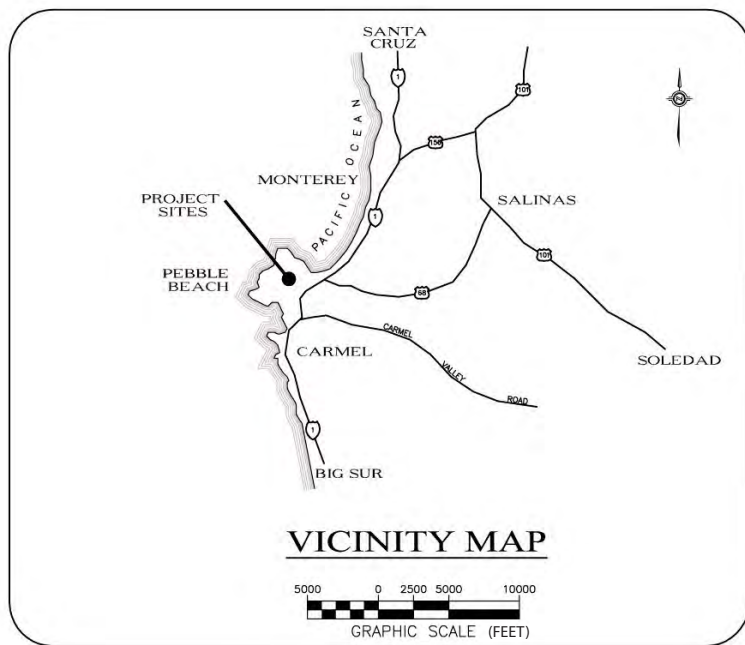
Congress Road/17-Mile Drive

Congress Road/Lopez Road

Sunridge Road/Lopez Road

Stevenson Drive/Portola Road

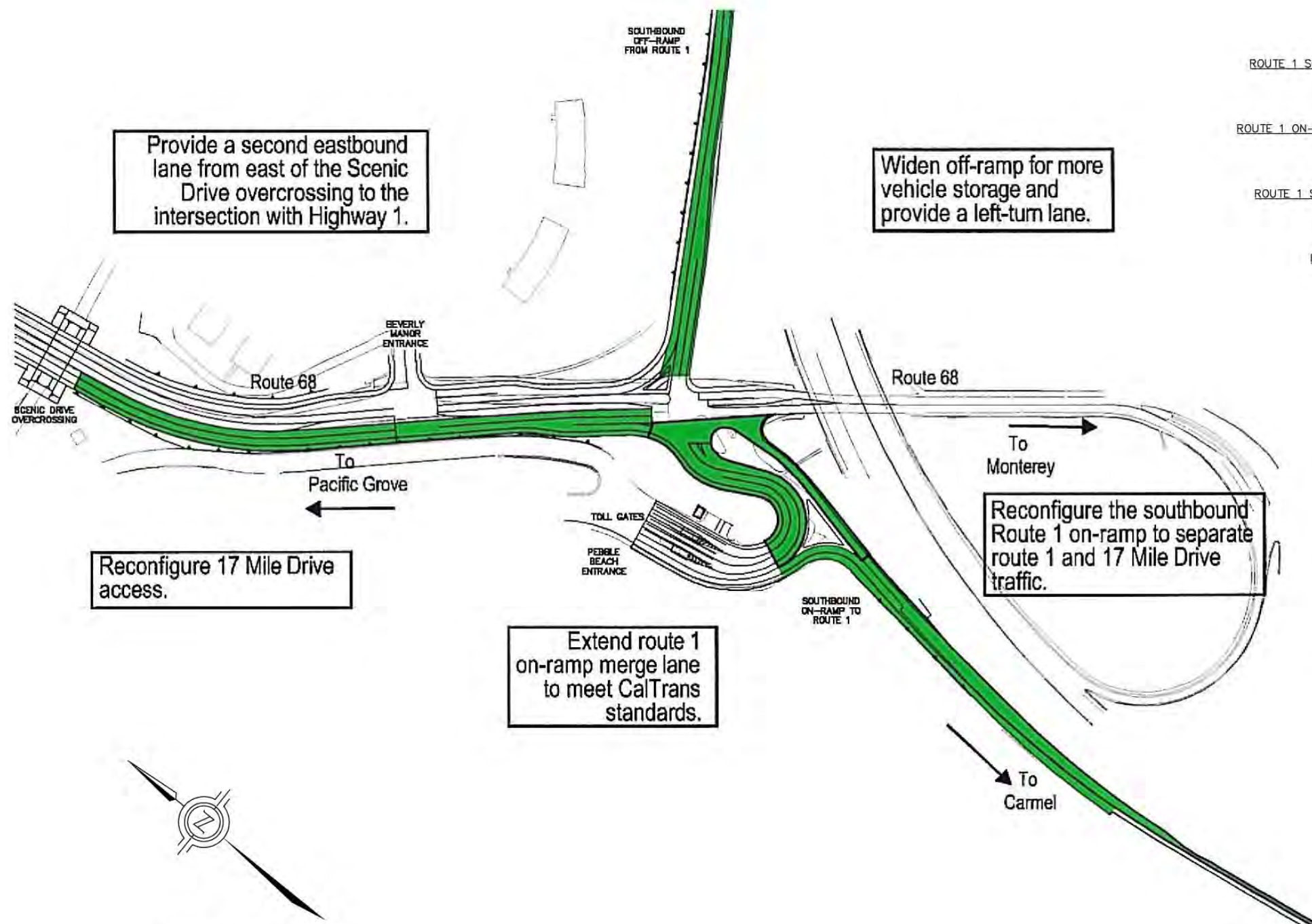
SR 1/SR 68/17-Mile Drive



PROJECT SITE MAP

Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-28
Roadway Improvements



NOT TO SCALE

TREE REMOVAL

ROUTE 1 SOUTHBOUND OFF-RAMP	PINE TREES*	
	6"-12" DIAMETER =	0
	13"-23" DIAMETER =	0
	24" & GREATER DIAMETER =	0
ROUTE 1 ON-RAMP RETAINING WALL	PINE TREES*	
	6"-12" DIAMETER =	1
	13"-23" DIAMETER =	6
	24" & GREATER DIAMETER =	2
ROUTE 1 SOUTHBOUND ON-RAMP	PINE TREES*	
	6"-12" DIAMETER =	2
	13"-23" DIAMETER =	4
	24" & GREATER DIAMETER =	2
ROUTE 68 EAST BOUND	PINE TREES*	
	6"-12" DIAMETER =	22
	13" & GREATER =	13
	24" & GREATER DIAMETER =	1

* TREE REMOVAL BASED UPON FOREST MANAGEMENT PLAN FOR PHASE 1B INTERIM IMPROVEMENTS FOR ROUTE 68 WIDENING / IMPROVEMENT PROJECT, MONTEREY COUNTY, DECEMBER 2001.

EARTHWORK***

CUT = 621 CY
 FILL = 402 CY
 NET = 219 CY CUT**

** 10% SHRINKAGE / LOSS FACTOR APPLIED.

DEMOLITION

AC PAVEMENT / CONCRETE = 27,000 SQFT

AREA OF DEVELOPMENT WITHIN SLOPES 30% AND OVER***

36,150 SQFT

PROPOSED WALLS

RETAINING WALL = 630 LF, HEIGHT 8 FT

*** BASED UPON STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY 68 IN MONTEREY COUNTY, PEBBLE BEACH - PHASE 1B INTERIM IMPROVEMENT ROUTE 68/1 AND ENTRANCE MODIFICATION, DECEMBER 2005.

Graphics...00106.11 (8-11)





Source: Pebble Beach Company, May 2011. Used with permission.

Figure 2-29
SR 1/SR 68/17-Mile Drive Intersection Reconfiguration



NOTES:

TRAIL SYSTEM SHOWN IS REPRESENTATIVE OF THE EXISTING DEL MONTE FOREST TRAIL SYSTEM. THOSE PORTIONS OF THE SYSTEM OUTSIDE THE PROPOSED PRESERVATION AND DEVELOPMENT AREA ARE INCLUDED FOR ILLUSTRATIVE PURPOSES TO SHOW HOW THE PROPOSED ON-SITE TRAIL SEGMENTS TIE INTO THE WHOLE.

-  EXISTING TRAILS (31.5 MILES)
-  PROPOSED TRAILS ON EXISTING DIRT ROADS OR FIRE ROADS (+2.1 MILES)
-  PROPOSED TRAILS (+1.8 MILES)
-  RELOCATED TRAILS (-1.5 MILES)

EXISTING HIKING & EQUESTRIAN TRAIL MILEAGE = 31.5

PROPOSED HIKING & EQUESTRIAN TRAIL MILEAGE = 33.9

 DEDICATED BICYCLE LANE (9.4 MILES TOTAL, 4.7 MILES EACH WAY)

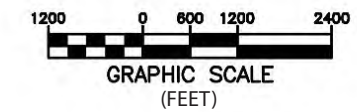
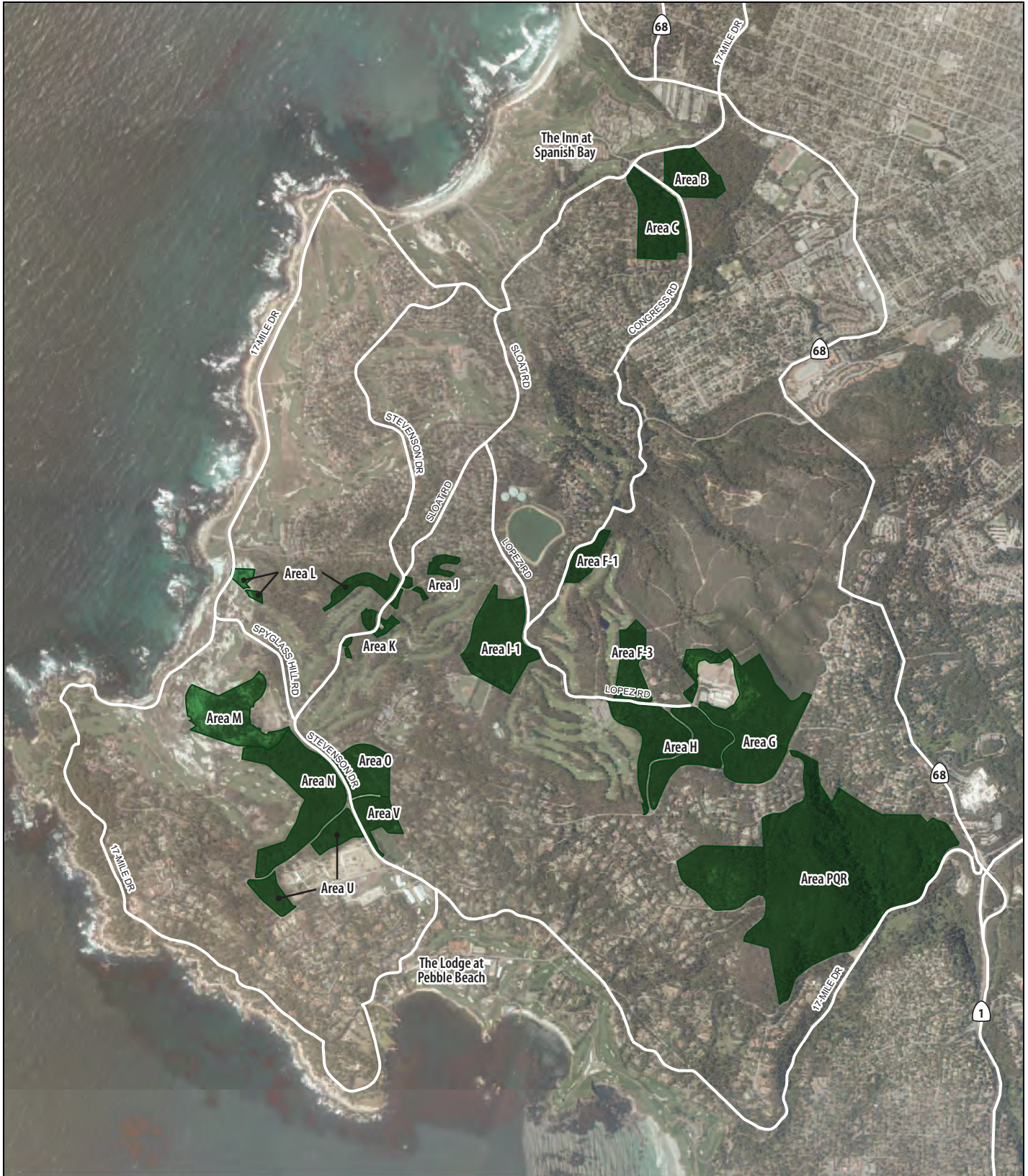


Figure 2-30
Trail Improvements



Pebble Beach Company Project

Legend
 Preservation Area

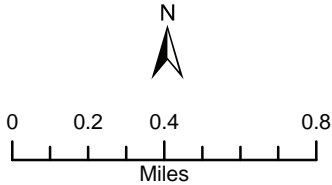
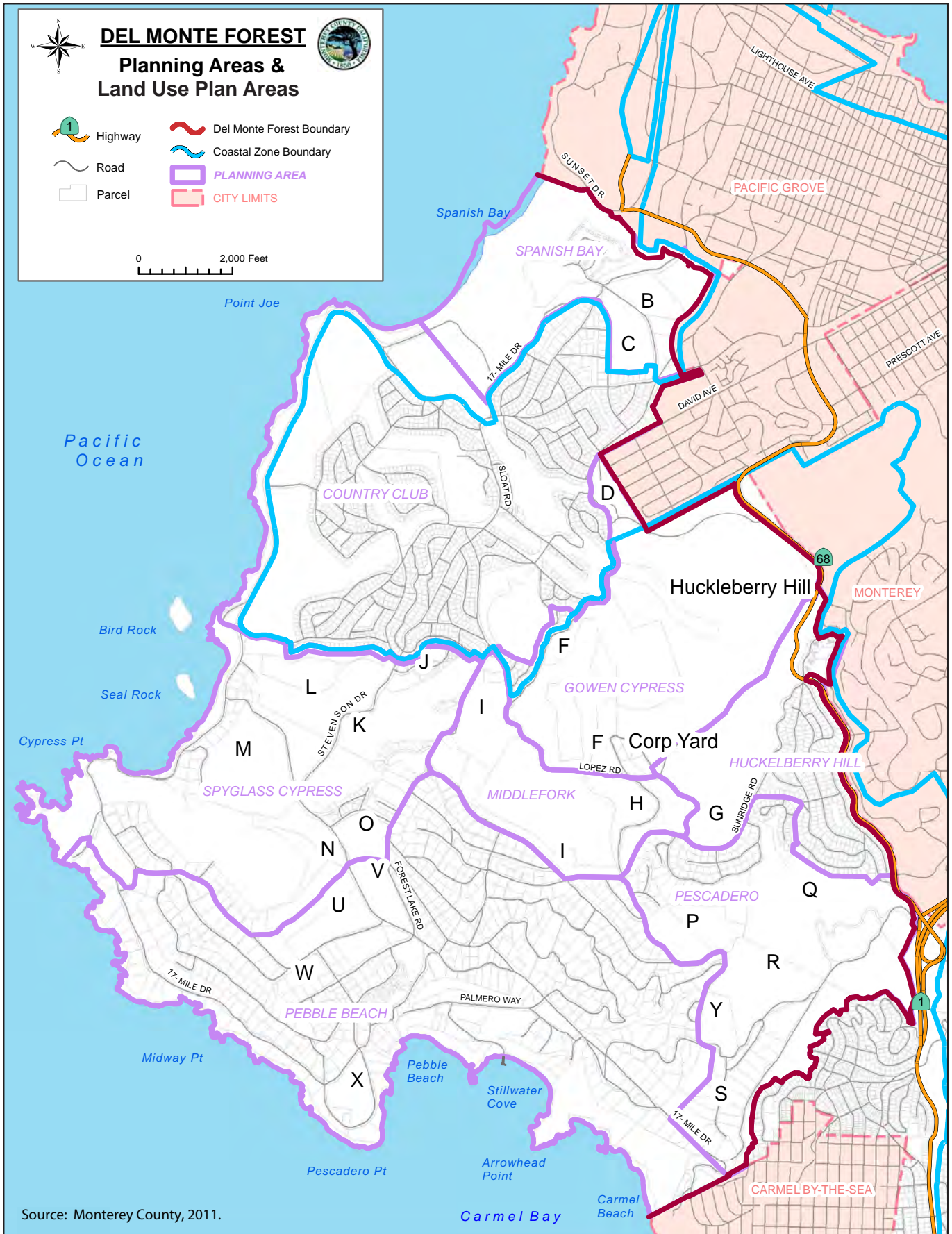


Figure 2-31
Preservation Areas

Graphics ... 0010611 (10-11)



Source: Monterey County, 2011.

Figure 2-32
Del Monte Forest Planning Areas

Chapter 3
**Environmental Setting,
Impacts, and Mitigation Measures**

1 Chapter 3
2 **Environmental Setting,**
3 **Impacts, and Mitigation Measures**

4 This chapter discusses the various resources affected by the proposed project. Each resource is
5 addressed in the following sections.

- 6 • 3.1, Aesthetics.
- 7 • 3.2, Air Quality.
- 8 • 3.3, Biological Resources.
- 9 • 3.4, Climate Change.
- 10 • 3.5, Cultural Resources.
- 11 • 3.6, Geology, Seismicity, and Soils.
- 12 • 3.7, Hydrology and Water Quality.
- 13 • 3.8, Land Use and Recreation.
- 14 • 3.9, Noise and Vibration.
- 15 • 3.10, Public Services and Utilities.
- 16 • 3.11, Transportation and Circulation.
- 17 • 3.12, Water Supply and Demand.

18 The proposed project includes the Pebble Beach Company Project application for development and
19 preservation of several sites within Monterey County’s unincorporated Del Monte Forest area, and
20 an amendment of the Monterey County LCP.

21 **Analysis of Proposed Project**

22 In each resource section in this chapter, the Regulatory Setting section describes applicable plans,
23 policies, and regulations, and the Environmental Setting describes the existing conditions for the
24 resources potentially affected by the proposed project in the study area. The study area will vary
25 depending on the resource and is sometimes larger than the project area (e.g., the study area for air
26 quality and transportation extends beyond the project area boundaries).

27 Also in each resource section, the Impacts Analysis section addresses the methodology used for the
28 analysis, the criteria used to determine the significance of potential impacts, a corresponding
29 discussion of project impacts and mitigation measures, and cumulative impacts and mitigation
30 measures. The methodology for analyzing cumulative impacts has been included below, rather than
31 in each resource section. For each potential impact, a significance determination is made (less than
32 significant, less than significant with mitigation, or significant and unavoidable). If required to
33 reduce a significant impact, feasible mitigation measures are identified.

1 As described in Chapter 2, Project Description, the Pebble Beach Company Project includes several
2 project elements that occur at different sites categorized by location within the project area (Figure
3 2-2 and Table 2-1). Each impact discussion addresses project elements individually or collectively as
4 appropriate for specific resources and impacts. Each resource section also summarizes project
5 impacts in a table organized according to project element.

6 Analysis of Cumulative Impacts

7 The term *cumulative impacts* refers to “two or more individual effects which, when considered
8 together, are considerable or which compound or increase other environmental impacts” (CEQA
9 Guidelines Section 15355).

10 A cumulative impact can result from the combination of two or more individually significant
11 impacts, or the combination of two or more impacts that are individually less than significant but
12 constitute a significant change in the environment when considered together. To analyze the
13 proposed project’s contribution to cumulative impacts, CEQA requires the lead agency to identify
14 reasonably foreseeable projects in the vicinity of the proposed project, summarize their effects,
15 identify the contribution of the proposed project to cumulative impacts occurring in the project
16 region, and recommend mitigation measures for any cumulative impacts evaluated as significant
17 (CEQA Guidelines Section 15130[b]).

18 Cumulative impacts were determined in the following manner:

- 19 1. Determine whether there is a significant cumulative impact under future conditions with the
20 proposed project for an issue area; if yes, then
- 21 2. Determine if the proposed project would or would not make a considerable contribution to the
22 identified significant cumulative impact.

23 To provide an adequate discussion of cumulative impacts, the context of the analysis is defined. Each
24 resource topic was assigned a geographic impact zone (CEQA Guidelines Section 15130(b)(3)).
25 These zones represent the probable area in which project effects could be observed or in some way
26 interact with other cumulative development. The zones are directly related to the nature of the
27 potential impact. For example, the zone for geology, soils, and seismicity is Del Monte Forest.
28 Geology and soils impacts are localized in that they would occur within a specific geographical area
29 (i.e., within the forest).

30 Two geographic impact zones were identified (Table 3-1):

- 31 ● **Del Monte Forest.** This zone is limited to Del Monte Forest.
- 32 ● **Monterey Peninsula and Beyond.** This zone encompasses the Monterey Peninsula and extends
33 beyond Monterey County.

34 There are two approaches to identifying related past, present, and reasonably foreseeable projects
35 and their impacts. The list approach identifies individual projects in order to identify potential
36 cumulative impacts. The projection approach uses a summary of projections in an adopted general
37 plan or related planning document to identify potential cumulative impacts. In this document we
38 used the projection approach overall, but also included one project, the Monterey Presidio Real
39 Property Master Plan (RPMP) project, in the analysis of cumulative traffic conditions.

1 As described in Section 3.11, Transportation and Circulation, the projection approach was also used
 2 based on the adopted general plans (including the 2010 General Plan Update for inland areas and
 3 the 1982 General Plan for the coastal zone). The 2010 General Plan Update provided daily traffic
 4 forecasts for 2008 and 2030 on several roads in the study area, and annualized growth factors were
 5 derived and applied to the existing (2011) traffic forecasts to obtain 2030 forecasts. In addition, air
 6 quality and noise analysis are based on the cumulative traffic impacts. As noted above, the RPMP
 7 project was included in the analysis of traffic, and thus in the analysis of traffic-related air quality
 8 and noise impacts as well.

9 **Table 3-1. Cumulative Analysis Approach and Applicable Impact Zone by Resource Area**

Resource Topic	Cumulative Analysis Approach	Geographic Impact Zone	
		Del Monte Forest	Monterey Peninsula and Beyond
Aesthetics	Projection	X	
Air Quality	Projection ^a		X
Biological Resources	Projection		X
Climate Change	Projection		X
Cultural Resources	Projection	X	
Geology, Seismicity, Soils	Projection	X	
Hydrology and Water Quality	Projection	X	X
Land Use and Recreation	Projection	X	
Noise and Vibration	Projection ^a	X ^b	
Public Services and Utilities	Projection	X	
Transportation and Circulation	Projection ^a		X
Water Supply and Demand	Projection		X

Note:

^a Traffic analysis was used overall, but projection also included conditions relative to the Monterey Presidio Real Property Master Plan project.

^b Includes Del Monte Forest, as well as SR 68.

10

11 Projections

12 General Plan Projections outside Del Monte Forest

13 The County General Plan was updated in October 2010, but only for the inland areas, which does not
 14 include most of Del Monte Forest. Except for a small portion of the SR 1/SR 68/17-Mile Drive
 15 intersection, none of the proposed project occurs in the Inland Area, and thus the updated 2010
 16 General Plan does not directly apply to the proposed project area. However, the 2010 General Plan
 17 does apply to roadways outside the coastal zone. Thus, where traffic affects the inland areas, the
 18 2010 General Plan policies apply.

19 The prior General Plan (sometimes referred to as the 1982 General Plan) still applies within the
 20 Coastal Zone. Per the 2010 General Plan, “In the interim period between adoption of the General
 21 Plan and update of the LCP Land Use Plans, the certified Land Use Plans will continue to govern in
 22 their respective areas within the coastal zone.”

1 **Del Monte Forest Land Use Plan and Proposed LCP Amendments**

2 The LUP, together with the zoning ordinance and CIP, serve as the LCP, which is the regional
3 planning document for Del Monte Forest (Monterey County 1984, 2000). The existing LUP was used
4 as the baseline to identify potential buildout for the document within Del Monte Forest. However,
5 the potential buildout with the proposed project and the LCP Amendment would be quite different
6 than that technically allowed by the existing LUP, in that the potential residential buildout is much
7 lower than allowable (in concept) and the potential visitor-serving buildout would be somewhat
8 higher (see Proposed Amendments in Chapter 2, Project Description).

9 The potential buildout of Del Monte Forest, without the project/LCP amendment, would consist of
10 the potential development of existing lots and potential future subdivision where allowed by the
11 existing LUP. According to the County (and the Architectural Review Board September 2011
12 Construction Activity Summary), as of September 2011, 2,996 lots exist in Del Monte Forest, 96 of
13 which were vacant. Of the existing vacant lots, the largest numbers are located in the Pebble Beach
14 subdivision (26 vacant lots) north and northeast of the Lodge. The next largest group are within the
15 MPCC #1 subdivision (24 vacant lots) between Spanish Bay and Forest Lake, DMF#2 (11 vacant
16 lots), and the Douglas Tract (4 vacant lots), south of Robert Louis Stevenson School. The rest of the
17 vacant lots are scattered across the other Del Monte Forest subdivisions. In addition, the existing
18 LUP allows development of up to 934 additional residential dwelling units in subdivisions. There are
19 190 existing visitor-serving units at The Lodge at Pebble Beach (including Casa Palmero) and 269
20 units at The Inn at Spanish Bay. The LUP does not allow for additional visitor-serving uses at these
21 locations. Thus, the existing LUP building projections (without project) are 96 dwelling units on
22 existing vacant lots, 934 additional residential dwelling units in subdivisions, and no additional
23 visitor-serving units.¹

24 The proposed project would result in a far lower amount of residential development than
25 technically allowable by the LUP. With the proposed project, additional development would include
26 the existing 96 vacant lots and the proposed project's 90-100 lots² in Areas F-2 (16), I-2 (16), J (5), K
27 (8), L (10), U (7), V (14), Collins Residence (4)³, the Corporation Yard (10) and Area M Spyglass
28 Hill(10). Thus, the additional development with the proposed project under buildout could be up to
29 100 residential dwelling units. The analysis of impacts of vacant lot development was generic in
30 nature as these lots are scattered in different somewhat isolated locations. The proposed project's
31 location of the 90 to 100 potential future dwelling units was used specifically in the analysis of the
32 proposed project.

33 Comparing buildout with and without the proposed project under the existing LCP, the proposed
34 project buildout would be up to 835 fewer residential dwelling units and up to 195 visitor-serving
35 units more than buildout without the proposed project (Table 3-2). The cumulative analysis focuses
36 on the impacts of the additional potential buildout under the LCP combined with the impacts of the
37 proposed project.

38 The proposed project includes the majority of developable land in Del Monte Forest.

¹ Includes vacant PBC lots; based on existing LCP zoning; full buildout is likely not possible due to environmentally sensitive habitat areas or other considerations.

² The proposed project has two options for Area M Spyglass Hill. Under Option 1, there would be a new resort hotel and no residential lots. Under Option 2, there would be 10 residential lots and no resort hotel. Thus, there would be 90 potential residential dwelling units under Option 1 and 100 units under Option 2.

³ Includes 2 existing lots and residences that would be subdivided to include 4 lots and residences.

1 **Table 3-2. Cumulative Projections in Del Monte Forest, With and Without the Proposed Project**

Component	Existing	Existing LCP/ No Project		Proposed Project/LCP Amendment Change With Project			
	Existing DU/VSU	Potential DU/VSU Over Existing	Buildout	Project Residential Lots	Potential DU/VSC Over Existing	Buildout	Relative to Existing LCP
Existing Developed Lots	2,900	-	2,900	-	-	2,900	0
Undeveloped (Vacant) Existing Lots ^a	-	96	96	-	96	96	0
Proposed Project Lots	-	-	-	90 to 100 ^b	90 to 100	90 to 100	90 to 100
Additional Lots Allowable	-	934 ^c	934 ^c	-	9 ^d	9 ^d	-925
<i>Total Residential Lots</i>	<i>2,900</i>	<i>1,030</i>	<i>3,930</i>	<i>90 to 100^b</i>	<i>195 to 205</i>	<i>3,095 to 3,105</i>	<i>-825 to -835</i>
<i>Total Visitor- Serving Units</i>	<i>459</i>	<i>-</i>	<i>459</i>	<i>-</i>	<i>95 to 195</i>	<i>554 to 654</i>	<i>95 to 195</i>

Notes:

DU = dwelling units.

VSC = visitor-serving unit.

^a Does not include vacant PBC lots.

^b Includes 2 existing residential lots at Collins Residence.

^c Includes vacant PBC lots, based on existing LCP zoning; full buildout may not be possible due to ESHA or other considerations.

^d New lots: Area X (8) based on County-issued certificates of compliance; Area Y—assumed limit to 1 lot based on presumption that presence of ESHA may prevent further subdivision.

2

3

Section 3.1
Aesthetics

Section 3.1 Aesthetics

1
2
3 Visual or aesthetic resources are generally defined as the natural and built features of the landscape
4 that can be seen. The combination of landform, water, and vegetation patterns represent the natural
5 landscape features that define an area’s visual character, as opposed to built features such as
6 buildings, roads, utility structures, and ornamental plantings that reflect human or cultural
7 modifications to the landscape. These natural and built landscape features, or visual resources,
8 contribute to the public’s experience and appreciation of the environment. Depending on the extent
9 to which a project’s presence would alter the perceived visual character and quality of the
10 environment, visual or aesthetic impacts may occur.

11 This chapter presents a discussion of existing visual resources in the project area, an evaluation of
12 potential impacts of the proposed project on those resources, and mitigation for significant impacts
13 where feasible and appropriate. A summary of the impacts and mitigation measures for proposed
14 development is presented in Table 3.1-1. Existing visual conditions are illustrated by 28
15 photographs of representative public views of the development sites taken during a site visit on May
16 10, 2011. Computer-generated visual simulations illustrating “before” and “after” visual conditions
17 at the development sites, as seen from 16 representative public vantage points, are presented as
18 part of the analysis. Digitized photographs and computer modeling and rendering techniques were
19 used to prepare the visual simulations, which are based on project renderings presented in the
20 application plan set (Pebble Beach Company 2011). In addition to field observations of the project
21 area, the analysis of the proposed project’s potential visual impacts is based on review of Monterey
22 County Planning Department documents.

1 **Table 3.1-1. Summary of Project Impacts on Aesthetics**

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL - EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Scenic Vistas and Corridors										
AES-A1. The proposed project could have substantial adverse visual effects on public viewing in or near “visually prominent” areas identified in the LUP and along the 17-Mile Drive corridor.	○	⊙	○	⊙	⊙	⊙	-	○	-	⊙
AES-A2. The proposed roadway improvements could adversely affect views from 17-Mile Drive.	-	-	-	-	-	-	⊙	-	-	⊙
Mitigation Measures:	AES-A1. Incorporate design features and landscaping requirements in design plans and specifications for all development sites that involve construction of new structures or modification of existing structures. AES-A2. Prepare and implement a landscape plan for SR 1/SR 68/17-Mile Drive intersection reconfiguration and internal roadway improvements.									
B. Visual Character/Building Scale and Mass										
AES-B1. The proposed project could degrade the visual character and quality of some development sites (at The Inn at Spanish Bay, Area M Spyglass Hill, Residential Lot Subdivisions, and 17-Mile Drive intersections).	○	⊙	⊙	⊙	⊙	⊙	⊙	○	-	⊙
Mitigation Measures:	AES-A1, AES-A2. See above.									
C. Light and Glare										
AES-C1. The proposed project would introduce new sources of light and glare at development sites, which could affect nighttime views or activities in the area.	⊙ (Applies to proposed project as a whole)									
Mitigation Measures:	AES-C1. Incorporate light and glare reduction measures in design plans and specifications.									
Notes: ● = Significant unavoidable impact. ⊙ = Significant impact that can be reduced to less than significant. ○ = Less-than-significant impact. - = No impact or not applicable to the development site. PBL – The Lodge at Pebble Beach; SBI – The Inn at Spanish Bay; COL-EQC – Collins Field–Equestrian Center–Special Events Area; MH – Area M Spyglass Hill—New Resort Hotel (Option 1); MR – Area M Spyglass Hill—New Residential Lots (Option 2); RES SUB – Residential Lot Subdivisions; RD – Roadway Improvements; TRA – Trail Improvements; INF – Infrastructure Improvements; Cumulative – Proposed Project’s Contribution to Cumulative Impacts										

1 **Regulatory Setting**

2 Several state and local land use regulations are pertinent to visual quality in the project area and the
3 surrounding area: the Coastal Zone Management Act (CZMA), California Coastal Act, the Del Monte
4 Forest LUP, and Monterey County CIP.

5 **Coastal Zone Management Act**

6 The sections of the CZMA that are most relevant to visual resources in the project area are excerpted
7 below:

8 **Section 302** (16 United States Code [USC] 1451) (congressional findings) states:

9 (b) The coastal zone is rich in a variety of natural, commercial, recreational, ecological, industrial, and
10 esthetic resources of immediate and potential value to the present and future well-being of the
11 Nation. ...

12 (e) Important ecological, cultural, historic, and esthetic values in the coastal zone which are essential
13 to the well-being of all citizens are being irretrievably damaged or lost.

14 **Section 303** (16 USC 1452) (congressional declaration of policy) states:

15 It is the national policy (2) to encourage and assist the states to exercise effectively their
16 responsibilities in the coastal zone through the development and implementation of management
17 programs to achieve wise use of the land and water resources of the coastal zone, giving full
18 consideration to ecological, cultural, historic, and aesthetic values as well as the needs for compatible
19 economic development, which programs should at least provide for ... (F) assistance in the
20 redevelopment of deteriorating urban waterfronts and ports, and sensitive preservation and
21 restoration of historic, cultural, and aesthetic coastal features.

22 **Section 306** (16 USC 1455) (administrative grants) states:

23 Management programs for administrative grants submitted by coastal states are required to have ...

24 (2G) a definition of the term *beach* and a planning process for the protection of, and access to, public
25 beaches and other public coastal areas of environmental, recreational, historical, esthetic, ecological,
26 or cultural value. ...

27 (9) The management program includes procedures whereby specific areas may be designated for the
28 purpose of preserving or restoring them for their conservation, recreational, ecological, historical, or
29 esthetic values.

30 However, the CZMA applies only to the actions of a federal agency. At this point, the only potential
31 federal action may or may not be the issuance of permits concerning federal jurisdictional wetlands
32 and possibly concerning impacts on the federally listed California red-legged frog. Should the
33 proposed project require such permits, the CZMA would be a consideration for the federal
34 permitting agency.

35 **California Coastal Act**

36 The California Coastal Act includes the following sections that apply to visual resources in the
37 project area:

38 **Section 30251 – Scenic and Visual Qualities.** The scenic and visual qualities of coastal areas shall
39 be considered and protected as a resource of public importance. Permitted development shall be
40 sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the

1 alteration of natural land forms, to be visually compatible with the character of surrounding areas,
2 and, where feasible, to restore and enhance visual quality in visually degraded areas. New
3 development in highly scenic areas such as those designated in the California Coastline Preservation
4 and Recreation Plan prepared by the Department of Parks and Recreation and by local government
5 shall be subordinate to the character of its setting.

6 **Section 30253 – Minimization of Adverse Impacts.** New development shall do all of the following:
7 ... (e) Where appropriate, protect special communities and neighborhoods that, because of their
8 unique characteristics, are popular visitor destination points for recreational uses.

9 Monterey County's LCP implements the goals and policies of the California Coastal Act. The CCC
10 periodically reviews the coastal area and applicable LUPs for compliance with the act. The project
11 area is in Del Monte Forest and is governed by the Del Monte Forest LUP under the LCP.

12 **Monterey County Local Coastal Program**

13 **Del Monte Forest Land Use Plan**

14 The Del Monte Forest LUP strives to protect the Del Monte Forest area and 17-Mile Drive as scenic
15 resources that attract tourists and visitors (County of Monterey 1987). Under the LUP, new
16 development in the area must be designed and placed in a way that maintains the visual integrity of
17 the area, preserves visual resources, and is compatible with the protection of scenic resources. The
18 LUP Visual Resources Map (Figure 2C in the existing LUP; Figure 3 in the proposed LUP
19 Amendment) shows important visual resources. As described in Chapter 2, Project Description, the
20 LUP Amendment retains the emphasis on protection of the visual integrity and scenic vistas in Del
21 Monte Forest, although several technical changes are proposed in terms of specific policies.

22 For development in areas identified as visual resources, the LUP requires the following:

- 23 ● Scenic shoreline areas, corridors along SR 68 and 17-Mile Drive, and ridges identified on the LUP
24 Visual Resources Map shall be designated for outdoor recreation, low-density residential, or
25 open space land uses that are compatible with protection of scenic resources and shall be
26 required as scenic or conservation easements. This policy is proposed for deletion in the LUP
27 Amendment in favor of a site by site determination of scenic sensitivity for all new development
28 in Del Monte Forest, which is a more restrictive approach to managing scenic impacts by
29 expanding consideration of scenic resources beyond those mapped on the Visual Resources
30 Map.
- 31 ● Development within visually prominent settings, including those identified on LUP Figure 3,
32 shall be sited and designed to avoid blocking or having a significant adverse impact on
33 significant public views, including by situating lots, access roads, and/or buildings to maximize
34 the effectiveness of screening vegetation and related viewshed mitigation. Lots, access roads,
35 and/or buildings should also be sited to minimize tree removal and visually obtrusive grading.
36 (Existing LUP Policy 51 as proposed to be amended as Policy 48 for the LUP Amendment)
- 37 ● During the development review process, open space conservation and scenic easements shall be
38 required to the fullest extent possible for visually prominent areas. These shall be granted to the
39 Del Monte Forest Foundation. Except in the case of voluntary easements or properties not
40 subject to the permit process, these instruments shall be subject to approval by the County and
41 the CCC as to form and content, shall provide for enforcement, if need be, by the County or other
42 appropriate agency, and shall name the County as beneficiary in event the Foundation is unable
43 to adequately manage these easements for the intended purpose of scenic and visual resource

- 1 protection. (Existing LUP Policy 52 as proposed to be amended as Policy 49 for the LUP
2 Amendment)
- 3 • Utility lines shall be placed underground, typically within road access footprints, except where
4 1) such undergrounding would result in removal of native trees and 2) it can be shown that the
5 lines can be hidden from public view using different siting and design approaches (e.g., placing
6 lines behind existing vegetation or structures, etc.). (Existing LUP Policy 53 as proposed to be
7 amended as Policy 50 for the LUP Amendment)
 - 8 • Live tree removal shall be prohibited in undeveloped areas unless it is consistent with LUP
9 policies and any Forest Management Plan applicable to the area in question. (Existing LUP Policy
10 54 as proposed to be amended as Policy 51 for the LUP Amendment)
 - 11 • Development within the viewshed of visually prominent settings, including those identified on
12 LUP Figure 3, shall include adequate structural setbacks (generally a minimum of 50 feet) from
13 such settings and shall require siting and design of structures to minimize the need for tree
14 removal and alterations to natural landforms. New structures shall be sited and designed to
15 harmonize with the natural setting and not be visually intrusive. (Existing LUP Policy 55 as
16 proposed to be amended as Policy 52 for the LUP Amendment)
 - 17 • Design and siting of structures in public views of scenic areas should not detract from scenic
18 values of the forest, stream courses, ridgelines, or shoreline. Structures, including fences, shall
19 be subordinate to and blended into the environment, including by using appropriate materials
20 that will achieve that effect. Where necessary, modifications shall be required for siting,
21 structural design, shape, lighting, color, texture, building materials, access, and screening to
22 protect such public views. (Existing LUP Policy 56 as proposed to be amended as Policy 53 for
23 the LUP Amendment)
 - 24 • Structures in public view in scenic areas shall utilize non-invasive native vegetation and
25 topography to help provide visual compatibility and, when such structures cannot be sited
26 outside of public view, to provide screening from public viewing areas. In such instances, the
27 least visible portion of the property should be considered the most desirable building site
28 location, subject to consistency with other siting criteria (e.g., proximity to environmentally
29 sensitive habitat areas and safe access). (Existing LUP Policy 57 as proposed to be amended as
30 Policy 54 for the LUP Amendment)
 - 31 • Parking on the seaward side of 17-Mile Drive should be designed to minimize the visual impact
32 of parked vehicles in the viewshed and disturbance to the habitat. (Existing LUP Policy 58 as
33 proposed to be amended as Policy 55 for the LUP Amendment)
 - 34 • New development, including ancillary structures such as fences constructed between 17-Mile
35 Drive and the sea (Pacific Grove gate to Carmel gate portion), shall be designed and sited to
36 minimize obstructions of and degradation to views from the road to the sea. Examples of
37 methods to reduce obstruction include, but are not limited to the following: height limits, use of
38 see-through materials for fences, and limitations on landscape materials that would block views,
39 whether immediately or at maturity. (Existing LUP Policy 59 as proposed to be amended as
40 Policy 56 for the LUP Amendment)

41 **Monterey County Coastal Implementation Plan**

42 Section 20.147.070 of the Monterey County CIP includes development standards for the protection
43 of scenic and visual resources. These standards are intended to avoid incompatible development,

1 encourage improvements to existing facilities, ensure that new facilities complement natural scenic
2 assets, and enhance public enjoyment of the scenic landscape (County of Monterey 1988).

3 The plan includes a Public Viewshed Determination, an Underground Utilities Requirement, and
4 General Development Standards. The Public Viewshed Determination requires measures to be
5 implemented during the planning process to ensure that an accurate public viewshed determination
6 is made for a project from public viewing areas. The Underground Utilities Requirement calls for
7 underground utilities in all new development in the area, unless lines can be hidden in existing tree
8 cover. In the latter case, the applicant must apply for a waiver from the Monterey County Planning
9 Department.

10 The General Development Standards are as follows:

- 11 • Development within areas identified as visual resources on the LUP (Existing LUP Figure 2C;
12 proposed LUP Amendment Figure 3) shall be sited on the least visible part of the lot. Native
13 vegetation and topography shall serve as a screen for new structures.
- 14 • Appropriate construction and landscaping materials shall be used to achieve blending of all
15 structures with the environment.
- 16 • Ridgeline development (i.e., development on a hill that, when viewed from a public viewing area,
17 creates a silhouette against the sky) is prohibited. In cases where such development cannot be
18 avoided, a Coastal Development Permit must be applied for.
- 19 • Conservation, scenic, or negative easements granted to Monterey County shall be required to the
20 fullest extent possible for visually prominent areas.
- 21 • All structures located in scenic viewsheds shall be set back at least 50 feet. Tree removal and
22 alteration to natural landforms shall be minimized. New structures shall be visually unobtrusive
23 and shall harmonize with the natural setting.
- 24 • Parking on the seaward side of 17-Mile Drive shall be designed and sited so as not to affect
25 visual access from public viewing areas nor disturb existing natural habitat.
- 26 • The design and siting of new development, including accessory structures (e.g., fences)
27 constructed between 17-Mile Drive and the sea shall allow views from the road to the sea to
28 remain intact.
- 29 • Developments fronting on 17-Mile Drive shall be set back at least 100 feet from the centerline of
30 17-Mile Drive, unless the new development is found to be screened from view by existing
31 vegetation or terrain.
- 32 • New subdivisions shall be set back a minimum of 50 feet from the front lot line within scenic
33 easements.

34 Environmental Setting

35 Pebble Beach is situated in northern Monterey County along the southwestern edge of the Monterey
36 Peninsula (Figure 2-1). Bounded by the Pacific Ocean to the west, Monterey Bay to the north, and
37 Carmel Bay to the south, the Monterey Peninsula consists of approximately 10 square miles of
38 coastal lands and forested hills. The Monterey Peninsula is known for its coastal scenery and has
39 long been a tourist and visitor destination. To the south and east, coastal mountain peaks reaching

1 approximately 3,000 feet in elevation provide a backdrop for the Monterey Peninsula landscape. The
2 area's natural features include varied and rugged topography, coastal panoramas, and forested
3 slopes and ridgelines. Although much of the Peninsula is urbanized, its coastline is devoted
4 primarily to open space and recreational uses. Several scenic routes provide access to the northern
5 Monterey County area, including SR 1 and 17-Mile Drive, which generally follow the coastal terrace
6 (17-Mile Drive is a private road to which the public gains access by paying an entry fee). SR 68,
7 which links Monterey and Salinas, merges with both roadways.

8 Located between Carmel, Pacific Grove, and Monterey, Pebble Beach is situated along the 17-Mile
9 Drive in Del Monte Forest. In addition to golf resorts and associated commercial uses, there is
10 substantial low-density residential development in the surrounding Del Monte Forest. The existing
11 development pattern is found amid stands of pine, cypress, and oak trees, as well as near riparian
12 corridors, open meadows, and dunes. In wooded areas, understory vegetation and tree cover vary
13 from fairly sparse to quite dense. Undeveloped portions of Del Monte Forest include the SFB Morse
14 Botanical Preserve and the HHNHA situated at the southern end of the community.

15 **Visual Character of Development Sites**

16 As detailed in Chapter 2, the project area includes several development sites grouped together by
17 location (Figure 2-2 and Table 2-2). As indicated on this aerial view and as described in Section 3.3,
18 substantial portions of the project vicinity are forested. Because of the existing tree cover and
19 intervening topography, views of the development sites are screened from many places in the
20 surrounding vicinity, but portions are visible from some nearby and distant locations. This
21 discussion outlines the existing landscape character and general site visibility for the specific
22 development sites.

23 Figure 3.1-1 shows the development sites and visual resources in the project area¹. Several
24 development sites are in defined viewsheds. The development sites in the "Viewshed from Point
25 Lobos" (across Carmel Bay) include: The Lodge at Pebble Beach, portions of Residential Lot
26 Subdivisions I-2 and V, and portions of the Equestrian Center and Special Events Area. The
27 development sites in the "Viewshed from 17-Mile Drive and Vista Points" include: The Inn at Spanish
28 Bay, Residential Lot Subdivisions at the Corporation Yard and a portions at Area F-2.

29 This chapter refers to 28 photographs that provide a general sense of the existing visual conditions.
30 Figures 3.1-2a through 3.1-2e are maps of the project vicinity that show the photo viewpoint and
31 simulation locations in relation to the development sites. Numbers on the maps correspond to the
32 photo numbers in Figures 3.1-3 through 3.1-9. The circled location numbers indicate locations for
33 which a simulation view has been prepared, shown in Figures 3.1-10 through 3.1-25 and discussed
34 under Impact Analysis. All figures are provided at the end of this chapter.

35 **The Lodge at Pebble Beach**

36 The Lodge at Pebble Beach is situated along 17-Mile and Cypress Drives, near the southern end of
37 Del Monte Forest. Existing land uses at the site include a lodge complex with a restaurant, a
38 commercial/retail area, a post office, two banks, offices, a tennis facility, and surface parking. Guest

¹ The visual resources are identified in both the current Del Monte Forest Land Use Plan (Figure 2C) and in the proposed land use plan amendment (Figure 3).

1 units are provided at The Lodge and at a number of free-standing buildings in The Lodge complex.
2 The complex adjoins the Pebble Beach Golf Links and low-density residential development.

3 Photos 1 through 6 (Figures 3.1-3a and 3.1-3b) were taken from The Lodge complex and show the
4 architectural and landscape character of The Lodge at Pebble Beach. Photo 1 shows glimpses of
5 Carmel Bay and distant mountains as viewed from the meeting facility and golf course. There are
6 distant views of Point Lobos, more than 3 miles to the south, from the complex. As demonstrated by
7 Photo 1, when seen from this distance, general landscape vegetation, development patterns, and
8 topographic features are visible. Specific landscape details are not discernible from this distance,
9 however, and this lack of detail would also be characteristic of views from Point Lobos looking
10 toward the complex. As illustrated by Photos 2 through 6, the complex includes well-maintained
11 landscaped grounds with existing one- to three-story buildings that are generally light-colored
12 stucco with tile roofs.

13 **The Inn at Spanish Bay**

14 Situated in the northern portion of the Del Monte Forest Planning Area, The Inn at Spanish Bay
15 includes the existing resort building, tennis courts, a clubhouse, and the Spanish Bay Golf Course.
16 Monterey pine forest lies to the north, and low-density residential development is found to the south
17 and east. Spanish Bay Circle provides internal traffic circulation within the resort development and
18 provides access from 17-Mile Drive. This development site is composed largely of landscaped,
19 paved, and developed areas. Photos 7 through 10 are representative views of the Inn at Spanish Bay
20 (Figure 3.1-4).

21 Photo 7 is a view of The Inn from 17-Mile Drive, looking north. From here, the resort is largely
22 screened by trees and shrubs in the foreground. Photo 8 is a view from The Inn at Spanish Bay
23 parking lot, looking southwest toward the proposed resort additions. Photo 9 shows a similar view
24 from the golf course. Both views illustrate the dense existing vegetation present on the site that
25 limits views beyond The Inn complex. The same is true of the primarily undeveloped Monterey pine
26 forest surrounding the proposed employee parking lot (Photo 10).

27 **Collins Field–Equestrian Center–Special Events Area**

28 The Collins Field–Equestrian Center–Special Events Area is situated just north of The Lodge at
29 Pebble Beach, north of Ondulado Road, south of Drake Road, and west of Stevenson Drive. The area
30 is on flat terrain, about 0.5 mile east of the coastline at an elevation of approximately 170 to 270
31 feet. The Equestrian Center and Collins Field, a multipurpose recreational area, occupy the northern
32 portion of this site, and the adjacent land to the north is covered with Monterey pine forest. The
33 southeastern portion of the site includes a driving range, and low-density single-family residences
34 found adjacent to the site, to the south. Portola Road, Drake Road, and Stevenson Drive currently
35 traverse the site. Photos 11 through 14 are representative views of the development site (Figure 3.1-
36 5).

37 Photos 11 and 12 are close-range views of the Equestrian Center development site and illustrate the
38 existing equestrian center's infrastructure, jump arena, and surrounding forested area. Photos 13
39 and 14 are views from Portola Road and Stevenson Drive, looking south toward the driving range.
40 These photos illustrate the site's flat terrain, roadside split rail fence, open field, surrounding
41 residential land uses, and wooded character.

1 **Area M Spyglass Hill**

2 Area M Spyglass Hill lies west of Spyglass Hill Road, which intersects with Stevenson Drive near the
3 southern site boundary. This undeveloped site is a former sand quarry that has been partially
4 revegetated through past restoration efforts. As shown in Photo 15, the site has sparse vegetation,
5 but is surrounded by trees (Figure 3.1-6). It is currently being used for construction staging (Photo
6 16), and low-density residential development is located nearby, to the east. A proposed preservation
7 area is located north of the site in vegetated dune habitat. There are views of the ocean from the site,
8 over the golf course and 17-Mile Drive (Photo 17).

9 **Residential Subdivisions**

10 As described in Chapter 2, Project Description nine areas are proposed for residential development.
11 Figures 3.1-7 through 3.1-9 (Photos 18 through 28) show character photos of the residential
12 subdivisions, as described below:

- 13 • **Area F-2.** Area F-2 is a wooded area visible from Lopez Road (Figure 3.1-7, Photo 18) and the
14 Poppy Hills Golf Course (Figure 3.1-7, Photo 19). Photo 18, a view from Lopez Road, shows the
15 wooded character of roadside views in this area. Photo 19, a view from the 10th tee of Poppy
16 Hills, shows a similar view.
- 17 • **Area I-2.** Area I-2 is a wooded area visible from the Poppy Hills Golf Course and from Viscaino
18 and Ronda Roads. Photo 20 (Figure 3.1-7), a view looking toward the area along Viscaino Road,
19 and Photo 21 (Figure 3.1-7), a view looking toward the area along Ronda Road, show the
20 wooded character along the roadside.
- 21 • **Area J.** Area J is a wooded area on both sides of Spyglass Woods Drive (Figure 3.1-8, Photos 22
22 and 23), located east of Stevenson Drive. The three lots on the south side are on the 13th hole of
23 and visible from the Spyglass Hill Golf Course and Spyglass Woods Drive. The two lots on the
24 north side are only visible from Spyglass Woods Drive. Existing low-density residential
25 development is located along Spyglass Woods Drive. Forested lands surrounding the
26 development site are proposed for preservation.
- 27 • **Area K.** Area K consists of wooded lots on both sides of Stevenson Drive, adjacent to the
28 Spyglass Hill Golf Course and visible from the golf course and Stevenson Drive. Figure 3.1-8,
29 Photo 24 shows the dense Monterey pine forest located on both sides of Stevenson Drive.
30 Forested lands surrounding the development site are proposed for preservation.
- 31 • **Area L.** Area L consists of wooded lots on the south side of Dune Road, adjacent to the Spyglass
32 Hill Golf Course and visible from the golf course and Stevenson Drive. Figure 3.1-8, Photo 25
33 shows the dense Monterey pine forest located along Dune Road, which is not open to vehicular
34 traffic past the gate near the Gingerbread House. Forested lands to the north of the development
35 site are already preserved as part of the Indian Village area, and the northern half of Area L is
36 proposed for preservation as part of the project.
- 37 • **Area U.** Photo 26 (Figure 3.1-9), a view from Drake Road, shows the degraded vegetated
38 character of the area along the roadway and partially visible elements located on the cleared
39 lands beyond the roadside vegetation that are storage areas for the existing equestrian center.
40 Forested lands surrounding the development site are proposed for preservation.

- 1 • **Area V.** Photo 27 (Figure 3.1-9), shows a highly manicured driving range between Stevenson
2 Drive and Forest Lake Road that is surrounded by a thin band of Monterey pine forest. Low-
3 density residential development is located east of Forest Lake Road.
- 4 • **Collins Residence.** The Collins Residence is located east of the Alva Lane/Portola Road
5 intersection and is an unoccupied former private residence. The site backs Collins Field on the
6 south side of Portola Road, and vegetation is planted around its borders, along the roadways.
- 7 • **Corporation Yard.** The existing corporation yard is developed, with offices, a vehicle
8 maintenance building, indoor and outdoor storage, and timber harvesting activities. The site is
9 surrounded by the HHNHA. Photo 28 is a view looking east toward the site (Figure 3.1-9) from
10 the trailhead that starts at the western edge of the site. This view is from forested lands
11 surrounding the proposed development site that are proposed for preservation. It shows the
12 disturbed nature of the site and the surrounding Monterey pine forest.

13 **Roadway Improvements**

14 At the SR 1/SR 68/17-Mile Drive intersection are natural areas, north of SR 68, composed of mature
15 planted pine trees and various forms of ruderal vegetation in the understory. The south side of SR
16 68 is primarily developed, with Sunridge Road directly adjacent to the eastern portion of the SR 68
17 right-of-way, with some forested areas as SR 68 moves west to the Beverly Manor entrance.

18 The main topographic features in this area are a gradual incline as SR 68 travels west to the Beverly
19 Manor entrance, steep upslopes adjacent to the north side of this portion of SR 68, and a steep
20 downslope on the south side of SR 68. This area is devoid of prominent rocky outcroppings and
21 similar geologic features.

22 One plant community is present in this area—closed-cone coniferous forest, specifically Monterey
23 pine forest (which represents most of the planted vegetation). The remainder of the vegetation in
24 the area is ruderal. Horticultural plantings are present in various portions of the area. In general,
25 vegetation adjacent to this area is disturbed where development has occurred.

26 The overall visual character of this area is defined by the Monterey pine forest that dominates the
27 visual experience for those traveling in this area.

28 The proposed roadway improvements include grading, alignment, and intersection improvements
29 to improve roadway safety. These changes would occur at the Lopez Road/Congress Road, Lopez
30 Road/Sunridge Road, Congress Road/17-Mile Drive (The Inn at Spanish Bay entrance), and Portola
31 Road/Stevenson Drive intersections. These are primarily two-lane roadways with Monterey pine
32 forest located on either side.

33 **Impacts Analysis**

34 **Methodology**

35 **Approach**

36 To document the visual changes that would be caused by the proposed project, computer-generated
37 visual simulations were produced using digitized photographs and computer modeling and

1 rendering techniques. The simulations illustrate specific development sites from 16 locations.
 2 Simulation vantage points were selected to provide representative public views from which specific
 3 project elements would be most visible, particularly from places along 17-Mile Drive, and are shown
 4 in Figures 3.1-11 through 3.1-25.

5 The visual simulations, presented as “before” and “after” images, provide clear images of the
 6 location, scale, and visual appearance of the proposed project. Table 3.1-2 summarizes the
 7 simulation viewing locations and the respective development sites that are illustrated. The
 8 simulations are the result of an objective analytical and computer modeling process and are
 9 accurate within the constraints of the available site and project data. All figures for this analysis are
 10 presented at the end of this chapter.

11 The visual impact assessment was based on evaluation of the changes to the existing visual
 12 resources that would result from construction and operation of the proposed project. These changes
 13 were assessed, in part, by evaluating the “after” views provided by the visual simulations and
 14 comparing them to the existing visual environment. The following factors were considered in
 15 determining the extent and implications of the visual changes:

- 16 • The specific changes in the affected visual environment’s composition, its character, and any
 17 specially valued qualities.
- 18 • The affected visual environment’s context.
- 19 • The extent to which the affected environment contains places or features that have been
 20 designated in plans and policies for protection or special consideration.
- 21 • The relative numbers of viewers, their activities, and the extent to which these activities are
 22 related to the aesthetic qualities affected by the expected changes.

23 Impacts on landscapes visible in the foreground from 17-Mile Drive, as delineated in the LUP, were
 24 given particular consideration.

25 **Table 3.1-2. Summary of Project Visual Simulation Viewpoints**

Figure	Simulation	Development Site Location	Viewing Location
3.1-11 to 3.1-14	1–4	The Lodge at Pebble Beach	17-Mile Drive south of Portola Road
3.1-15 to 3.1-18	5–8	The Inn at Spanish Bay	17-Mile Drive southwest of Majella Road
3.1-19	9	The Inn at Spanish Bay	17-Mile Drive at Congress Road
3.1-20	10	The Inn at Spanish Bay	Congress Road southeast of 17-Mile Drive
3.1-21	11	The Inn at Spanish Bay	17-Mile Drive northeast of Congress Road
3.1-22 to 3.1-26	12–16	Area M Spyglass Hill	17-Mile Drive south of Spyglass Hill Road

26

27 **Criteria for Determining Significance**

28 In accordance with CEQA, the State CEQA Guidelines, Monterey County plans and policies, and
 29 agency and professional standards, a project impact would be considered significant if the proposed
 30 project would result in:

1 **A. Scenic Vistas and Corridors**

- 2 • Substantial adverse effects on a scenic vista, public viewing area, or view corridor, including
3 obstructing or obscuring any of the following:
 - 4 ○ Public views (including views of the ocean from 17-Mile Drive).
 - 5 ○ “Visually prominent” areas (as identified in the LUP, see Figure 3.1-1).
 - 6 ○ Public views to and along the shoreline.
 - 7 ○ Distant views from publicly accessible shoreline areas such as Point Lobos.
 - 8 ○ Removal of or damage to scenic resources, including trees, rock outcrops, or historic
9 buildings along a scenic highway, a county-designated scenic roadway, or the SR 68 and 17-
10 Mile Drive roadway corridors.

11 **B. Visual Character/Building Scale and Mass**

- 12 • Substantial degradation of the existing visual character, or quality, of the site or surrounding
13 area, new ridgeline development, or incompatibility with the development scale and style of the
14 surrounding area.

15 **C. Light and Glare**

- 16 • Creation of a new source of substantial light or glare that would affect daytime or nighttime
17 views or activities in the area, or pose a nuisance, including ambient nighttime illumination
18 levels that would be increased beyond the property line, or use of highly reflective building
19 materials.

20 **Project Impacts and Mitigation Measures**

21 **A. Scenic Vistas and Corridors**

22 Views of the project elements would not be available to the public from many places in the project
23 vicinity because existing intervening vegetation or topography would provide screening. To varying
24 degrees, however, portions of the proposed project would be visible from some public views,
25 including along 17-Mile Drive.

26 Planned construction activities would not destroy or remove any major rock outcroppings or
27 historical structures. However, substantial tree removal would occur in areas that are along, or
28 visible from, 17-Mile Drive within Del Monte Forest.

29 This discussion focuses on designated scenic vistas and corridors. Impacts related to site-specific
30 scale and aesthetic character are discussed separately under Impact AES-B1.

1 **Impact AES-A1: The proposed project could have substantial adverse visual effects on public**
 2 **viewing in or near “visually prominent” areas identified in the LUP and along the 17-Mile**
 3 **Drive corridor. (Less than significant with mitigation)**

4 Figure 3.1-1 in this EIR shows the proposed project’s general relationship to the following sensitive
 5 visual resource areas identified by the County².

- 6 ● **Ridgeline and visible area from Point Lobos (generally the southern portions of Del**
 7 **Monte Forest).** Development sites that are within the ridgeline and visible area from Point
 8 Lobos include those at The Lodge at Pebble Beach, and portions of the Equestrian–Center–
 9 Special Events Area, and Residential Lot Subdivisions at Areas I-2 and V.
- 10 ● **17-Mile Drive vista points and designated coastal access locations.** None of the
 11 development sites are located at designated 17-Mile Drive vista points or designated coastal
 12 access locations.
- 13 ● **View area from 17-Mile Drive and vista points.** Development sites that lie partially within the
 14 view area from 17-Mile Drive and vista points include those at The Inn at Spanish Bay and
 15 Residential Lot Subdivisions at the Corporation Yard and Area F-2.
- 16 ● **Scenic buffer zone for new development along 17-Mile Drive (starting at Sunridge**
 17 **Road/Lopez Road and running along Lopez Road to Congress Road).** Development sites
 18 along the designated “scenic buffer zone” for new development along 17-Mile Drive include
 19 Residential Lot Subdivision at Area F-2.

20 Site-specific aesthetic impacts on designated scenic vistas and corridors are described below.
 21 Impacts related to roadway improvements, including the SR 1/SR 68/17-Mile Drive intersection
 22 improvements and the four internal intersection improvements, are discussed separately under
 23 Impact AES-A2.

24 **The Lodge at Pebble Beach**

25 Existing development at The Lodge at Pebble Beach is in the sensitive area visible from Point Lobos
 26 (Figure 3.1-1). Figures 3.1-11 through 3.1-14 show “before” and “after” visual conditions for
 27 proposed development at The Lodge at Pebble Beach.

28 For Fairway One Reconstruction, Figure 3.1-11, Simulation 1, and Figure 3.1-12, Simulation 2, show
 29 south-facing “before” and “after” views of the Fairway One complex from 17-Mile Drive. After the
 30 existing building and 66 trees are removed, this complex would introduce new two-story buildings
 31 and landscaping between the buildings and street front. While both of these simulations depict that
 32 the existing vegetation along 17-Mile Drive would remain, much of this vegetation would be
 33 removed during construction and new landscaping would be installed. Trees would be contract-
 34 grown in 24-inch containers, would be approximately 10 feet tall upon planting, and would grow
 35 approximately 10 to 12 inches per year. Based on the plans submitted, the elevation along 17-Mile
 36 Drive in the upper location is at 118.0 feet. The elevation of the second-story roofline of the guest
 37 building shown in the simulations is 131.25 feet, or 13.25 feet above the elevation of 17-Mile Drive.
 38 Therefore, the 10-foot-tall tree plantings would screen 10 feet of the new development upon
 39 planting. As the trees grow, they would reach the elevation of the roofline of the guest buildings, and
 40 eventually, most of the development would be screened and closely match conditions shown in the

² The base map for Figure 3.1-1 includes visually sensitive resources, based on Figure 2C in the current LUP and Figure 3 of the proposed LUP (both show the same resources).

1 simulations. Fairway One would also be visible from the golf course and would be visually more
2 developed than the existing site.

3 The proposed structures would have cement shake roofing, horizontal wood siding, and stone
4 veneer at their bases, creating a visual character inconsistent with the existing visual character of
5 surrounding buildings, which have terra cotta roof tiles and stucco wall finish. This inconsistency
6 would add to the degree of perceived visual change at the site because the new buildings would
7 visually differ from the existing buildings on the site and from the surrounding architectural styles.
8 While all of these changes would not affect views from Point Lobos, more than 3 miles away, they
9 would affect public views available from 17-Mile Drive.

10 For New Colton Building, the existing parking lot and 5 trees would be removed and replaced with a
11 new two-story building between the golf course and the existing Morse Building. However, although
12 the entrances for the Morse Building face the golf course, the building does not have windows with
13 views of the golf course that would be blocked with construction of the new Colton Building. In
14 addition, the complex is separated from the golf course by a wooden fence that further limits views.
15 The addition of the Colton Building would keep with the existing visual character at the
16 development site, would not greatly alter the existing views of the golf course, and would not greatly
17 affect existing viewer groups.

18 For Meeting Facility Expansion, Figure 3.1-13, Simulation 3, presents “before” and “after” views of
19 the meeting facility as seen from 17-Mile Drive. This expansion would appear somewhat more
20 prominent than the existing building and would contribute to a more urban character along the 17-
21 Mile Drive streetscape. The proposed improvements would generally represent an incremental
22 change that would not substantially alter the aesthetic character of The Lodge at Pebble Beach, as
23 seen from 17-Mile Drive. As shown in the simulation, the proposed expansion would not obstruct
24 the distant views of the bay and mountains.

25 For Parking and Circulation Reconstruction, Figure 3.1-14, Simulation 4, shows the existing view
26 and a visual simulation from 17-Mile Drive, looking west toward the proposed parking structure and
27 circulation improvements. The existing surface parking lots and vegetation (including 52 trees)
28 would be removed and replaced with a two-level parking structure (partially subterranean), new
29 landscaping, and pedestrian and roadway improvements. As indicated by the simulation,
30 landscaping proposed at the ground and upper parking levels would effectively screen portions of
31 the parking structure and would help to integrate its appearance into the surroundings (refer to the
32 right side of simulation image). The combination of new landscaping and pedestrian and roadway
33 improvements would generally enhance the scale and appearance of the streetscape by making it
34 more conducive to pedestrian activity at The Lodge at Pebble Beach. Thus, the proposed
35 modifications would represent an incremental change that could enhance the pedestrian
36 environment and create a somewhat more urban streetscape along this segment of 17-Mile Drive.

37 Overall, the proposed project would increase the intensity and density of development at The Lodge
38 at Pebble Beach, particularly the Fairway One Reconstruction and New Colton Building, causing the
39 Lodge complex to appear somewhat more urban in character. While the removal of mature
40 landscaping between the buildings at Fairway One and 17-Mile Drive and the addition of more
41 development with buildings of a different architectural style than the surrounding vernacular would
42 degrade the visual quality of sensitive public views from 17-Mile Drive, the proposed landscaping
43 would be planted at a size that would provide screening upon planting and would mature in a
44 relatively short time and appear similar to existing conditions. This would not substantially alter the

1 area's existing visual character and quality. The New Colton Building would generally appear similar
2 to the existing facilities in scale and visual character and would not substantially alter the area's
3 existing visual character and quality. It is anticipated that, when seen from distant locations, the
4 proposed changes to The Lodge would represent incremental changes in the context of the overall
5 vicinity. As seen from Point Lobos (Figure 3.1-10), more than 3 miles away, these changes would
6 have a less-than-significant impact on public view scenic vistas. While impacts are considered less
7 than significant, the proposed building designs are not in keeping with the surrounding architectural
8 vernacular, and implementing Mitigation Measure AES-A1 would ensure that the proposed Fairway
9 One and the Colton Building blend with the surrounding visual environment until landscaping fully
10 matures and that the buildings are consistent with the existing visual character.

11 **The Inn at Spanish Bay**

12 Figures 3.1-15 through 3.1-21 show "before" and "after" views of The Inn at Spanish Bay, as seen
13 from 17-Mile Drive.

14 For New Guest Cottages, although 322 existing trees would be removed, the new two-story buildings
15 would not be visible from 17-Mile Drive where dense roadside vegetation is present to screen views
16 (Figures 3.1-15 through 3.1-17, Simulation 5 through 7), and only portions of the buildings would be
17 visible from 17-Mile Drive where breaks in roadside vegetation exist (Figure 3.1-18, Simulation 8)
18 and near Congress Road (Figure 3.1-19, Simulation 9). Because they are located closer to the
19 roadway, the new buildings would appear slightly more prominent than the existing buildings. The
20 new structures would obstruct views of the existing guest buildings currently seen from this
21 segment of 17-Mile Drive. Like the existing guest structures, the new buildings would appear as a
22 backdrop to the existing golf course landscape seen in the foreground. Existing and proposed
23 landscaping and existing trees along the roadside would partially screen views of these buildings
24 from 17-Mile Drive. The new guest cottages would appear similar to the existing resort buildings in
25 scale, massing, and general aesthetic character. However, from 17-Mile Drive, the new buildings
26 would appear slightly more prominent than the existing buildings because they are located closer to
27 the roadway. The new guest cottages would not be visible from Asilomar State Beach because of
28 intervening infrastructure and vegetation.

29 For Conference Center Expansion, there would be visible changes to the existing building and façade
30 on its north and west sides. These modifications would be approximately the same height as the
31 existing structure and would blend with the existing architectural style. The conference center is not
32 visible from 17-Mile Drive. The north side of the conference center faces Asilomar State Beach,
33 approximately 0.5 mile away. However, modifications to the existing structure would not be
34 discernible from Asilomar State Beach because of their distance and similar appearance to the
35 existing facilities in terms of their scale and aesthetic character.

36 For New Employee Parking, Figures 3.1-20 and 3.1-21, Simulations 10 and 11, present "before" and
37 "after" views. Development of the parking lot would result in the removal of approximately 235
38 trees. However, the new parking lot would not be very apparent from Congress Road (Figure 3.1-20,
39 Simulation 10) or 17-mile Drive (Figure 3.1-21, Simulation 11) because the remaining roadside
40 vegetation would buffer views of the parking area from 17-Mile Drive. The primary visual feature
41 would be the entry drives into the parking lot, which would not greatly alter the existing dirt pull-
42 offs and gated entrances. The new parking lot would not be visible from Asilomar State Beach
43 because of intervening infrastructure and vegetation. Therefore, the new employee parking lot
44 would have a less-than-significant impact on scenic vistas and corridors.

1 Overall, the proposed project would increase the intensity and density of development at The Inn at
2 Spanish Bay. The existing viewshed in and immediately surrounding development sites is
3 characterized by development. No public views to the ocean or scenic features would be blocked,
4 and changes to views from Asilomar State Beach would not be discernible. The new guest cottages
5 would be visible from 17-Mile Drive. Although they would appear similar to the existing resort
6 buildings in scale, massing, and general aesthetic character, the new buildings would appear slightly
7 more prominent than the existing buildings at The Inn because they would be located closer to the
8 roadway. Because of the sensitivity of this scenic corridor, the increased prominence of the new
9 buildings is considered a potentially significant impact. Implementing Mitigation Measure AES-A1
10 would reduce this impact to a less-than-significant level.

11 **Collins Field–Equestrian Center–Special Events Area**

12 Most of Collins Field and the easternmost portion of the Special Events Area are within the ridgeline
13 and visible area from Point Lobos, approximately 3.5 miles away. The affected portions that are
14 within this delineated visible area are largely cleared, grassy lands with trees along the edges
15 (Figure 3.1-1). The Equestrian Center is not visible from Point Lobos.

16 For Pebble Beach Driving Range Relocation from Area V to Collins Field, the existing field and 132
17 trees would be removed and replaced with driving range facilities. For Equestrian Center
18 Reconstruction, 148 trees would be removed and replaced with the new equestrian facilities and
19 trees. For Special Events Staging Area Grading and Expansion, 270 trees would be removed and the
20 area regraded. It is anticipated that, when seen from Point Lobos, the changes in views of this area
21 would not be substantial enough to constitute a discernable change in the context of the overall
22 vicinity. Therefore, these changes would have a less-than-significant impact on scenic vistas and
23 corridors, including public views from Point Lobos. The remainder of the Special Events Area and
24 the proposed Equestrian Center changes do not fall within the boundaries of the ridgeline and
25 visible area from Point Lobos, but they are visible from public roadways and are discussed
26 separately under Impact AES-B1.

27 **Area M Spyglass Hill**

28 Area M Spyglass Hill is an undeveloped, partially revegetated former sand quarry, and the
29 northwestern slope of the site is visible from 17-Mile Drive. Two development options are under
30 consideration for Area M Spyglass Hill.

31 For New Resort Hotel (Option 1), 389 trees would be removed and 100 guest units in 11 different
32 single-story buildings, other hotel facilities and a spa would be constructed. Figures 3.1-22 through
33 3.1-26 show “before” and “after” views. As shown in Simulations 12 through 15 (Figures 3.1-22
34 through 3.1-25, respectively), the proposed structures in the existing forested area north of the
35 quarry site would not be visible from 17-Mile Drive or would recede and blend into the existing tree
36 canopy. However, as seen in Simulation 16 (Figure 3.1-26), the guest buildings immediately
37 northwest of the quarry site and on the slope would be visible from 17-Mile Drive.

38 For New Residential Lots (Option 2), 285 trees would be removed and the area would be subdivided
39 into 10 residential lots for future single-family residences.

40 Under both options, views of the site would be similarly altered, resulting in the same level of
41 impact. The existing viewshed in and immediately surrounding this development site is
42 characterized by low-density residential development, with public views to the ocean and scenic

1 features. Although public views to the ocean and scenic features would not be blocked, the increased
2 prominence of the new buildings is considered a potentially significant impact, given the sensitivity
3 of views affected from 17-Mile Drive, a scenic corridor. Implementing Mitigation Measure AES-A1
4 would reduce this impact to a less-than-significant level.

5 **Residential Lot Subdivisions**

6 The proposed project includes creating new residential lot subdivisions, which would enable future
7 development of up to 90 single-family residences in nine areas within or adjacent to existing golf
8 courses or other development (Figure 2-2). Residential development in Areas F-2, I-2, L, U, and V,
9 and the Corporation Yard could result in impacts relevant to scenic vistas and corridors and are
10 discussed below. Areas J, K, and U and the Collins Residence are not visible along any designated
11 scenic vistas or corridors. (The residential option in Area in Area M and potential effects on scenic
12 corridors is addressed under Area M Spyglass Hill.)

- 13 • **Area F-2.** Area F-2 is visible along the Lopez Road portion of 17-Mile Drive that is designated
14 scenic buffer for new development along 17-Mile Drive, and may be visible from the vista point
15 on Huckleberry Hill. Development of Area F-2 for residential use is estimated to result in the
16 removal of 1,226 trees. Depending on the location and architectural design, development at this
17 site could affect views from 17-Mile Drive, which is considered a potentially significant impact.
- 18 • **Area I-2.** As shown in Figure 3.1-1, the very southeastern part of Area I-2 is along the ridgeline
19 and visible area from Point Lobos. Approximately four of the proposed lots are within the
20 designated area. Development of Area I-2 for residential use is estimated to result in the
21 removal of 488 trees. Because this location is at the edge of the visible area, residential
22 development and tree removal is likely to represent only a limited (if apparent at all) change in
23 the distant views. As seen from Point Lobos (Figure 3.1-10), approximately 3.7 miles away,
24 these changes would not be discernible and have a less-than-significant impact on public vistas.
- 25 • **Area L.** Residential development in Area L would result in the removal of 1,334 trees. Although
26 this area is located slightly more than 550 feet east of 17-Mile Drive, it is located on the backside
27 of sand dunes blocking the view of this area from 17-Mile Drive. Additionally, there is a
28 proposed preservation area along the portion of Dune Road near the Gingerbread House that
29 will retain the existing tree cover, blocking views of the residential area from 17-Mile Drive.
30 Because residential development at Area L would be screened by intervening topography and
31 existing vegetation, it would not be visible along any designated scenic corridor or from any
32 designated scenic vista points. The impact would be less than significant.
- 33 • **Area V.** As shown in Figure 3.1-1, the very southern half of Area V is along the ridgeline and is
34 visible area from Point Lobos. Development of Area V for residential use is estimated to result in
35 the removal of 176 trees. Because this location is at the edge of the visible area, tree removal and
36 residential development would result in a barely-discernible change in the distant views of this
37 site. As seen from Point Lobos (Figure 3.1-10), approximately 3.7 miles away, these changes
38 would have a less-than-significant impact on public vistas.
- 39 • **Corporation Yard.** 17-Mile Drive passes near the Corporation Yard at the intersection of
40 Sunridge and Lopez Roads. The site's appearance would be altered by the removal of nine trees
41 and the introduction of 10 residential lots. A landscaped berm would be installed to visually
42 buffer the Corporation Yard from the residential development. In addition, the northwestern
43 edge of the site would continue to be used for open space and passive recreation, with no formal
44 recreation structures. The existing vegetation and intervening terrain would generally screen

1 the proposed Corporation Yard development from public view. Depending on the location and
2 architectural design, development at these sites could affect views from 17-Mile Drive, which
3 could result in a potentially significant impact.

4 In summary, residential development in Areas F-2 and Corporation Yard could result in a significant
5 impact. Implementation of Mitigation Measure AES-A1 would reduce this impact to a less-than-
6 significant level.

7 **Trail Improvements**

8 As described in Chapter 2, Project Description, under Trail Improvements, the proposed project
9 would add 2.4 miles of hiking and equestrian trails within Areas F-2, I-2, J, K, PQR, Corporation Yard,
10 and the HHNHA (Figure 2-30). Although these areas are in sensitive viewing areas and vistas, these
11 minor changes would be imperceptible because of their small scale, the intervening topography and
12 vegetation that would screen views, and their distance from locations such as 17-Mile Drive and
13 Point Lobos approximately 3.7 miles away. As seen from Point Lobos (Figure 3.1-10) and 17-Mile
14 Drive, these changes would have a less-than-significant impact on public vistas.

15 **Infrastructure Improvements**

16 As described in Chapter 2, Project Description, under Infrastructure Improvements, infrastructure
17 improvements include new water, sewer, and reclaimed water lines and storm drains that would be
18 installed underground. There would be a relatively minor amount of associated grading and possibly
19 tree removal, which has been included in that for the relative project component, as described in
20 Table 2-3. These areas would be repaved, revegetated, or incorporated into the proposed
21 development. Because they would be located underground, these infrastructure improvements
22 would result in no impact on public vistas.

23 **Mitigation Measure AES-A1: Incorporate design features and landscaping requirements** 24 **in design plans and specifications for all development sites that involve construction of** 25 **new structures or modification of existing structures.**

26 Prior to project construction, the applicant will incorporate design features and landscaping into
27 plans for all development sites that involve construction of new structures or modification to
28 existing structures, as outlined below, for review and approval by the County. The applicant will
29 be responsible for maintaining and monitoring the landscaping at all visitor-serving facilities
30 and within public views from 17-Mile Drive.

31 All Development

- 32 ● Landscape buffers will be preserved along the perimeters of all development sites to
33 maximize screening of public views. Additional landscape screening will be placed in the
34 areas along 17-Mile Drive where canopy gaps in roadside vegetation allow for additional
35 shrub and tree infill plantings. Landscape species will be selected and placed to appear
36 compatible with the existing vegetation in this area.
- 37 ● Under no circumstances will any invasive plant species be used at any location.

38 Visitor-Serving Development

- 39 ● Architectural treatments of visitor-serving facilities will incorporate building façade and
40 roofline articulation designed to reduce their apparent building mass.

- 1 ● Architectural treatments of visitor-serving facilities will incorporate building façade and
- 2 roofing materials that are consistent with the visual character of existing buildings located
- 3 on the site and existing buildings surrounding the site.

4 **Residential Development**

- 5 ● Structures associated with new single-family residential development will be set back from
- 6 parcel property lines (consistent with County zoning and development standards) to
- 7 minimize the proposed project’s visibility, as seen from sensitive public viewing locations.
- 8 ● New landscaping in residential developments will be specified and placed in a manner that
- 9 blends into the surrounding natural landscape.

10 **Impact AES-2: The proposed roadway improvements could adversely affect views from 17-**
 11 **Mile Drive. (Less than significant with mitigation)**

12 The proposed roadway improvements would result in wider areas of pavement, roadside vegetation
 13 removal, and topography changes (including cut or fill banks through grading operations) which
 14 would result in a change in views from the roadway and in the vicinity of the improvements. The SR
 15 1/SR 68/17-Mile Drive Intersection Reconfiguration would include removing 53 trees, widening the
 16 SR 68 and SR 1 southbound on- and off-ramps and 17-Mile Drive along their existing alignments,
 17 reconfiguring the intersection, and modifying the signals.

18 The four internal intersection improvements at Lopez/Congress Roads, Lopez/Sunridge Roads,
 19 Congress Road/17-Mile Drive, and Portola Road/Stevenson Drive would include realigning and
 20 widening portions of Congress, Lopez, and Sunridge Roads to increase safety along curves in the
 21 roadway and at intersections. Intersection improvements would also require removal of 36 trees at
 22 the Lopez/Congress Roads intersection and seven trees at the Lopez/Sunridge Road intersection,
 23 reducing the number of roadside trees and vegetation overhanging the roadway immediately along
 24 the corridor. Furthermore, grading operations would create cut-and-fill banks that would result in
 25 visibly exposed soil where vegetation previously existed.

26 Existing views at these intersections consist primarily of Monterey pine forest in the foreground
 27 with some residential and semi-urban characteristics in the foreground and middleground. Most of
 28 the visual changes would be in the foreground and visible to those traveling on these roads through
 29 the project area.

30 This impact is considered significant because while native vegetation would re-establish in
 31 disturbed areas over time, tree removal and construction of the roadway improvements would
 32 change the visual experience of public viewers. Implementation of Mitigation Measure AES-A2
 33 would reduce this impact to a less-than-significant level.

34 **Mitigation Measure AES-A2: Prepare and implement a landscape plan for SR 1/SR 68/17-**
 35 **Mile Drive intersection reconfiguration and internal roadway intersection**
 36 **improvements.**

37 As part of the final design for intersection improvements, the applicant will prepare a
 38 landscape plan for the SR 1/SR 68/17-Mile Drive intersection improvements and internal
 39 intersection improvements, as outlined below, to be approved by Caltrans (for the portion of
 40 the SR 1/SR 68/17-Mile Drive intersection within the Caltrans right-of-way) and the County
 41 (for the portion outside the County right-of-way and all internal intersections). Caltrans will

- 1 be responsible for maintenance within the State RW, and the applicant will be responsible
 2 for the portion of the improvements located within Del Monte Forest.
- 3 ● The species composition of the landscape plan will reflect species that are native and
 4 indigenous to the project area. The species list should include trees, shrubs, and an
 5 herbaceous understory of varying heights. Plantings will be installed to mimic natural
 6 patterns. If space does not allow, or the slope is too steep (greater than 2:1), a native
 7 perennial hydroseed mix will be applied (see next bullet) at a minimum.
 - 8 ● Native perennial hydroseed mix will be applied at all locations with exposed soil and steep
 9 slopes to prevent soil erosion, reduce water pollution, and help preserve the existing
 10 landscape character. Other erosion control and water pollution prevention practices will
 11 also be utilized, as recommended by the project landscape architect and/or project designer.
 12 Hydroseeded areas treated between September 15–October 15, prior to the wet season, will
 13 not require irrigating. Areas treated prior to that might require periodic truck watering to
 14 facilitate seed growth.
 - 15 ● The landscape architect will work with the engineers to ensure the landscape plan
 16 addresses retaining walls and grade transitions. Retaining wall design, colors and treatment
 17 will be approved by Caltrans and the County. Gradual grade transitions (slope rounding)
 18 will be incorporated into the landscape design at hinge and catch points of earthwork
 19 slopes, and flatter slopes (1:4 slope ratios) will be implemented where applicable to
 20 preserve the existing grade around the base of trees that are to remain, so that tree roots are
 21 not affected by cut or fill earthwork.
 - 22 ● Vegetation will be planted within the first year following completion of the intersection
 23 improvements.
 - 24 ● An irrigation and maintenance program will be implemented during the plant establishment
 25 period. The irrigation system will utilize a smart watering system that evaluates the existing
 26 site conditions and plant material against weather conditions to avoid overwatering of such
 27 areas. The irrigation system will be managed in such a manner that broken spray heads,
 28 pipes, or other components of the system are fixed within 1 to 2 days, or the zone or system
 29 will be shut down until it can be fixed to avoid undue water flows. The irrigation system will
 30 be managed by the applicant within Del Monte Forest and by Caltrans within state right-of-
 31 way.
 - 32 ● Under no circumstances will any invasive plant species be used at any location.

33 B. Visual Character/Building Scale and Mass

34 **Impact AES-B1: The proposed project could degrade the visual character and quality of some** 35 **development sites (at The Inn at Spanish Bay, Area M Spyglass Hill, Residential Lot** 36 **Subdivisions, and 17-Mile Drive intersections). (Less than significant with mitigation)**

37 The proposed project could degrade the visual character and the quality of some areas proposed for
 38 development by removing structures and trees and by introducing new structures, facilities, and
 39 associated landscaping, grading, and paving. As described below, this degradation would be most
 40 notable at The Inn at Spanish Bay, Area M Spyglass Hill, and Residential Lot Subdivisions.

1 **The Lodge at Pebble Beach**

2 Proposed development at The Lodge at Pebble Beach includes remodeling some existing facilities,
3 demolishing several existing structures, constructing new visitor-serving structures, and
4 reconstructing the parking structure and circulation area. Figures 2-9 through 2-14 show plans and
5 elevation drawings for the proposed development. The specific changes at the four development
6 sites (Meeting Facility Expansion, Fairway One Reconstruction, New Colton Building, and Parking
7 and Circulation Reconstruction) are described under Impact AES-A1.

8 Overall, the proposed development at The Lodge at Pebble Beach would generally appear similar to
9 existing facilities in scale and visual character and would not substantially alter the area's existing
10 visual character and quality. Therefore, this impact would be less than significant.

11 **The Inn at Spanish Bay**

12 Proposed development at The Inn at Spanish Bay includes remodeling some existing facilities,
13 constructing new visitor-serving structures, and removing trees to construct a parking lot. The
14 appearance of this development site would be altered by proposed modifications to the existing
15 resort facilities. Figures 2-15 and 2-16 show plans and elevation drawings for the proposed
16 improvements at The Inn at Spanish Bay. The specific changes at the three development sites
17 (Conference Center Expansion, New Guest Cottages, and New Employee Parking) are described
18 under Impact AES-A1.

19 Conference Center Expansion would result in visible changes to the existing building and façade
20 modifications on its north and west sides. These modifications would be approximately the same
21 height as the existing structure and would blend with the existing architectural style because the
22 exterior colors and materials would match those of the existing resort buildings. The existing
23 viewshed in and immediately surrounding this development site is characterized by development,
24 primarily The Inn at Spanish Bay. Although this area includes sensitive public views to the ocean and
25 scenic features, the modifications to the conference center would not substantially change the visual
26 character and quality of the area or views of the area; thus this would not be considered a significant
27 impact.

28 New Employee Parking would result in visible change on the development site because 242 existing
29 trees would be removed and replaced with a 285-space surface parking lot and approximately 200-
30 foot pedestrian trail across to the main entry. However, as described under Impact AES-A1, the new
31 parking lot would not be very visible from Congress Road or 17-Mile Drive at the main entrance to
32 The Inn at Spanish Bay because the roadside vegetation would buffer views (Figure 3.1-20 and 3.1-
33 21, Simulations 10 and 11). The primary visual feature would be the entry drives into the parking
34 lot, which would not be substantially different than the existing dirt pull-offs and gated entries.
35 Therefore, new employee parking would have a less-than-significant impact on the existing visual
36 character.

37 New Guest Cottages would result in visible change to the area because 322 existing trees would be
38 removed and replaced with two-story guest cottages along the 11th Fairway. As described in Impact
39 AES-A1 and indicated in Simulations 5 through 9, the new guest cottages would not be very visible
40 where dense roadside vegetation is present to screen views, and only portions would be visible from
41 17-Mile Drive where breaks in roadside vegetation exist and near Congress Road. The new guest
42 units would generally appear similar to the existing facilities in the area in scale, massing, and
43 general aesthetic character. Existing and proposed landscaping and existing trees along the roadside

1 would partially screen views of the proposed buildings. However, the new buildings would appear
2 slightly more prominent than the existing buildings because they are located closer to the roadway;
3 thus this would be considered a potentially significant impact. Implementing Mitigation Measure
4 AES-A1 would reduce this impact to a less-than-significant level.

5 **Collins Field–Equestrian Center–Special Events Area**

6 Proposed development in the Collins Field–Equestrian Center–Special Events Area includes
7 relocating, reconstructing and existing visitor-serving recreation facilities which would be visible
8 from public roadways Portola Road and Stevenson Drive. As described under Impact AES-A1, the
9 visible changes from Pebble Beach Driving Range Relocation from Area V to Collins Field and from
10 Special Events Staging Area Grading and Expansion would not be substantial enough to constitute a
11 significant change because these features are all part of the existing visual character in the vicinity.
12 Therefore, these changes would have a less-than-significant impact on existing visual character.

13 Equestrian Center Reconstruction would include removing all existing structures and 148 trees and
14 constructing new facilities, and the changes would be fully visible from the portion of Portola Road
15 that passes by the site and partially visible from Stevenson Drive. Figures 2-18 and 2-19 show the
16 proposed layout of the new facilities, which include a new covered arena, employee housing, barns
17 and stalls, vehicle storage, interior roadway, parking, and accessory structures. The density of onsite
18 uses at the new equestrian center would be greater than at the existing equestrian center because it
19 would cover a smaller footprint; however, it would be similar to the existing center in terms of
20 overall scale and general appearance and would remain compatible with the existing recreational
21 facilities in the area. Because the existing Equestrian Center would be replaced with the same type of
22 facility, with similar architectural styles, there would be little change to existing visual character.
23 Therefore, the new Equestrian Center would have a less-than-significant impact on existing visual
24 character.

25 **Area M Spyglass Hill**

26 Proposed development at Area M Spyglass Hill would include either a New Resort Hotel (Option 1)
27 or New Residential Lots (Option 2) in an undeveloped area that is the site of a former sand quarry.
28 Under Option 1, 389 trees would be removed and 100 guest units in 11 different single-story
29 buildings, other hotel facilities, and a spa would be constructed. Figures 3.1-22 through 3.1-26 show
30 “before” and “after” views from 17-Mile Drive. As shown in Simulations 12 through 15, the proposed
31 structures in the existing forested area north of the quarry site would not be visible from 17-Mile
32 Drive or would recede and blend into the existing tree canopy, so they would not greatly impact the
33 existing visual character. However, as seen in Simulation 16, the guest buildings immediately
34 northwest of the quarry site and on the slope would be visible from 17-Mile Drive. Views from
35 Stevenson Drive, Spyglass Hill Road, and nearby residences would be affected by tree removal and
36 the presence of development that would replace forest and the cleared land of the quarry site.

37 Under Option 2, 285 trees would be removed and the area would be subdivided into 10 residential
38 lots for future single-family residences, and the change in views of the site would be similar to
39 Option 1, resulting in the same level of impact.

40 Under both options, views of the site would be similarly altered. The existing viewshed in, and
41 immediately surrounding, this development site is characterized by low-density residential
42 development, with public views to the ocean and scenic features. Although public views to the ocean
43 and scenic features would not be blocked, the increased prominence of the new buildings is

1 considered a significant impact on existing visual character. Implementing Mitigation Measure AES-
2 A1 would reduce this impact to a less-than-significant level.

3 **Residential Lot Subdivisions**

4 Up to 90 single-family homes could be built on Areas F-2, I-2, J, K, L, U, and V, the Collins Residence,
5 and the Corporation Yard. Impacts relevant to visual character are discussed below:

- 6 • **Area F-2.** Area F-2 is visible along the Lopez Road portion of 17-Mile Drive, and development of
7 the site is estimated to result in the removal of 1,226 trees.
- 8 • **Area I-2.** Area I-2 is visible from nearby residences, the golf course, Lisbon Lane, and Viscaino,
9 Ronda, Cortez, and Deer Path Roads. Development of Area I-2 for residential use is estimated to
10 result in the removal of 488 trees.
- 11 • **Area J.** Area J is visible from nearby residences, the golf course, and Stevenson and Spyglass
12 Woods Drives. Development of Area J for residential use is estimated to result in the removal of
13 380 trees.
- 14 • **Area K.** Area K is visible from the golf course and Stevenson Drive, and development of the site
15 is estimated to result in the removal of 948 trees.
- 16 • **Area L.** Area L is visible from the golf course. However, it is not visible from 17-Mile Drive,
17 Stevenson Drive, Spyglass Hill Road, or nearby residences because preservation areas,
18 intervening topography, and existing vegetation screen views of the site. Development of the
19 site is estimated to result in the removal of 1,334 trees.
- 20 • **Area U.** Area U is visible from Collins Field, the Special Events Area, Stevenson Drive, and Forest
21 Lake and Portola Roads. Development of Area U for residential use is estimated to result in the
22 removal of 362 trees.
- 23 • **Area V.** Area V is visible from nearby residences, Collins Field, the Equestrian Center, the Special
24 Events Area, Stevenson Drive, and Drake and Portola Roads. Development of Area V for
25 residential use is estimated to result in the removal of 176 trees.
- 26 • **Collins Residence.** The Collins Residence area is visible from nearby residences, Collins Field,
27 the Equestrian Center, the Special Events Area, Alva Lane, and Drake and Portola Roads.
28 Development of Area V for residential uses is estimated to result in the removal of 27 trees.
- 29 • **Corporation Yard.** The Corporation Yard is visible from 17-Mile Drive as it passes near the site
30 at the intersection of Sunridge Road and Lopez Road. Development of the Corporation Yard is
31 estimated to result in the removal of nine trees.

32 The appearances of these sites would be altered by the removal of existing trees and introduction of
33 residential development and associated infrastructure such as roadways. Mature existing vegetation
34 along the roadsides would screen many views of the proposed developments. However, as shown in
35 the simulations for the nonresidential areas, glimpses of the new buildings could be visible through
36 the trees. Filtered views could also include limited areas where tree removal would occur. In some
37 locations, proposed development would be readily visible because it would be immediately adjacent
38 to a roadway that is currently developed (e.g., Areas I-2 and V). Depending on the location and
39 architectural design, development at these sites could degrade existing visual character or be
40 incompatible with the development scale and style of the surrounding area, which would be

1 considered a significant impact. Implementing Mitigation Measure AES-A1 would reduce this impact
2 to a less-than-significant level.

3 **Roadway Improvements**

4 The impact on existing visual character from roadway improvements is the same as described in
5 Impact AES-A2, which is considered less than significant with implementation of Mitigation Measure
6 AES-A2.

7 **Trail Improvements**

8 The proposed project would add 2.4 miles of hiking and equestrian trails within Areas F-2, I-2, J, K,
9 PQR, the Corporation Yard, and the HHNHA. These minor changes would not affect the existing
10 visual character because of their small scale, similarity to existing character, and intervening
11 topography and vegetation that would screen many views and prevent the changes from being seen.
12 Therefore, these changes would have a less-than-significant impact on existing visual character.

13 **Infrastructure Improvements**

14 New infrastructure lines include water, sewer, and reclaimed water lines and storm drains that
15 would all be installed underground. These areas would be repaved, revegetated, or incorporated
16 into the proposed development. Because they would be located underground, these infrastructure
17 improvements would result in no impact on existing visual character.

18 Overall, the proposed development would be similar to surrounding development in scale and
19 massing. However, the visual character and the quality could be degraded at specific sites as
20 described above. Development of structures would be subject to the County's design review process
21 which would address site and architectural design issues, including specific building layout,
22 architectural treatment, site design, and landscaping. However, due to the sensitive nature of the
23 environment at specific sites, development of new guest cottages at The Inn at Spanish Bay, a new
24 resort hotel or new residential lots at Area M Spyglass Hill, and the proposed residential lot
25 subdivisions and roadway improvements could result in a substantial degradation of the visual
26 character and quality. This is considered a significant impact. Implementation of Mitigation
27 Measures AES-A1 and AES-A2 would reduce this impact to a less-than-significant level.

28 **C. Light and Glare**

29 **Impact AES-C1: The proposed project would introduce new sources of light and glare at** 30 **development sites, which could adversely affect nighttime views or activities in the area.** 31 **(Less than significant with mitigation)**

32 The proposed project would introduce nighttime light sources related to the proposed visitor-
33 serving uses and residential development. The primary sources of light and glare would be outdoor
34 lighting in parking areas, security lighting around buildings, and light from new buildings and
35 residences. These sources have the potential to adversely affect nighttime views and increase
36 ambient nighttime illumination levels beyond property lines. Proposed designs would need to go
37 through the County design review process and comply with Title 20 of the County zoning ordinance.
38 The primary land uses for the project vicinity include lighting plan requirements under this
39 ordinance (County of Monterey 2000), are as follows:

- 1 • **Medium Density Residential (for two or more residential units on a lot), Coastal General**
2 **Commercial (under which conditional use applies for hotels and other similar uses), and**
3 **Institutional Commercial.** All exterior lighting will be unobtrusive, harmonious with the local
4 area and constructed or located so that only the area intended is illuminated and off-site glare is
5 fully controlled. The location, type and wattage of the exterior lighting must be approved by the
6 Director of Planning prior to the issuance of building permits or the establishment of the use.
- 7 • **Low Density Residential, Resource Conservation, and Open Space Recreation.** No specific
8 requirements, but may be required by condition of approval of a Coastal Administrative or
9 Coastal Development Permit.

10 This impact is considered significant because of the potential for light pollution and glare. However,
11 implementation of Mitigation Measure AES-C1 would reduce this impact to a less-than-significant
12 level.

13 **Mitigation Measure AES-C1: Incorporate light and glare reduction measures in design**
14 **plans and specifications.**

15 Prior to project construction, the applicant will ensure that design plans and specifications for
16 all proposed visitor-serving development include exterior lighting that provides for the safety
17 and security of people using the facilities in the evening, but that is not intrusive and glaring.
18 The design plans will be reviewed and approved by the County. For future residential
19 development, the County design review process will ensure residential development includes
20 appropriate light and glare reduction measures. Light and glare reduction measures include, but
21 are not limited to, the following.

- 22 1. All exterior lighting will be directed downward and toward the development site.
- 23 2. All exterior lighting will be installed at the lowest allowable height, the lowest allowable
24 wattage will be used, and the number of nighttime lights used will be minimized.
- 25 3. The design of exterior light fixtures will incorporate shielding to prevent glare.
- 26 4. Non-glare fixtures will be specified for outdoor project lighting.
- 27 5. Where appropriate, trees will be planted along roadway frontages to reduce potential glare.
- 28 6. Non-reflective colors and finishes will be used for all exterior building and structure
29 treatment.
- 30 7. Project lighting, including locations and specific fixture types, will be subject to the
31 County's design review process.

32 **Cumulative Impacts and Mitigation Measures**

33 The cumulative impact zone for aesthetics is Del Monte Forest, and the ridgeline and southern part
34 of Del Monte Forest as viewed from Point Lobos across Carmel Bay. The methodology for
35 determining cumulative impacts is described in Analysis of Cumulative Impacts at the beginning of
36 Chapter 3.

1 **A. Scenic Vistas and Corridors**

2 **Impact AES-A1(C) and Impact AES-A2(C). Cumulative development in Del Monte Forest might**
3 **have substantial adverse effects on public viewing in or near “visually prominent” areas, but**
4 **the proposed project’s contribution would be reduced to a less-than-significant level with**
5 **mitigation.**

6 Cumulative development may have a substantial adverse effect on public viewing in or near
7 “visually prominent” areas identified in the LUP and along the 17-Mile Drive corridor and views
8 from 17-Mile Drive. Building development projects could remove existing trees and other
9 vegetation, result in views of more developed conditions inconsistent with the visual character of
10 the surrounding area, and increase the degree of perceived visual change. Roadway improvements
11 would result in wider areas of pavement, roadside vegetation removal, and topography changes.
12 However, projected development (and roadway improvements) in Del Monte Forest (not including
13 the proposed project) would consist of development of individual lots with single-family residential
14 uses and associated roadway improvements that would be subject to the requirements of the LUP
15 and CIP and review by County staff, the Del Monte Forest Architectural Review Board, and the Del
16 Monte Forest Land Use Advisory Committee. The degree of change from development of single lots
17 is not anticipated to result in a discernable change to scenic vistas or corridors within Del Monte
18 Forest or along the shoreline of Carmel Bay.

19 As identified under Project Impacts and Mitigation Measures, the proposed project would have
20 individually significant impacts on sensitive views from 17-Mile Drive related to the increased
21 prominence of new buildings at The Inn at Spanish Bay, new buildings at Area M Spyglass Hill,
22 development at the Corporation Yard, and roadway improvements related to the SR 1/SR 68/17-
23 Mile Drive and internal intersections. It should be noted that all views of the proposed project from
24 Point Lobos across Carmel Bay are fairly distant (ranging from 3 to 3.7 miles from the project site)
25 and are not anticipated to significantly change. Furthermore, implementation of Mitigation Measure
26 AES-1 would, through design, ensure that the proposed development would be required to reduce
27 potential aesthetic impacts related to adverse effects to public viewing in or near “visually
28 prominent” areas to a less-than-significant level. Mitigation Measure AES-2 would ensure, through
29 preparation/implementation of a landscaping plan, that proposed development would be required
30 to reduce potential impacts related to changes in views from 17-Mile Drive to a less-than-significant
31 level. Therefore, although cumulative development impacts related to scenic vistas and corridors
32 (“scenic views” and areas near “visually prominent” areas) are considered to be potentially
33 significant, the proposed project’s contribution would not be considerable.

34 **B. Visual Character/Building Scale and Mass**

35 **Impact AES-B1(C). Cumulative development in Del Monte Forest might have a substantial**
36 **adverse effect related to degradation of the visual character and quality, but the proposed**
37 **project’s contribution would be reduced to a less-than-significant level with mitigation.**

38 Cumulative development might have a substantial adverse effect related to degradation of the visual
39 character and quality of some development sites. This could include degradation of the existing
40 visual character or quality of the site and surrounding area, new ridgeline development, or
41 incompatibility with the development scale and style. However, projected development in Del Monte
42 Forest (not including the proposed project) would consist of development of individual lots with
43 single-family residential uses and associated roadway improvements. As mentioned in the

1 discussion of Impact AES-A1 and Impact AES-A2, this type of development would be subject to
2 requirements that would ensure their effect would be less than significant. The degree of change
3 from development of single residential lots is not anticipated to be discernable, nor result in
4 degradation of the visual character and quality.

5 As identified under Project Impacts and Mitigation Measures, the proposed project would have
6 individually significant impacts related to degradation of visual character and quality primarily at
7 The Inn at Spanish Bay, Area M Spyglass Hill, and at the Residential Lot Subdivisions, related to
8 removal of structures and trees and introduction of new structures, facilities, and associated
9 landscaping, grading, and paving. As discussed under A. Scenic Vistas and Corridors, implementation
10 of Mitigation Measures AES-1 and AES-2, through design and preparation/implementation of a
11 landscaping plan, would ensure that the proposed project would reduce potential degradation of
12 visual character and quality impacts to a less-than-significant level. Therefore, although cumulative
13 development impacts related to visual character/building scale and mass are considered to be
14 potentially significant, the proposed project's contribution would not be considerable.

15 C. Light and Glare

16 **Impact AES-C1(C). Cumulative development in Del Monte Forest might introduce new sources** 17 **of light and glare, but the proposed project's contribution would be reduced to a less-than-** 18 **significant level with mitigation.**

19 Cumulative development might have a substantial adverse effect related to introduction of new
20 sources of light and glare at development sites, which could affect nighttime activities or views from
21 within Del Monte Forest or along the shoreline of Carmel Bay. This adverse effect could include
22 creation of a new source of light and glare that would affect daytime or nighttime activities or views
23 in the area, or pose a nuisance, including ambient nighttime illumination levels that would be
24 increased beyond the property line, or use of highly reflective building materials. However,
25 projected development in the area (not including the proposed project) would consist of
26 development of individual lots with single-family residential uses and associated roadway
27 improvements. Individual lots would be required to go through the County's design review process
28 and comply with Title 20 of the Zoning Ordinance. Potential sources of light and glare would be
29 addressed individually. Views from Point Lobos across Carmel Bay would be more than 3 miles
30 away, and introduction of new sources of light and glare would not be substantially discernable
31 from sources of light and glare from existing development. Furthermore, future single-family
32 residential development in Del Monte Forest (not all of which is visible from Point Lobos), other
33 than the proposed project, would be limited to up to 105 new dwelling units³.

34 As identified under Project Impacts and Mitigation Measures, the proposed project would have
35 individually significant light and glare impacts related to outdoor lighting at parking areas, security
36 lighting around buildings, and light from new buildings and residences. The proposed project would
37 be required to go through the County review process and comply with Title 20, the County zoning
38 ordinance. Further, implementation of Mitigation Measures AES-C1, through light and glare
39 reduction measures, would ensure that the proposed project would reduce potential light and glare

³ As described in Table 3-2 in the introduction to Chapter 3, there are 96 undeveloped (vacant) existing residential lots, 8 new lots allowed in Area X based on County-issued certificates of compliance, and 1 new lot allowed in Area Y based on the presumption that presence of environmentally sensitive habitat area (ESHA) may prevent further subdivision – thus the potential for up to 105 new dwelling units.

1 impacts to a less-than-significant level. Therefore, although cumulative development impacts related
2 to scenic vistas and corridors (“scenic views” and areas near “visually prominent” areas) are
3 considered to be potentially significant, the proposed project’s contribution would not be
4 considerable.
5

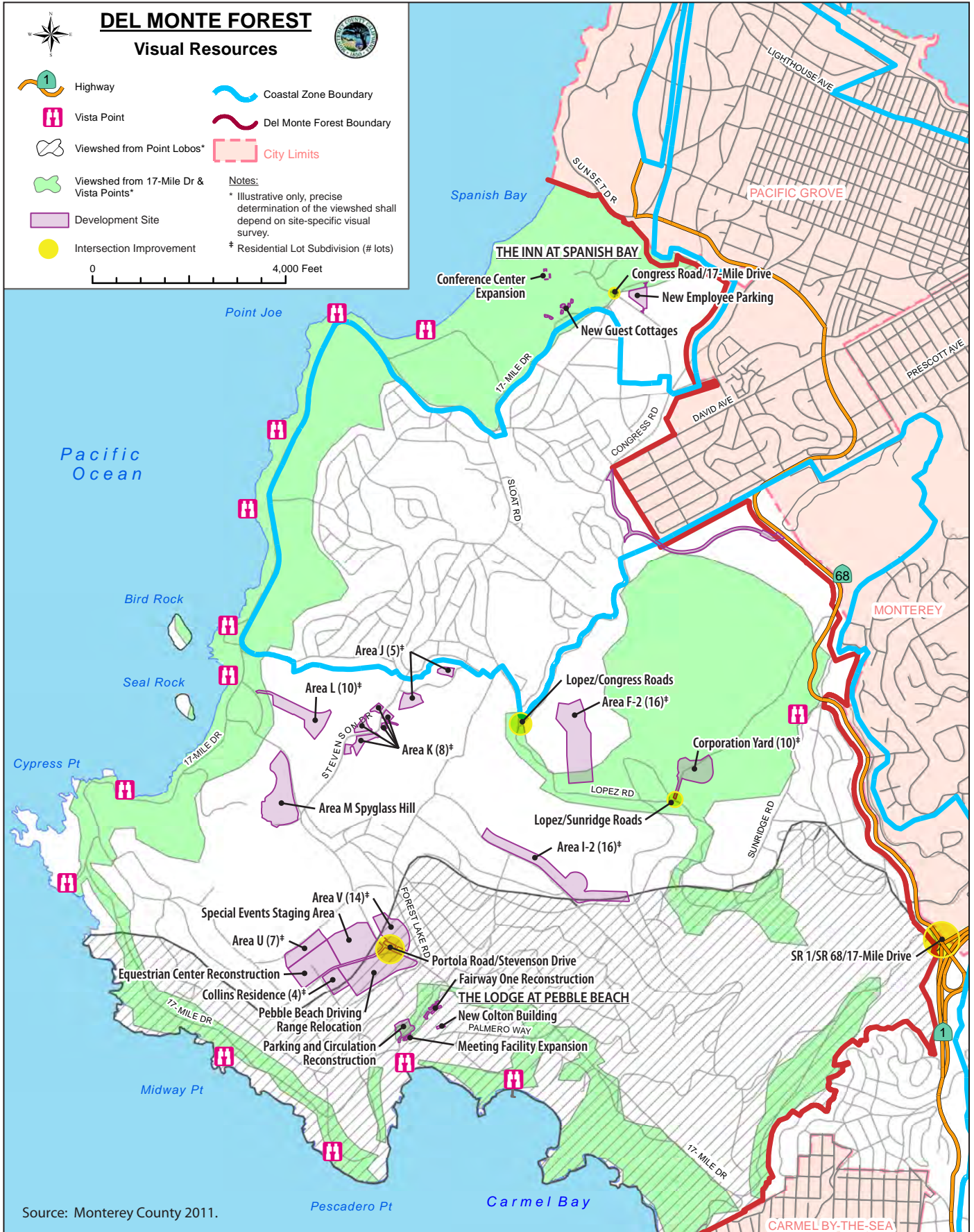
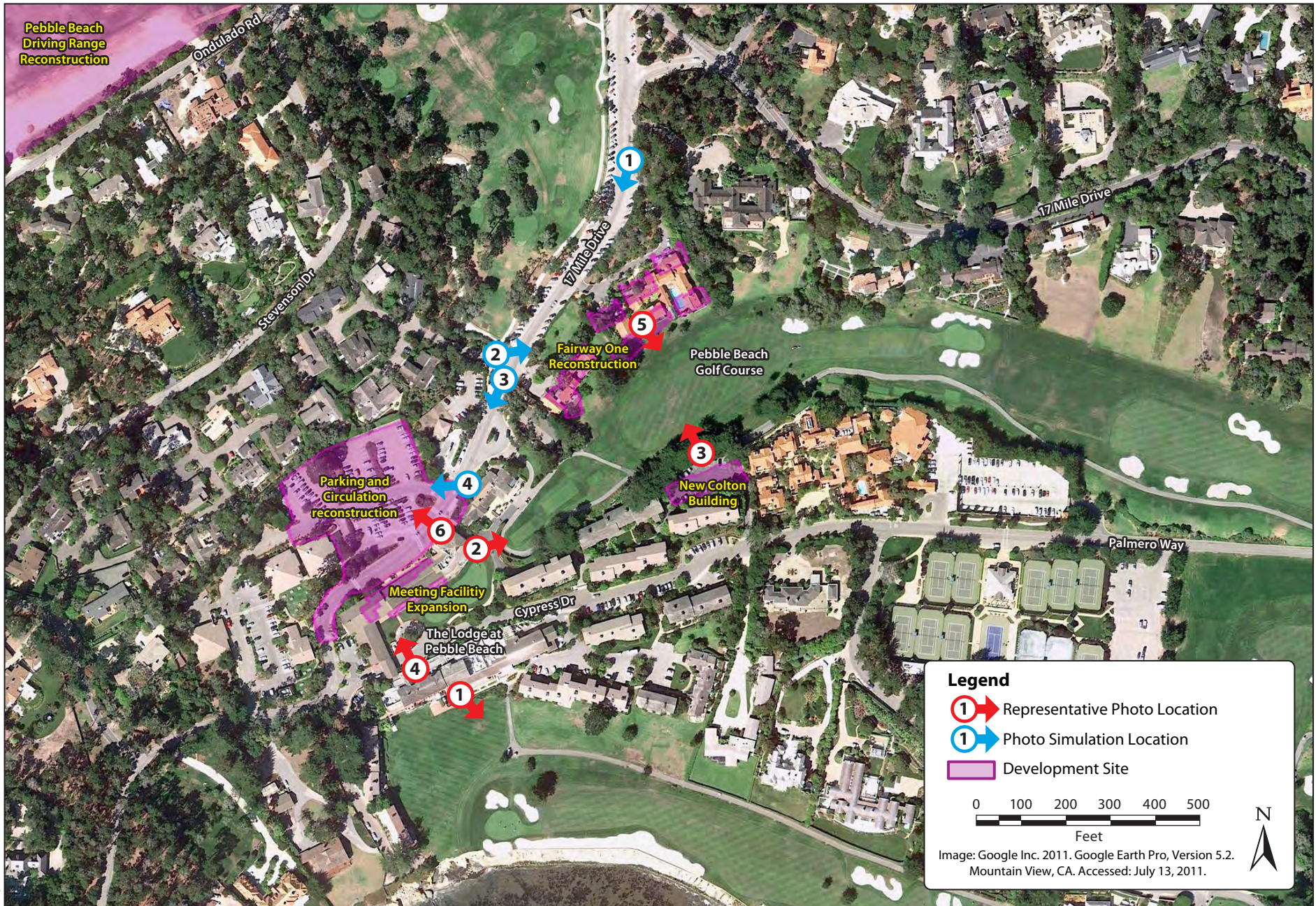
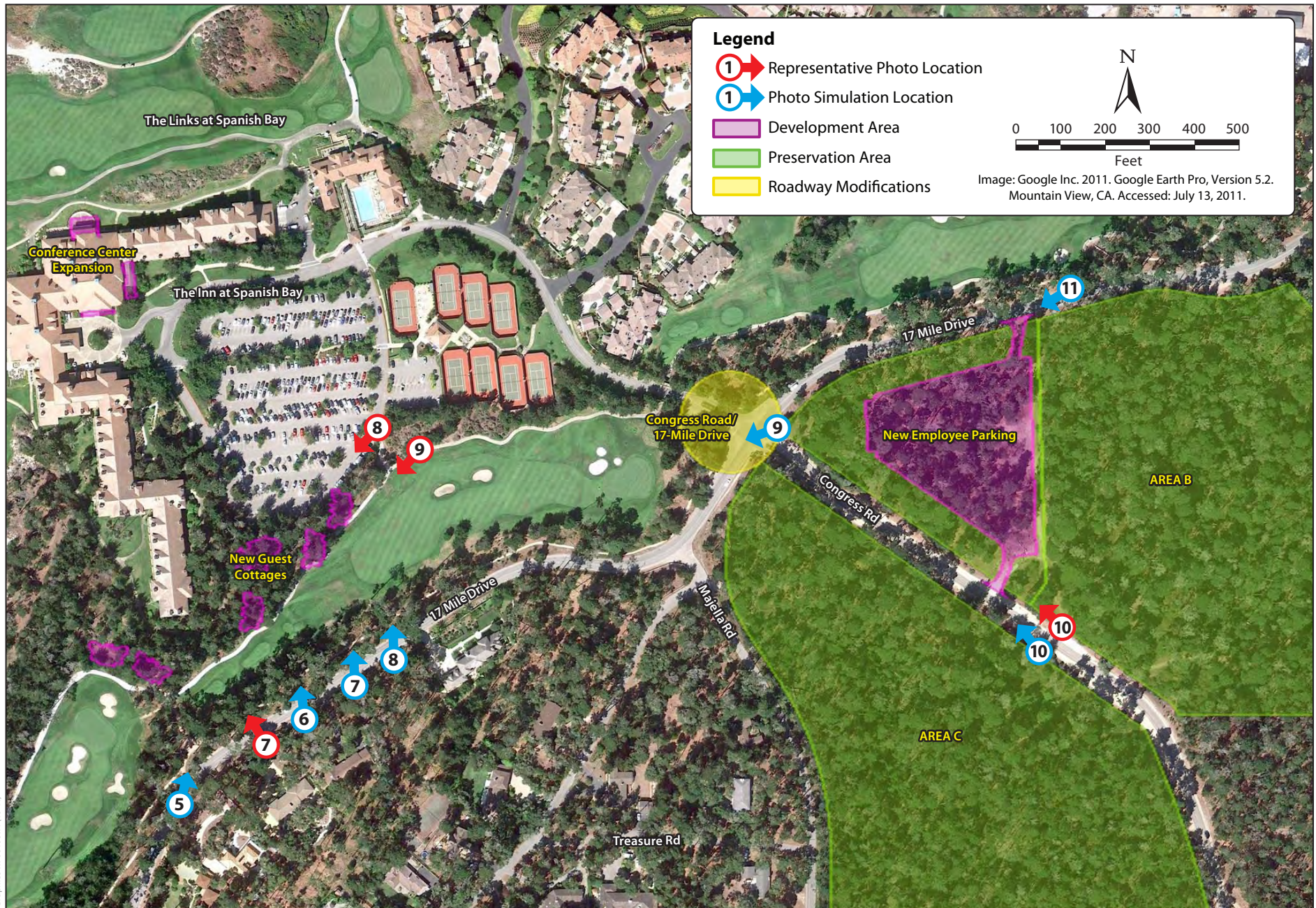


Figure 3.1-1
Del Monte Forest Visual Resources and Development Sites



Graphics ... 00106.11 (10-11)

Figure 3.1-2a
Location of Representative Photos and Photo Simulations
at The Lodge at Pebble Beach



Graphics ... 00106.11 (10-11)

Figure 3.1-2b
Location of Representative Photos and Photo Simulations
at The Inn at Spanish Bay

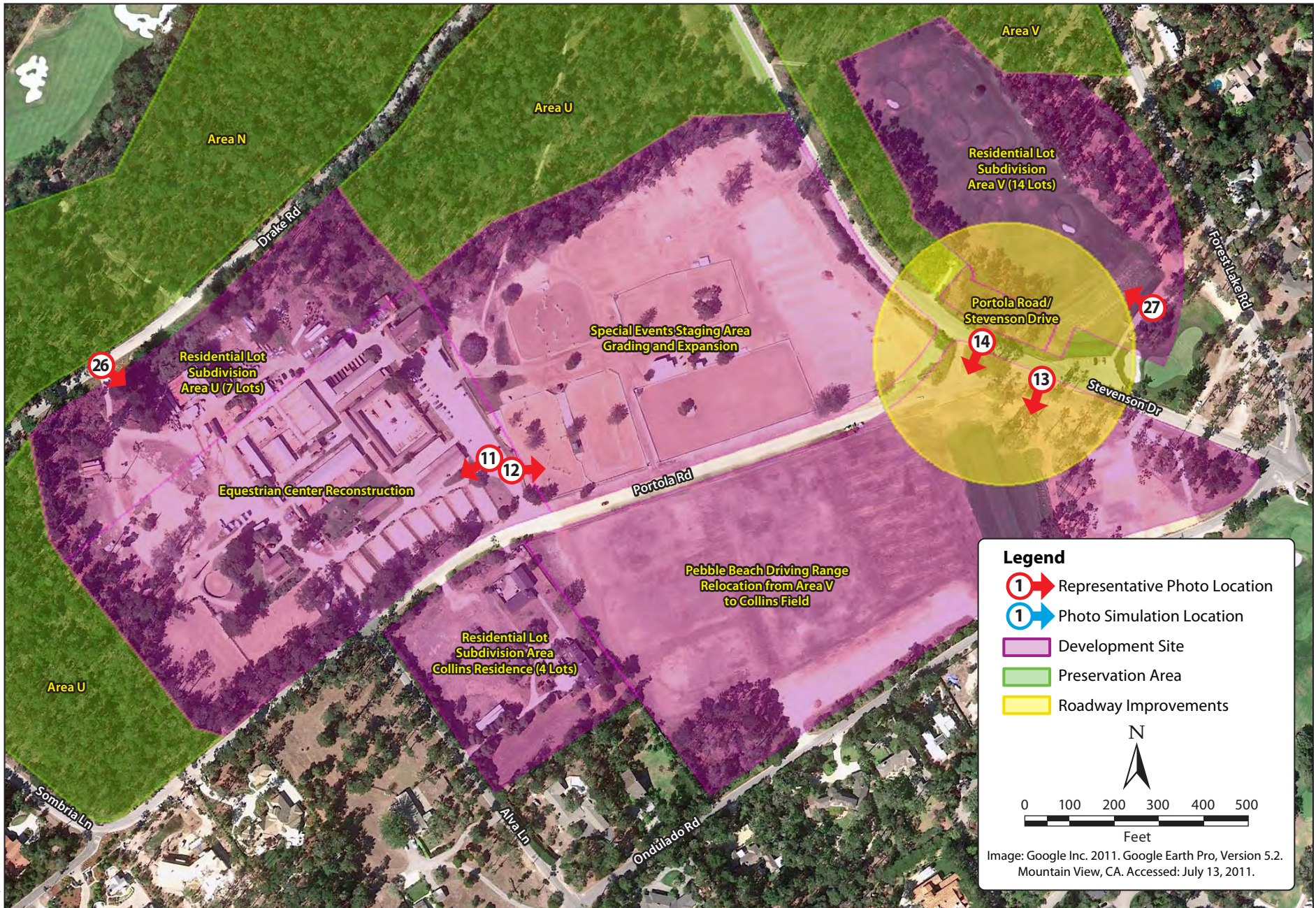
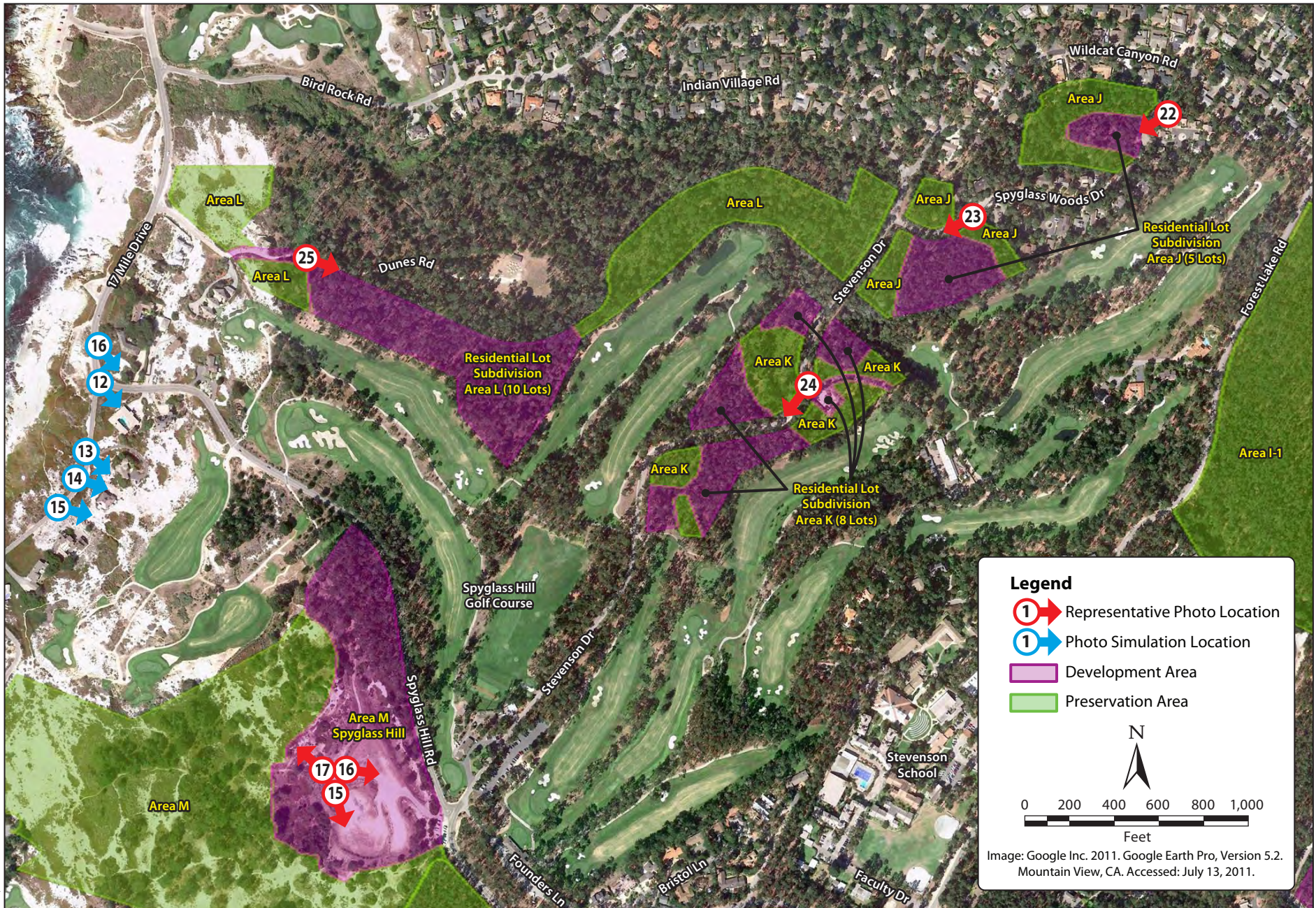


Figure 3.1-2c
Location of Representative Photos and Photo Simulations
at Collins Field–Equestrian Center–Special Events Area



Graphics ... 00106.11 (10-11)

Figure 3.1-2d
Location of Representative Photos and Photo Simulations
for Areas J, K, L, and M

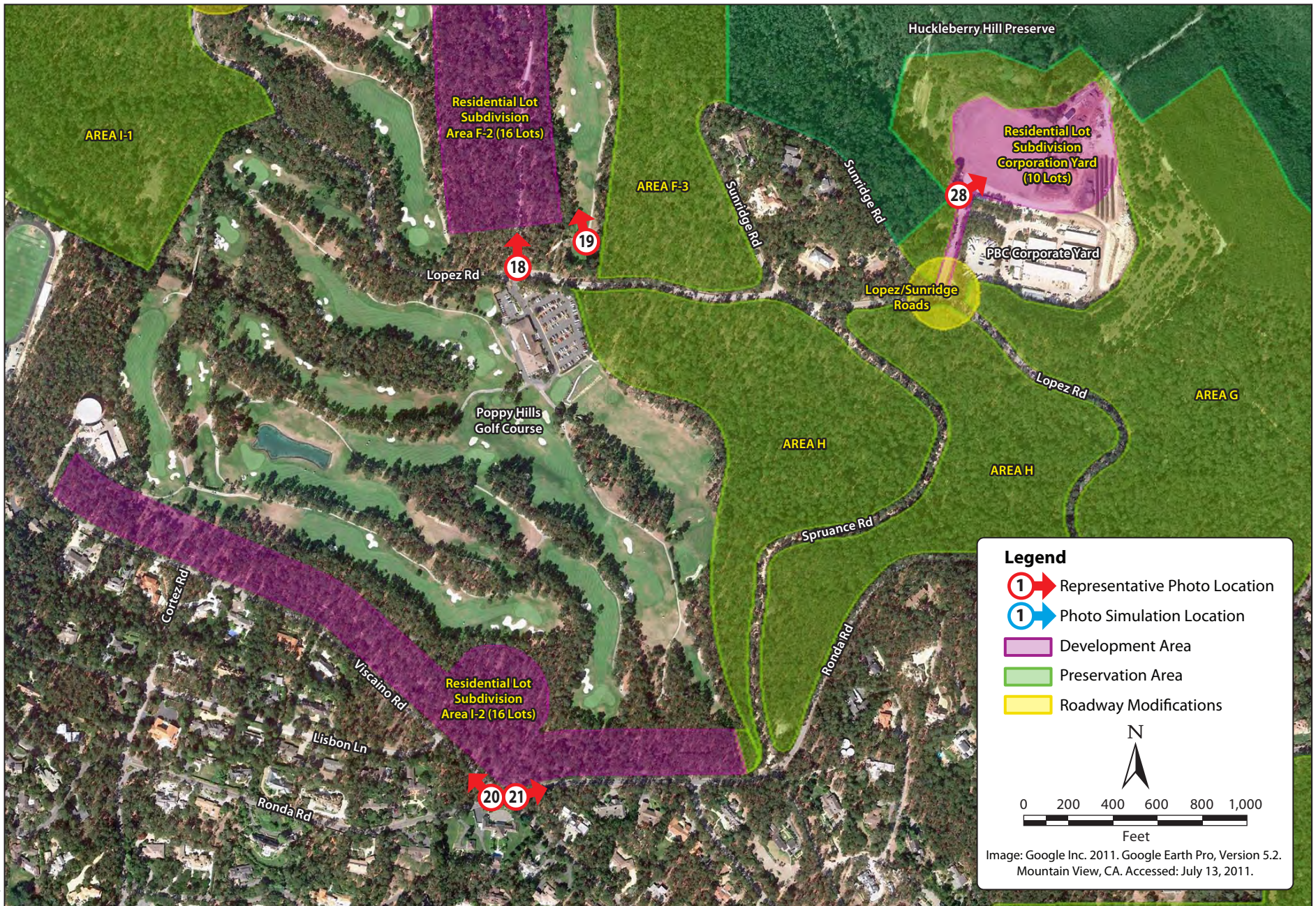


Figure 3.1-2e
Location of Representative Photos and Photo Simulations
for Areas F-2, I-2, and Corporation Yard



1. Looking southeast toward the Pacific Ocean from The Lodge.



2. Looking east toward the 1st Fairway from the Gallery Café.



3. Looking northwest toward Fairway One from near the new Colton Building site. Fairway One house left and Bierne residence on right.

Graphics ... 00106.11 (10-11)

Figure 3.1-3a
Representative Photos of The Lodge at Pebble Beach Area



4. Looking northwest toward the Meeting Facility from The Lodge.



5. Looking southeast toward the new Colton Building site (behind trees) from Fairway One.



6. Looking northwest toward the parking lot from the Meeting Facility.

Figure 3.1-3b
Representative Photos of The Lodge at Pebble Beach Area



7. Looking north from 17-Mile Drive toward The Inn at Spanish Bay.



8. Looking southwest from the parking lot toward the new Guest Cottages site.



9. Looking southwest from the 11th hole toward the new Guest Cottages site.



10. Looking northwest from Congress Road toward the new Employee Parking site.

Graphics ... 00106.11 (10-11)

Figure 3.1-4
Representative Photos of The Inn at Spanish Bay Area



11. Looking west from the Equestrian Center parking lot toward the stables.



12. Looking east from the Equestrian Center parking lot toward the Special Events Staging Area.



13. Looking southwest from Stevenson Drive towards Collins Field.



14. Looking southwest from Stevenson Drive at Portola Road towards Collins Field.

Graphics ... 00106.11 (10-11)

Figure 3.1-5
Representative Photos of the Collins Field–Equestrian Center–Special Events Area



15. Looking south from Area M toward the old quarry site.



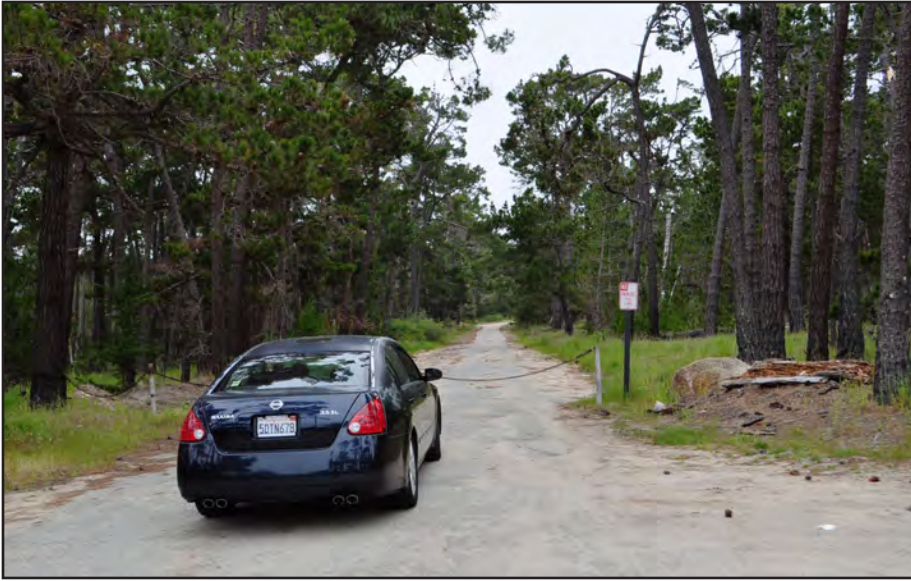
16. Looking southeast from Area M toward Stevenson Drive.



17. Looking northwest from Area M toward 17-Mile Drive and the Pacific Ocean.

Graphics ... 00106.11 (7-8-11)

Figure 3.1-6
Representative Photos of the Area M Spyglass Hill Site



18. Looking north from an access road off of Lopez Road toward Area F-2.



19. Looking northwest from the 10th tee of Poppy Hills Golf Course toward Area F-2.



20. Looking northwest from the Ronda/Viscaino Road intersection toward Area I-2.



21. Looking northeast from the Ronda/Viscaino Road intersection toward Area I-2.

Figure 3.1-7
Representative Photos of Residential Lot Subdivision Areas F-2 and I-2



22. Looking southwest from Spyglass Woods Drive toward Area J.



23. Looking southwest from Spyglass Woods Drive toward Area J.



24. Looking southwest from Stevenson Drive toward Area K.



25. Looking east from the unpaved portion of Dunes Road toward Area L.

Figure 3.1-8
Representative Photos of Residential Lot Subdivision Areas J, K, and L



26. Looking southeast from Drake Road toward Area U.

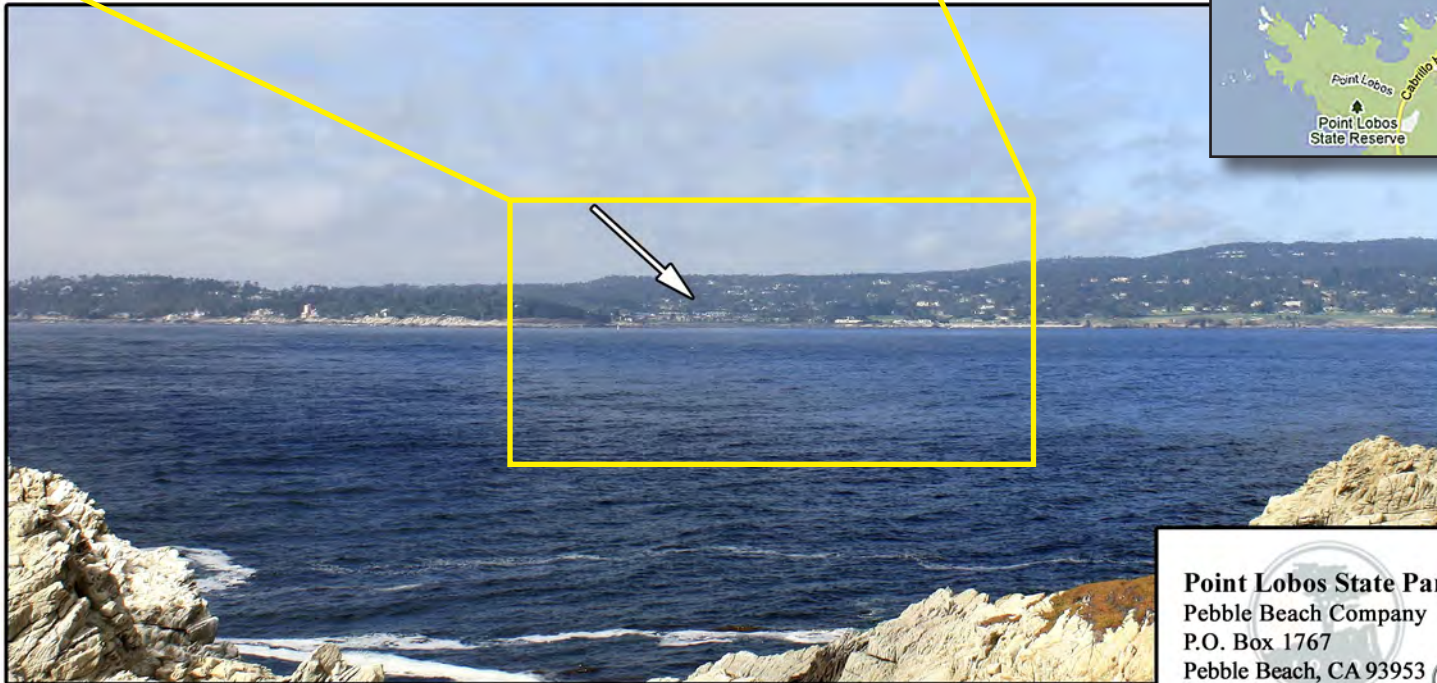


27. Looking northwest from the driving range parking lot toward Area V (current location of Bebble Beach Links Driving Range).



28. Looking northeast from the unpaved haul road toward Corporation Yard.

Figure 3.1-9
Representative Photos of Residential Lot Subdivision Areas U, V, and Corporation Yard



Point Lobos State Park
Pebble Beach Company
P.O. Box 1767
Pebble Beach, CA 93953

Graphics ... 00106:11 (10-11)

Source: Perfect Image 2011

Figure 3.1-10
View toward Development Sites at The Lodge at Pebble Beach from Point Lobos



The Lodge At Pebble Beach
Fairway One
Pebble Beach Company
P.O. Box 1767
Pebble Beach, CA 93953

Graphics ... 00106:11 (10-11)

Source: Perfect Image 2011

Figure 3.1-11
Simulation 1: The Lodge at Pebble Beach—View Looking Southwest toward
the Fairway One Reconstruction from 17-Mile Drive



The Lodge At Pebble Beach
Fairway One
Pebble Beach Company
P.O. Box 1767
Pebble Beach, CA 93953



Source: Perfect Image 2011

Figure 3.1-12
Simulation 2: The Lodge at Pebble Beach—View Looking Northeast toward
the Fairway One Reconstruction from 17-Mile Drive



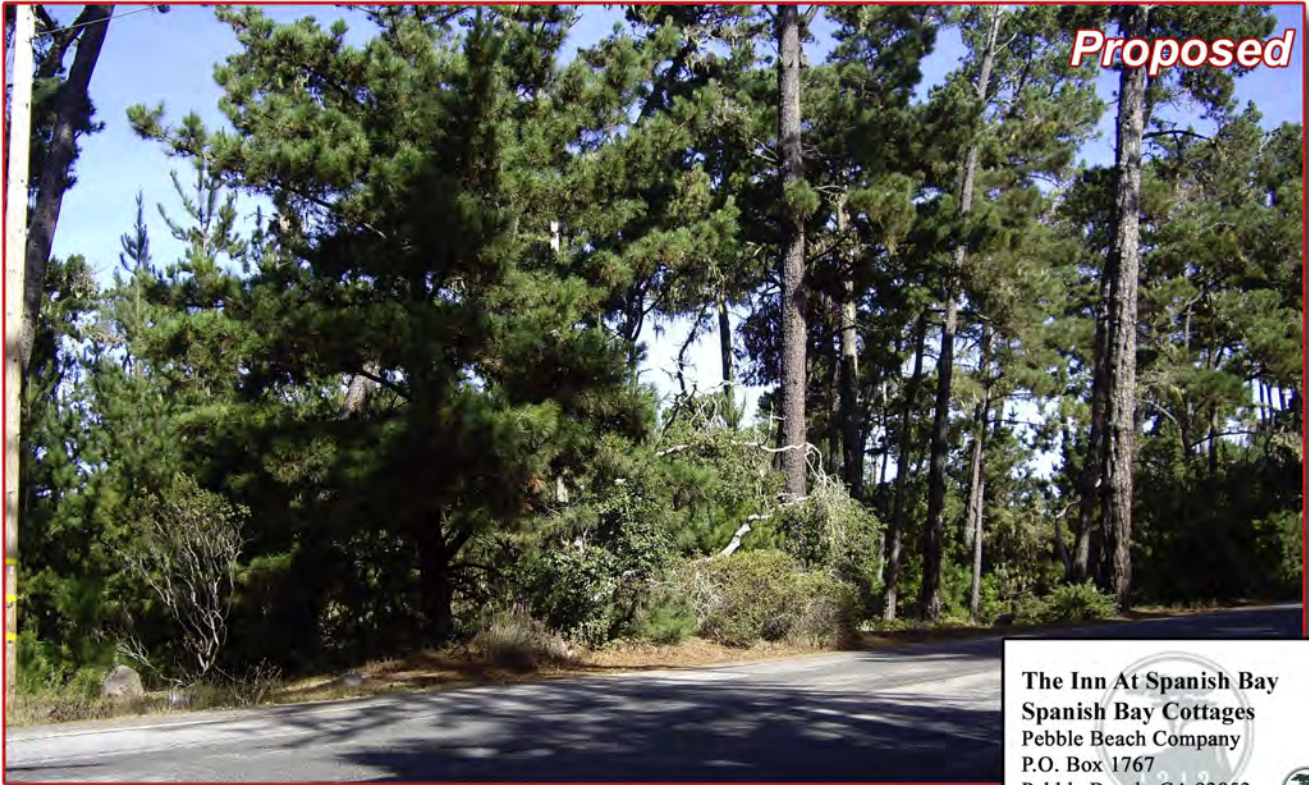
Source: Environmental Vision 2005

Figure 3.1-13
Simulation 3: The Lodge at Pebble Beach—View Looking Southwest
toward the Meeting Facility Expansion from 17-Mile Drive



Source: Environmental Vision 2005

Figure 3.1-14
Simulation 4: The Lodge at Pebble Beach—View Looking Northwest
toward Parking and Circulation Reconstruction from 17-Mile Drive



The Inn At Spanish Bay
Spanish Bay Cottages
Pebble Beach Company
P.O. Box 1767
Pebble Beach, CA 93953



Note: No project features would be visible from this location.

Source: Perfect Image 2011

Graphics ... 00106.11 (10-11)

Figure 3.1-15
Simulation 5: The Inn at Spanish Bay—View Looking North toward the
New Guest Cottages from 17-Mile Drive



The Inn At Spanish Bay
Spanish Bay Cottages
Pebble Beach Company
P.O. Box 1767
Pebble Beach, CA 93953



Note: No project features would be visible from this location.

Source: Perfect Image 2011

Graphics ... 00106.11 (10-11)

Figure 3.1-16
Simulation 6: The Inn at Spanish Bay—View Looking North toward the
New Guest Cottages from 17-Mile Drive

Existing



Proposed



The Inn At Spanish Bay
Spanish Bay Cottages
Pebble Beach Company
P.O. Box 1767
Pebble Beach, CA 93953



Note: No project features would be visible from this location.

Source: Perfect Image 2011

Graphics ... 00106.11 (10-11)

Figure 3.1-17
Simulation 7: The Inn at Spanish Bay—View Looking North toward the
New Guest Cottages from 17-Mile Drive



The Inn At Spanish Bay
 Spanish Bay Cottages
 Pebble Beach Company
 P.O. Box 1767
 Pebble Beach, CA 93953

Source: Perfect Image 2011

Graphics ... 00106:11 (10-11)

Figure 3.1-18
Simulation 8: The Inn at Spanish Bay—View Looking Northwest toward
the New Guest Cottages from 17-Mile Drive



The Inn At Spanish Bay
Spanish Bay Cottages
 Pebble Beach Company
 P.O. Box 1767
 Pebble Beach, CA 93953



Source: Perfect Image 2011

Graphics ... 00106.11 (10-11)

Figure 3.1-19
Simulation 9: The Inn at Spanish Bay—View Looking Southwest toward
the New Guest Cottages from 17-Mile Drive

Existing



Proposed



The Inn At Spanish Bay
Employee Parking
Pebble Beach Company
P.O. Box 1767
Pebble Beach, CA 93953



Source: Perfect Image 2011

Graphics ... 00106:11 (10-11)

Figure 3.1-20
Simulation 10: The Inn at Spanish Bay—View Looking Northwest toward the
New Employee Parking Lot from Congress Road



The Inn At Spanish Bay
 Employee Parking
 Pebble Beach Company
 P.O. Box 1767
 Pebble Beach, CA 93953



Source: Perfect Image 2011

Graphics ... 00106:11 (10-11)

Figure 3.1-21
Simulation 11: The Inn at Spanish Bay—View Looking Southwest toward the
New Employee Parking Lot from 17-Mile Drive

Existing



Proposed



Spyglass Hill Resort
Pebble Beach Company
P.O. Box 1767
Pebble Beach, CA 93953

Source: Perfect Image 2011

Graphics ... 00106:11 (10-11)

Figure 3.1-22
Simulation 12: Area M Spyglass Hill—View Looking Southeast toward
the New Resort Hotel from 17-Mile Drive

Existing



Proposed



Spyglass Hill Resort
Pebble Beach Company
P.O. Box 1767
Pebble Beach, CA 93953

Source: Perfect Image 2011

Note: No project features would be visible from this location.

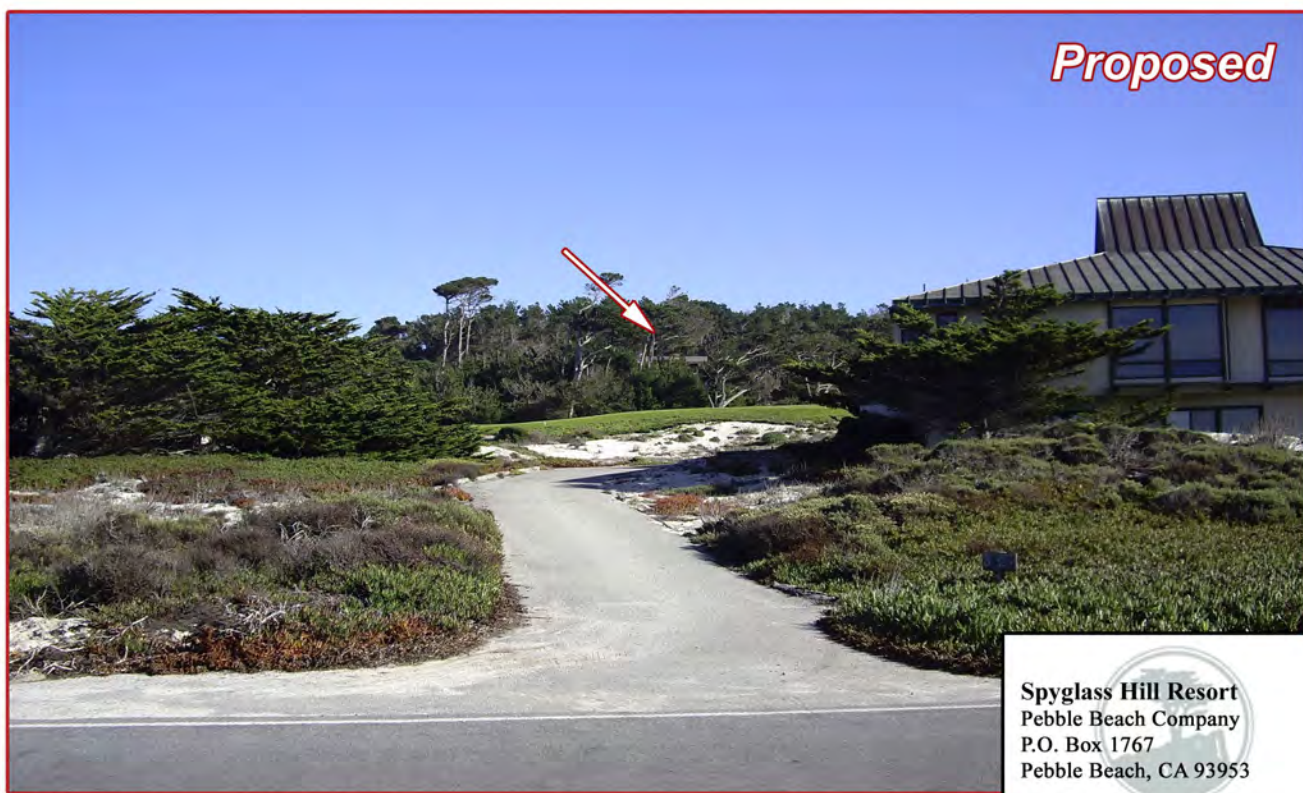
Graphics ... 00106.11 (10-11)

Figure 3.1-23
Simulation 13: Area M Spyglass Hill—View Looking Southeast toward the New Resort Hotel from 17-Mile Drive

Existing



Proposed



Spyglass Hill Resort
Pebble Beach Company
P.O. Box 1767
Pebble Beach, CA 93953

Graphics ... 00106.11 (10-11)

Source: Perfect Image 2011

Figure 3.1-24
Simulation 14: Area M Spyglass Hill—View Looking Southeast toward
the New Resort Hotel from 17-Mile Drive

Existing



Proposed



Spyglass Hill Resort
Pebble Beach Company
P.O. Box 1767
Pebble Beach, CA 93953

Source: Perfect Image 2011

Graphics ... 00106.11 (10-11)

Figure 3.1-25
Simulation 15: Area M Spyglass Hill—View Looking Southeast toward
the New Resort Hotel from 17-Mile Drive



Graphics ... 00106:11 (10-11)

Source: Perfect Image 2011

Figure 3.1-26
Simulation 16: Area M Spyglass Hill—View Looking Southeast toward
the New Resort Hotel from 17-Mile Drive

Section 3.2
Air Quality

Section 3.2 Air Quality

1
2
3 This section describes the regulatory and environmental setting for air quality, the effects on air
4 quality that would result from the proposed project, and the mitigation measures that would reduce
5 these effects. Table 3.2-1 presents a summary of project impacts on air quality and mitigation
6 measures.

7 The key sources of data and information used in the preparation of this section are:

- 8 ● California ambient air quality standards (CAAQS) (California Air Resources Board 2010a).
- 9 ● Air Designation Maps/State and National (California Air Resources Board 2010b).
- 10 ● iADAM air quality data statistics (California Air Resources Board 2011).
- 11 ● The Green Book of Nonattainment Areas for Criteria Pollutants (U.S. Environmental Protection
12 Agency 2011).
- 13 ● CEQA Air Quality Guidelines (Monterey Bay Unified Air Pollution Control District 2008a).
- 14 ● 2008 Air Quality Management Plan for the Monterey Bay Region (Monterey Bay Unified Air
15 Pollution Control District 2008b).

1 **Table 3.2-1. Summary of Project Impacts on Air Quality**

Project Impact	Project Elements										Cumulative
	PBL	SBI	COL-EC	Area M		SUB	RD	TRA	INF		
				MH	MR						
A. Air Quality Plan Consistency											
AQ-A1. The proposed project would be consistent with the 2008 Air Quality Management Plan.	— (Applies to proposed project as a whole)										○
B. Long-Term Emissions											
AQ-B1. The proposed project would result in a long-term increase in ROG, NOx, CO, and PM10 emissions due to vehicular traffic generated by development, but would not exceed air quality standards of daily emissions thresholds.	○ (Applies to proposed project as a whole)										○
C. Construction Emissions											
AQ-C1. The proposed project would result in a short-term increase in PM10 emissions due to grading and construction.	● (Applies to proposed project as a whole)										●
Mitigation Measures:	AQ-C1. Implement measures to control fugitive dust emissions. AQ-C2. Implement measures to control construction-related exhaust emissions.										
D. Sensitive Receptors											
AQ-D1. The proposed project would result in the emission of diesel toxic air contaminants, which pose a risk to human health, from diesel truck and equipment use during construction.	⊙	○	⊙	○	○	⊙	⊙	⊙	⊙	⊙	
Mitigation Measures:	AQ-D1. Implement after-market emissions control technology on on-road and off-road construction equipment.										
AQ-D2. The proposed project would expose sensitive receptors to less-than-substantial pollutant concentrations of CO from project-related traffic.	○ (Applies to proposed project as a whole)										⊙
E. Odors											
AQ-E1. The proposed project would expose new sensitive receptors to objectionable odors from the Equestrian Center.	○	○	⊙	○	○	⊙	○	○	○	—	
Mitigation Measures:	AQ-E1. Prepare and implement a manure management plan.										
Notes: ● = Significant unavoidable impact. ⊙ = Significant impact that can be reduced to less than significant. ○ = Less-than-significant impact. — = No impact or not applicable to the development site. PBL – The Lodge at Pebble Beach; SBI – Inn at Spanish Bay; COL-EQC – Collins Field-Equestrian Center-											

Project Impact	Project Elements									Cumulative
	PBL	SBI	COL-EC	Area M		SUB	RD	TRA	INF	
				MH	MR					
Special Events Area; MH – Area M Spyglass Hill Resort Hotel (Option 1); MR – Area M Spyglass Hill Residential Lots (Option 2); RES SUB – Residential Subdivisions; RD – Roadway Improvements; TRA – Trail Improvements; INF – Infrastructure Improvements; Cumulative – Proposed Project’s Contribution to Cumulative Impacts										

1

2 Regulatory Setting

3 The study area and surrounding areas are subject to air quality regulations developed and
 4 implemented at the Federal, state, and local levels. At the Federal level, the U.S. Environmental
 5 Protection Agency (EPA) is responsible for implementation of the Clean Air Act (CAA). Some
 6 portions of the CAA (e.g., certain mobile-source and other requirements) are implemented directly
 7 by EPA. Other portions of the CAA (e.g., stationary-source requirements) are implemented by state
 8 and local agencies.

9 Responsibility for attaining and maintaining air quality in California is divided between the
 10 California Air Resources Board (ARB) and regional air quality districts. Areas of control for the
 11 regional districts are set by ARB, which divides the state into air basins. These air basins are defined
 12 by topography that limits air flow access, or by county boundaries. Plans, policies, and regulations
 13 relevant to the proposed project are discussed below.

14 Federal

15 The following federal regulations related to air quality are likely to apply to the proposed project.

16 Clean Air Act and National Ambient Air Quality Standards

17 The Federal CAA, promulgated in 1963 and amended several times thereafter, including the 1990
 18 Clean Air Act amendments (CAAA), establishes the framework for modern air pollution control. The
 19 act directs EPA to establish national ambient air quality standards (NAAQS) for six criteria
 20 pollutants: ozone, carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and
 21 particulate matter (PM), which consists of PM 10 microns or less in diameter (PM10) and PM 2.5
 22 microns or less in diameter (PM2.5). The NAAQS are divided into primary and secondary standards;
 23 the former are set to protect human health within an adequate margin of safety, and the latter are
 24 set to protect valued environmental resources, such as plant and animal life. Table 3.2-2 summarizes
 25 the NAAQS.

26 The CAA requires states to submit a state implementation plan for areas in non-attainment for
 27 federal standards. The SIP, which is reviewed and approved by EPA, must demonstrate how the
 28 federal standards would be achieved. Failing to submit a plan or secure approval could lead to denial
 29 of federal funding and permits. In cases where the SIP is submitted by the state, but fails to
 30 demonstrate achievement of the standards, EPA is directed to prepare a federal implementation
 31 plan.

1 **Federal Tailpipe Emission Standards**

2 To reduce emissions from off-road diesel equipment, on-road diesel trucks, and harbor craft, EPA
3 established a series of increasingly strict emission standards for new engines. New construction
4 equipment used for the proposed project, including heavy-duty trucks, off-road construction
5 equipment, tugboats, and barges, will be required to comply with the emission standards.

6 **State**

7 The following state regulations related to air quality are likely to apply to the proposed project.

8 **California Clean Air Act and California Ambient Air Quality Standards**

9 In 1988, the state legislature adopted the California Clean Air Act (CCAA), which established a
10 statewide air pollution control program. The CCAA requires all air districts in the state to endeavor
11 to meet the CAAQS by the earliest practical date. Unlike the federal CAA, the CAAQS do not set
12 precise attainment deadlines. Instead, the CCAA establishes increasingly stringent requirements for
13 areas that will require more time to achieve the standards. The CAAQS are generally more stringent
14 than the NAAQS and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride,
15 and visibility-reducing particles. The CAAQS and NAAQS are listed together in Table 3.2-2.

16 The ARB and local air districts bear responsibility for achieving California's air quality standards,
17 which are to be achieved through district-level air quality management plans that would be
18 incorporated into the state implementation plan. In California, EPA has delegated authority to
19 prepare state implementation plans to the ARB, which, in turn, has delegated that authority to
20 individual air districts. The ARB traditionally has established state air quality standards, maintaining
21 oversight authority in air quality planning, developing programs for reducing emissions from motor
22 vehicles, developing air emission inventories, collecting air quality and meteorological data, and
23 approving state implementation plans.

24 The CCAA substantially adds to the authority and responsibilities of air districts. The CCAA
25 designates air districts as lead air quality planning agencies, requires air districts to prepare air
26 quality plans, and grants air districts authority to implement transportation control measures. The
27 CCAA also emphasizes the control of "indirect and area-wide sources" of air pollutant emissions. The
28 CCAA gives local air pollution control districts explicit authority to regulate indirect sources of air
29 pollution and to establish traffic control measures.

Table 3.2-2. National and California Ambient Air Quality Standards

Pollutant	Symbol	Average Time	Standard (parts per million [ppm])		Standard (micrograms per cubic meter [$\mu\text{g}/\text{m}^3$])		Violation Criteria	
			California	National	California	National	California	National
Ozone*	O ₃	1 hour	0.09	-	180	-	If exceeded	-
		8 hours	0.070	0.075	137	147	If exceeded	If fourth-highest 8-hour concentration in a year, averaged over 3 years, is exceeded at each monitor in an area
Carbon monoxide	CO	8 hours	9.0	9	10,000	10,000	If exceeded	If exceeded on more than 1 day per year
		1 hour	20	35	23,000	40,000	If exceeded	If exceeded on more than 1 day per year
Nitrogen dioxide	NO ₂	Annual arithmetic mean	0.030	0.053	57	100	If exceeded	If exceeded on more than 1 day per year
		1 hour	0.18	0.100	339	188	If exceeded	-
Sulfur dioxide	SO ₂	24 hours	0.04	-	105	-	If exceeded	If exceeded on more than 1 day per year
		1 hour	0.25	0.075	655	196	If exceeded	-
		3 hour	-	0.50*	-	1300*-		
Hydrogen sulfide	H ₂ S	1 hour	0.03	-	42	-	If equaled or exceeded	-
Vinyl chloride	C ₂ H ₃ Cl	24 hours	0.01	-	26	-	If equaled or exceeded	-
Inhalable particulate matter	PM10	Annual arithmetic mean	-	-	20	-	-	-
		24 hours	-	-	50	150	If exceeded	If exceeded on more than 1 day per year
	PM2.5	Annual arithmetic mean	-	-	12	15.0	-	If 3-year average from single or multiple community-oriented monitors is exceeded
		24 hours	-	-	-	35	-	If 3-year average of 98th percentile at each population-oriented monitor in an area is exceeded
Sulfate particles	SO ₄	24 hours	-	-	25	-	If equaled or exceeded	-
Lead particles	Pb	Calendar quarter	-	-	-	1.5	-	If exceeded no more than 1 day per year
		30-day average	-	-	1.5	-	If equaled or exceeded	-
		Rolling 3-month average	-	-	-	0.15	If equaled or exceeded	Averaged over a rolling 3-month period

Source:
California Air Resources Board 2010a.

Notes:
* = Secondary standard.

1 **Idling Limit Regulation**

2 On June 15, 2008, the ARB adopted a regulation for off-road diesel vehicles. The regulation is
3 designed to reduce toxic air contaminants (TACs) from diesel-powered construction and mining
4 vehicles operating in California. Fleet owners are subject to retrofit or accelerated
5 replacement/repower requirements for which ARB must obtain authorization from EPA prior to
6 enforcement.

7 The regulation also imposes idling limitations on owners, operators, and renters or lessees of off-
8 road diesel vehicles. The idling limits became effective on June 15, 2008, and require an operator of
9 applicable off-road vehicles (self-propelled diesel-fueled vehicles of 25 horsepower and greater that
10 were not designed for on-road driving) to limit idling to no more than 5 minutes. These
11 requirements are specified in 13 CCR 2449(d)(3).

12 **State Tailpipe Emission Standards**

13 To reduce emissions from off-road diesel equipment, on-road diesel trucks, and harbor craft, the
14 ARB established a series of increasingly strict emission standards for new engines. New
15 construction equipment used for the proposed project, including heavy duty trucks, off-road
16 construction equipment, tugboats, and barges, will be required to comply with the standards.

17 **State NO_x Reduction Program**

18 The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) is a
19 voluntary program that offers grants to owners of heavy-duty vehicles and equipment. The program
20 is a partnership between the ARB and the local air districts throughout the state. Locally, the air
21 districts administer the Carl Moyer program. The purpose of the program is to reduce air pollution
22 emissions from heavy-duty engines.

23 **Local**

24 At the local level, responsibilities of air quality districts include overseeing stationary-source
25 emissions, approving permits, maintaining emissions inventories, maintaining air quality stations,
26 overseeing agricultural burning permits, and reviewing air quality-related sections of
27 environmental documents required by CEQA. The air quality districts are also responsible for
28 establishing and enforcing local air quality rules and regulations that address the requirements of
29 Federal and state air quality laws and for ensuring that NAAQS and CAAQS are met.

30 The following local policies related to air quality may apply to implementation of the proposed
31 project.

32 **Monterey Bay Unified Air Pollution Control District**

33 The project construction sites are located in Monterey County, where the Monterey Bay Unified Air
34 Pollution Control District (MBUAPCD) has local air quality jurisdiction over the project components.
35 MBUAPCD has adopted CEQA emission thresholds in their CEQA Air Quality Guidelines (Monterey
36 Bay Unified Air Pollution Control District 2008a) to determine the level of significance of project-
37 related emissions. Emissions that exceed the designated threshold levels are considered potentially
38 significant and should be mitigated.

1 Under the California CAA, the MBUAPCD is required to develop an air quality plan for nonattainment
2 criteria pollutants in the air district. The most recent air quality plan adopted by the MBUAPCD is
3 the 2008 Air Quality Management Plan for the Monterey Bay Region (Monterey Bay Unified Air
4 Pollution Control District 2008b) (AQMP). This plan outlines strategies to achieve the health-based
5 ozone standard.

6 All projects located in Monterey County are subject to the MBUAPCD regulations in effect at the time
7 of construction. Specific regulations applicable to the proposed project components may involve
8 diesel construction equipment emissions, fugitive dust, on-road haul truck emissions, and general
9 permit requirements. Listed below are descriptions of MBUAPCD rules that would be applicable to
10 the proposed project.

- 11 • Rule 400, Visible Emissions.
- 12 • Rule 402, Nuisances.
- 13 • Rule 403, Particulate Matter.
- 14 • Rule 424, National Emission Standards for Hazardous Air Pollutants.
- 15 • Rule 42j, Use of Cutback Asphalt.
- 16 • Rule 426, Architectural Coatings.
- 17 • Rule 439, Building Removals.

18 **Monterey County General Plan (1982)**

19 The 1982 General Plan includes a goal of providing for the protection and enhancement of Monterey
20 County's air quality. Policies in the 1982 General Plan include integration of land use and
21 development policies, encouraging the use of transit, bicycles and pedestrian alternatives to
22 automobile travel, a roadside tree program and maintenance of forested areas for their air purifying
23 functions, concentrating commercial development in designated centers that can be better served by
24 transit, and the promotion of mixed land uses. Policy 20.2.1 requires the County to condition
25 approval of new commercial development on meeting federal and state ambient air quality
26 standards and the rules and regulations of MBUAPCD. Other policies require the County to support
27 regional air quality plans, support air pollution control strategies of the MBUAPCD, and air quality
28 monitoring.

29 **Monterey County Local Coastal Program**

30 The existing and proposed LUP and CIP do not contain any specific policies relative to air quality.

31 **Environmental Setting**

32 **Regional Conditions**

33 The North Central Coast Air Basin (NCCAB) is comprised of Monterey, Santa Cruz, and San Benito
34 Counties. The basin lies along the central coast of California and covers an area of 5,159 square
35 miles. The northwest sector of the basin is dominated by the Santa Cruz Mountains. The Diablo
36 Range marks the northeastern boundary, and together with the southern extent of the Santa Cruz
37 Mountains forms the Santa Clara Valley, which extends into the northeastern tip of the Basin.

1 Farther south, the Santa Clara Valley evolves into the San Benito Valley which runs northwest-
2 southeast and has the Gabilan Range as its western boundary. To the west of the Gabilan Range is
3 the Salinas Valley, which extends from Salinas at its northwestern end to south of King City at its
4 southeastern end. The western side of the Salinas Valley is formed by the Sierra de Salinas, which
5 also forms the eastern side of the smaller Carmel Valley. The coastal Santa Lucia Range defines the
6 western side of the Carmel Valley.

7 The semi-permanent high-pressure cell in the eastern Pacific, known as the Pacific High, is the basic
8 controlling factor in the climate of the air basin. In the summer, the high pressure cell is dominant
9 and causes persistent west and northwest winds over the entire California coast. Air descends in the
10 Pacific High, forming a stable temperature inversion of hot air over a cool coastal layer of air. The
11 onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal
12 valleys. The warmer air above acts as a lid to inhibit vertical air movement.

13 The generally northwest-southeast orientation of mountainous ridges tends to restrict and channel
14 the summer onshore air currents. Surface heating in the interior portion of the Salinas and San
15 Benito Valleys creates a weak low pressure that intensifies the onshore air flow during the
16 afternoon and evening.

17 In the fall, the surface winds become weak, and the marine layer grows shallow, dissipating
18 altogether on some days. The air flow is occasionally reversed in a weak offshore movement, and the
19 relatively stationary air mass is held in place by the Pacific High, which allows pollutants to build up
20 over a period of a few days. It is most often during this season that north or east winds develop and
21 transport pollutants from either the San Francisco Bay area or the Central Valley into the NCCAB.

22 During the winter, the Pacific High migrates southward and has less influence on the air basin. Air
23 frequently flows in a southeasterly direction out of the Salinas and San Benito Valleys, especially
24 during night and morning hours. Northwest winds are nevertheless still dominant in winter, but
25 easterly flow is more frequent. The general absence of deep, persistent inversions and the
26 occasional storm systems usually result in good air quality for the basin as a whole in winter and
27 early spring.

28 According to data recorded by the Monterey station, the project area experiences moderate
29 temperatures and humidity. Temperatures average 58° Fahrenheit (F) annually. Summer afternoon
30 high temperatures average 61° F, decreasing to an average 50° F overnight. Winter temperatures
31 average 56° F during the day and 43° F at night. Temperatures above 70° F, or below 40° F, occur
32 only in unusual weather conditions. Because of the moderating marine influence, which decreases
33 with distance from the ocean, monthly and annual spreads between temperatures are greatest
34 inland and smallest at the coast. Temperature has an important influence on basin wind flow,
35 dispersion along mountain ridges, vertical mixing, and photochemistry.

36 According to data recorded from the Monterey station, precipitation is highly variable seasonally.
37 Rainfall in the Monterey area averages 25.5 inches annually. Summers are often completely dry,
38 with frequent periods of no rain through the early fall. Annual rainfall is lowest in the coastal plain
39 and inland valleys, higher in the foothills, and highest in the mountains.

40 **Background Information on Air Pollutants**

41 Air quality studies generally focus on five pollutants most commonly measured and regulated, and
42 referred to as criteria air pollutants: ozone, CO, inhalable PM (PM10 and PM2.5), NO₂, and SO₂.
43 Because ozone, a photochemical oxidant, is not emitted into the air directly from sources, emissions

1 of ozone precursors, including NO_x and reactive organic gasses (ROG), are regulated with the aim of
2 reducing ozone formation in the lowermost region of the troposphere.

3 Ozone and NO₂ are considered regional pollutants because they (or their precursors) affect air
4 quality on a regional scale. NO₂ reacts photochemically with ROG to form ozone, and this reaction
5 occurs at some distance downwind of the source of pollutants. Pollutants such as CO, PM10, and
6 PM2.5 are considered to be local pollutants because they tend to disperse rapidly with distance from
7 the source.

8 The principal characteristics surrounding these pollutants are discussed below. TACs are also
9 discussed below, although no air quality standards exist for these pollutants.

10 **Ozone (O₃)**

11 Ozone is an oxidant that attacks synthetic rubber, textiles, and other materials and causes extensive
12 damage to plants by leaf discoloration and cell damage. It is also a severe eye, nose, and throat
13 irritant and increases susceptibility to respiratory infections. Ozone is not emitted directly into the
14 air: it forms from a photochemical reaction in the atmosphere. Ozone precursors, including ROG and
15 NO_x, are emitted by mobile sources and stationary combustion equipment and react in the presence
16 of sunlight to form ozone. Because reaction rates depend on the intensity of ultraviolet light and air
17 temperature, ozone conversion occurs primarily in the summertime.

18 **Carbon Monoxide (CO)**

19 CO is essentially inert to most materials and to plants but can significantly affect human health
20 because it combines readily with hemoglobin and thus reduces the amount of oxygen transported in
21 the bloodstream. Effects on humans range from slight headaches to nausea to death. Motor vehicles
22 are the dominant source of CO emissions in most areas. High CO levels develop primarily during
23 winter, when periods of light wind combine with the formation of ground-level temperature
24 inversions—typically from evening through early morning. These conditions result in reduced
25 dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air
26 temperatures.

27 **Particulate Matter (PM)**

28 PM suspended in the atmosphere can reduce visibility, retard plant growth, corrode materials, and
29 affect human health. Health concerns focus on particles small enough to reach the lungs when
30 inhaled (inhalable PM). NAAQS and CAAQS for PM apply to two classes of inhalable particulates:
31 PM10 and PM2.5.

32 **Nitrogen Dioxide (NO₂)**

33 NO₂ is a brownish gas that contributes to the formation of ground-level ozone pollution. NO₂
34 increases respiratory disease and irritation and may reduce resistance to certain infections. The
35 majority of ambient NO₂ is not directly emitted but is formed rather quickly from the reaction of
36 nitric oxide (NO) and oxygen (O₂) in the atmosphere. NO and NO₂ are the primary pollutants that
37 make up the group of pollutants referred to as NO_x. In the presence of sunlight, complex reactions of
38 NO_x with ozone and other air pollutants produce the majority of NO₂ in the atmosphere. NO₂ is one
39 of the NO_x emitted from high-temperature combustion processes, such as those occurring in trucks,
40 cars, and power plants. Indoors, home heaters and gas stoves also produce substantial amounts of
41 NO₂.

1 **Sulfur Dioxide (SO₂)**

2 SO₂ is a colorless, irritating gas with a rotten-egg smell formed primarily by the combustion of
 3 sulfur-containing fossil fuels. SO₂ is formed when sulfur-containing fuel is burned by mobile sources,
 4 such as locomotives and off-road diesel equipment. SO₂ also is emitted from several industrial
 5 processes, such as petroleum refining and metal processing.

6 **Toxic Air Contaminants (TACs)**

7 TACs are pollutants that may result in an increase in mortality or serious illness, or that may pose a
 8 present or potential hazard to human health. Health effects of TACs include cancer, birth defects,
 9 neurological damage, damage to the body’s natural defense system, and diseases that lead to death.
 10 In 1998, following a 10-year scientific assessment process, the ARB identified PM from diesel-fueled
 11 engines—commonly called diesel particulate matter (DPM)—as a TAC. Compared to other air toxics
 12 the ARB has identified, DPM emissions are estimated to be responsible for about 70% of the total
 13 ambient air toxics risk (California Air Resources Board 2000:1).

14 **Site-Specific Conditions**

15 The existing air quality conditions in the project area can be characterized by monitoring data
 16 collected in the region. The nearest monitoring stations in Monterey County are selected to present
 17 air quality of the project vicinity. Air quality concentrations typically are expressed in terms of ppm
 18 or µg/m³. The nearest monitoring stations to the study area are the Pearl Street Station in King City,
 19 which monitors ozone and PM10 concentrations, and the Salinas station, which monitors CO and
 20 PM2.5 concentrations.

21 Table 3.2-3 summarizes air quality monitoring data from the King City and Salinas monitoring
 22 stations for the last 3 years for which complete data are available (2008–2010). The monitoring
 23 stations have not recently experienced violations of the NAAQS and CAAQS for any pollutants except
 24 PM10. Air quality is generally good in the region and is improving, as indicated by the declining
 25 number of measured violations for PM10. Data from these two monitoring stations are used because
 26 they are the closest monitoring stations to the project area. However, they are in the Salinas Valley
 27 in the inland portion of Monterey County, and the project area is on the coast and would likely have
 28 better air quality conditions because of the dominance of onshore breezes and because the project
 29 area is not downwind of urban or agricultural areas.

30 **Table 3.2-3. Ambient Air Quality Monitoring Data from the King City and Salinas Stations (2008–**
 31 **2010)**

Pollutant Standards	Monitoring Data		
	2008	2009	2010
1-Hour Ozone (ppm) (King City)			
Maximum 1-hour concentration	0.088	0.069	0.078
1-hour California designation value	0.07	0.07	0.07
1-hour expected peak day concentration	0.070	0.069	0.072
<i>Number of days standard exceeded^a</i>			
CAAQS 1-hour (>0.09 ppm)	0	0	0
8-Hour Ozone (ppm) (King City)			
National maximum 8-hour concentration	0.068	0.059	0.067

Pollutant Standards	Monitoring Data		
	2008	2009	2010
National second-highest 8-hour concentration	0.063	0.054	0.066
State maximum 8-hour concentration	0.068	0.059	0.068
State second-highest 8-hour concentration	0.063	0.054	0.066
8-hour national designation value	–	0.054	0.058
8-hour California designation value	0.068	0.063	0.066
8-hour expected peak day concentration	–	0.063	0.066
<i>Number of days standard exceeded^a</i>			
<i>NAAQS 8-hour (>0.075 ppm)</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>CAAQS 8-hour (>0.070 ppm)</i>	<i>0</i>	<i>0</i>	<i>0</i>
Carbon Monoxide (ppm) (Salinas)			
National ^b maximum 8-hour concentration	0.89	0.90	0.76
National ^b second-highest 8-hour concentration	0.80	0.85	0.76
California ^c maximum 8-hour concentration	0.89	0.90	0.76
California ^c second-highest 8-hour concentration	0.80	0.85	0.76
Maximum 1-hour concentration ^g	2.5	2.0	2.2
Second-highest 1-hour concentration ^g	2.0	1.7	1.6
<i>Number of days standard exceeded^a</i>			
<i>NAAQS 8-hour (≥ 9 ppm)</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>CAAQS 8-hour (≥ 9.0 ppm)</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>NAAQS 1-hour (≥ 35 ppm)</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>CAAQS 1-hour (≥ 20 ppm)</i>	<i>0</i>	<i>0</i>	<i>0</i>
Particulate Matter (PM10)^d ($\mu\text{g}/\text{m}^3$) (King City)			
National ^b maximum 24-hour concentration	63.0	43.0	53.0
National ^b second-highest 24-hour concentration	63.0	42.0	51.0
State ^c maximum 24-hour concentration	65.0	44.0	54.0
State ^c second-highest 24-hour concentration	64.0	43.0	51.0
State annual average concentration ^e	27.4	22.1	20.6
National annual average concentration	26.4	21.6	19.9
<i>Number of days standard exceeded^a</i>			
<i>NAAQS 24-hour ($>150 \mu\text{g}/\text{m}^3$)^f</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>CAAQS 24-hour ($>50 \mu\text{g}/\text{m}^3$)^f</i>	<i>5</i>	<i>0</i>	<i>2</i>
Particulate Matter (PM2.5) ($\mu\text{g}/\text{m}^3$) (King City)			
National ^b maximum 24-hour concentration	17.8	18.7	16.2
National ^b second-highest 24-hour concentration	13.8	13.6	15.9
State ^c maximum 24-hour concentration	17.8	18.7	9.8
State ^c second-highest 24-hour concentration	13.8	13.6	9.8
National annual designation value	7.1	6.7	6.5
National annual average concentration	7.2	5.7	6.6
State annual designation value	7	7	5
State annual average concentration ^e	7.1	5.8	4.5
<i>Number of days standard exceeded^a</i>			
<i>NAAQS 24-hour ($>35 \mu\text{g}/\text{m}^3$)^f</i>	<i>0</i>	<i>0</i>	<i>0</i>

Pollutant Standards	Monitoring Data		
	2008	2009	2010
Sources: California Air Resources Board 2011; U.S. Environmental Protection Agency 2009.			
Notes:			
CAAQS: California ambient air quality standards.			
NAAQS: National ambient air quality standards.			
– Insufficient data available to determine the value.			
^a An exceedance is not necessarily a violation.			
^b National statistics are based on standard conditions data. In addition, national statistics are based on samplers using federal reference or equivalent methods.			
^c State statistics are based on local conditions data. In addition, State statistics are based on California approved samplers.			
^d Measurements usually are collected every 6 days.			
^e State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.			
^f Mathematical estimate of how many days that concentrations would have been measured as higher than the level of the standard had each day been monitored. Values have been rounded.			
^g Data presented is for years 2006–2008, as 2009 and 2010 are unavailable.			

1

2 **Air Quality Attainment Status**

3 Local monitoring data (Table 3.2-3) are used to designate areas as nonattainment, maintenance,
 4 attainment, or unclassified for the NAAQS and CAAQS. The four designations are further defined as
 5 follows:

- 6 ● Nonattainment—assigned to areas where monitored pollutant concentrations consistently
 7 violate the standard in question.
- 8 ● Maintenance—assigned to areas where monitored pollutant concentrations exceeded the
 9 standard in question in the past, but are no longer in violation of that standard.
- 10 ● Attainment—assigned to areas where pollutant concentrations meet the standard in question
 11 over a designated period of time.
- 12 ● Unclassified—assigned to areas where data are insufficient to determine whether a pollutant is
 13 violating the standard in question.

14 Table 3.2-4 summarizes the attainment status of Monterey with regard to the NAAQS and CAAQS.

1 **Table 3.2-4. Federal and State Attainment Status of Monterey County**

Pollutant	Monterey County	
	NAAQS	CAAQS
1-hour O ₃	-	Moderate Nonattainment
8-hour O ₃	Unclassified/Attainment	Nonattainment
CO	Unclassified/Attainment	Attainment
PM2.5	Unclassified/Attainment	Attainment
PM10	Unclassified/Attainment	Nonattainment

Sources:

California Air Resources Board 2010b; U.S. Environmental Protection Agency 2011.

Notes:

- = No applicable standard.
- (P) = Designation applies to a portion of the County.
- CAAQS = California ambient air quality standards.
- CO = Carbon monoxide.
- NAAQS = National ambient air quality standards.
- O₃ = Ozone.
- PM10 = Particulate matter less than 10 microns in diameter.
- PM2.5 = Particulate matter less than 2.5 microns in diameter.

2

3 **Sensitive Receptors**

4 The MBUAPCD generally defines a sensitive receptor as any residence including private homes,
 5 condominiums, apartments, and living quarters; education resources such as preschools and
 6 kindergarten through grade twelve (K-12) schools; daycare centers; and health care facilities such
 7 as hospitals or retirement and nursing homes. A sensitive receptor includes long-term care
 8 hospitals, hospices, prisons, and dormitories or similar live-in housing (Monterey Bay Unified Air
 9 Pollution Control District 2008a). Sensitive receptors in the vicinity of the project area are
 10 summarized in Table 3.2-5.

1 **Table 3.2-5. Air Quality Sensitive Receptors in the Project Area**

Project Development Areas	Distance to Sensitive Receptors (feet)
The Lodge at Pebble Beach	Private residences approximately 100 feet from Fairway One reconstruction, 200 feet from Colton Building construction, and 300 feet from Conference Center reconstruction. Additionally, private residences are approximately 50 feet of the parking facility construction.
The Inn at Spanish Bay	Residences approximately 400 feet to the south, directly across 17-Mile Drive, and 750 feet to the north, across from the resort’s main entry road, from golf cottage construction.
Collins Field–Equestrian Center–Special Events Area	Residences approximately 100 feet to the southwest, directly across Sombria Lane/Portola Road Residences approximately 100 feet to the southwest, directly across Alva Lane Residences approximately 100 feet to the southeast, directly across Ondulado Road
Area M Spyglass Hill	Residences approximately 750 feet southeast of Spyglass Hill Road/Stevenson Drive intersection
Residential Lot Subdivisions	
F-2	Residences approximately 400 feet west and east of golf course
I-2	Residential developments/subdivisions located approximately 100 feet across Viscaino and Ronda Roads
J	Residences located approximately 100 feet across Spyglass Woods Drive
K	Residences located approximately 100 feet to the northeast
L	Residences approximately 100 feet west of the area
U	Residences approximately 450 feet north of Drake Road Residence located along south border on Portola Road
V	Residences located approximately 100 feet across Forest Lake Road
Collins Residence	Residences located approximately 100 feet along south border and across Alva Lane
Corporation Yard	Residences located approximately 650 feet south of Sunridge Road
Roadway Improvements	
SR 1/SR 68/17-Mile Drive	Residences within approximately 200 feet along the south side of SR 68 west of the intersection reconfiguration area between the development site and the Community Hospital of the Monterey Peninsula
17-Mile Drive/Congress Road	Residences located approximately 350 feet to north across golf links and to south/southwest
Lopez Road/Congress Road	Residences located approximately 450 feet north
Lopez Road/Sunridge Road	Residences located to the northwest approximately 250 feet
Portola Road/Stevenson Drive	Residences approximately 500 feet to the northeast and south

2

1 Impact Analysis

2 Methodology

3 Construction-Related Emissions

4 Construction of the proposed project would result in the temporary generation of emissions of ROG,
5 NO_x, CO, PM_{2.5}, and PM₁₀ that would result in short-term impacts on ambient air quality in the
6 area. Emissions would originate from mobile and stationary construction equipment exhaust,
7 employee vehicle exhaust, dust from clearing the land, exposed soil eroded by wind, and ROG from
8 architectural coatings and asphalt paving. Construction-related emissions would vary substantially
9 depending on the level of activity, length of the construction period, specific construction
10 operations, types of equipment, number of personnel, wind and precipitation conditions, and soil
11 moisture content.

12 Construction emissions of PM₁₀ were estimated with the CalEEMod emissions model (version
13 2011.1.1, developed by Environ International Corp. in collaboration with the South Coast Air Quality
14 Management District and other California air districts), which analyzes the type of construction
15 equipment used and the duration of the construction period associated with construction of each of
16 the land uses specified. A detailed inventory of construction equipment that will be used for the
17 proposed project was not available, although a detailed estimate of the construction schedule for
18 each project element was provided by the project applicant by activity (i.e., grading/demolition,
19 building construction, paving, and architectural coating), in addition to maximum daily area
20 disturbed and cut-and-fill amounts. This data was input into the CalEEMod model to estimate
21 construction equipment based on model default values.

22 A screening-level assessment of potential health risks from exposure of existing sensitive receptors
23 to DPM emissions from construction exhaust was performed using methodology developed by ICF
24 consistent with Office of Environmental Health Hazard Assessment (OEHHA) methodology and
25 guidance. The analysis used emission factors for off-road equipment from the URBEMIS and
26 EMFAC2007 models, while emission concentrations at nearby sensitive receptors were calculated
27 with the CALS3QHCR and ISCST3 dispersion models. The screening-level analysis of pollutant
28 concentrations and associated health risks was conducted for the Pebble Beach Driving Range
29 Relocation to Collins Field. Relocation of the Driving Range, as it represents a worst-case scenario
30 for potential health risks from construction-related exhaust emissions due to the proximity of
31 nearby sensitive receptors within 100 feet directly across Ondulado Road and across Alva Lane, as
32 well as the anticipated level of construction activity required (i.e., earthwork would entail
33 approximately 36,500 cubic yards of cut material and 27,800 cubic yards of fill material,
34 representing the greatest amount of earthwork in close proximity to existing sensitive land uses).
35 Health risks at receptors nearby other construction areas were scaled from the health risks
36 calculated at the Driving Range Relocation to Collins Field based on distances of sensitive receptors
37 to the project development areas (Table 3.2-5).

38 Operation-Related Emissions

39 Two air pollutant sources—area and mobile—are expected during operation of the proposed
40 project. Area sources can include area-wide, natural, and groups of stationary sources (such as dry
41 cleaners and gas stations). At the proposed project site, area sources include emissions from natural
42 gas combustion for heating requirements (i.e., water heater and furnace), landscaping activities,

1 consumer products (i.e., automotive products, household cleaners, and personal care products), and
2 periodic paint emissions from facility upkeep. Area emissions associated with the proposed project
3 were estimated using the CalEEMod model based on land use data provided by the applicant.

4 Mobile sources are sources of emissions associated with vehicle trips and include employees,
5 deliveries, and maintenance activities. The primary operational emissions associated with the
6 proposed project are ozone precursors, CO, PM2.5, and PM10, emitted as vehicle exhaust. Emissions
7 of ROG, NO_x, and PM10 were evaluated using the CalEEMod model using existing-year conditions to
8 represent the worst-case emissions year, while the effects of CO hot spot emissions were evaluated
9 through CO dispersion modeling for 2011, 2015, and 2030 under with-project and without-project
10 conditions¹. Refer to Appendix E of this Draft EIR for modeling results.

11 **Criteria for Determining Significance**

12 In accordance with CEQA, the State CEQA Guidelines, Monterey County plans and policies, and
13 agency and professional standards, a project impact would be considered significant if the project
14 would:

15 **A. Air Quality Plan Consistency**

- 16 • Conflict with or obstruct implementation of the AQMP.

17 **B. Long-Term Emissions**

- 18 • Result in generation of emissions of or in excess of (Monterey Bay Unified Air Pollution Control
19 District 2008):
 - 20 ○ 137 pounds per day for volatile organic compounds (VOC) (direct and indirect).
 - 21 ○ 137 pounds per day for NO_x (direct and indirect).
 - 22 ○ 550 pounds per day of CO (direct).
 - 23 ○ CAAQS violation for CO.
 - 24 ○ 82 pounds per day of PM10.

25 **C. Construction Emissions**

- 26 • Result in generation of emissions of 82 pounds or more per day of PM10 due to construction.
- 27 • Result in a short-term increase in TACs.

28 **D. Sensitive Receptors**

- 29 • Expose sensitive receptors (e.g., residents, schools, hospitals) to substantial pollutant
30 concentrations (i.e. CO levels in excess of the CAAQS or NAAQS or cancer risks in excess of 10 in
31 one million).
- 32 • Result in a non-cancer (i.e., chronic or acute) hazard index (HI) greater than 1.0.

¹ This analysis uses the same conditions as the transportation analysis: 2011 which is the existing or baseline conditions, 2015 which is considered the likely timeframe for project, and 2030 which is full buildout of the project (Fehr & Peers 2011).

1 E. Odors

- 2 • Create objectionable odors in substantial concentrations, which could result in injury, nuisance,
3 or annoyance to a considerable number of persons or could endanger the comfort, health, or
4 safety of the public.

5 Project Impacts and Mitigation Measures

6 A. Air Quality Plan Consistency

7 **Impact AQ-A1: The proposed project would be consistent with the 2008 Air Quality** 8 **Management Plan. (No impact)**

9 A review of project consistency with the AQMP was conducted by the MBUAPCD comparing the
10 Monterey Bay Area 2008 Regional Forecast prepared by AMBAG with the Department of Finance's
11 Population Estimates Report for Monterey County (Getchell pers. comm.).

12 Based on the MBUAPCD's consistency analysis, the proposed project is not anticipated to exceed the
13 AMBAG's 2020 forecast. The Department of Finance estimates the 2011 population of the
14 unincorporated area of Monterey County to be 100,791 and the proposed project's estimated
15 increase of 297 (100 units x 2.967 occupancy factor) would result in a total of 101,088, below
16 AMBAG's 2020 forecast of 113,778 (Getchell pers. comm.). There would be no impact.

17 B. Long-Term Emissions

18 **Impact AQ-B1: The proposed project would result in a long-term increase in ROG, NO_x, CO,** 19 **and PM₁₀ emissions due to vehicular traffic generated by development, but would not** 20 **exceed air quality standards of daily emissions thresholds. (Less than significant)**

21 The primary operational emissions associated with the proposed project are ozone precursors, CO,
22 and PM₁₀ emitted as area sources (i.e., natural gas, fireplace and landscape fuel consumption) and
23 vehicle exhaust. Daily emissions were estimated using traffic data prepared for the proposed project
24 (Fehr & Peers 2011) and the CalEEMod emissions model (Appendix E). The proposed project's land
25 uses would generate motor-vehicle trips that would in turn generate operational air emissions.
26 Emission estimates for with-project conditions are based on the daily trip generation data (Fehr &
27 Peers 2011).

28 Table 3.2-6 presents area, energy, and mobile source emissions for each project element, as well as
29 total project emissions for both Option 1 (New Resort Hotel) and Option 2 (New Residential Lots)
30 for Area M. The data in Table 3.2-6 indicates that total project-related operational emissions (i.e., all
31 project elements operating concurrently) would not exceed the MBUAPCD's thresholds for project
32 operations at build-out. Therefore, this impact is considered less than significant.

1 **Table 3.2-6. Operational Emissions (lbs/day)**

Project Element	Category	Pounds/Year									Metric Tons/Year			
		ROG	NO _x	CO	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	NBio-CO ₂	CH ₄	N ₂ O	CO _{2e}
New Colton Building (PBL)	Area	0.81	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
	Energy	0.04	0.36	0.30		0.00	0.03		0.00	0.03	71.88	0.00	0.00	72.31
	Mobile	1.12	2.43	11.71	1.03	0.08	1.11	0.04	0.08	0.11	173.19	0.01	0.00	173.49
	Total	1.97	2.79	12.01	1.03	0.08	1.14	0.04	0.08	0.14	245.07	0.01	0.00	245.80
Conference Center Expansion (Ballroom) (SBI)	Area	0.04	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
	Energy	0.00	0.01	0.01		0.00	0.00		0.00	0.00	1.29	0.00	0.00	1.30
	Mobile	0.90	2.07	9.88	0.91	0.07	0.98	0.03	0.07	0.10	151.80	0.01	0.00	152.05
	Total	0.94	2.08	9.89	0.91	0.07	0.98	0.03	0.07	0.10	153.09	0.01	0.00	153.35
New Guest Cottages (SBI)	Area	1.61	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
	Energy	0.08	0.72	0.61		0.00	0.05		0.00	0.05	143.75	0.00	0.00	144.62
	Mobile	2.24	4.87	23.42	2.06	0.16	2.22	0.07	0.16	0.23	346.39	0.03	0.00	346.97
	Total	3.93	5.59	24.03	2.06	0.16	2.27	0.07	0.16	0.28	490.14	0.03	0.00	491.60
Conference Center Expansion (Meeting Rooms) (SBI)	Area	0.11	0	0		0	0		0	0	0.00	0.00	0.00	0.00
	Energy	0	0.02	0.02		0	0		0	0	3.64	0.00	0.00	3.66
	Mobile	0.12	0.28	1.35	0.12	0.01	0.13	0.00	0.01	0.01	20.70	0.00	0.00	20.73
	Total	0.23	0.30	1.37	0.12	0.01	0.13	0.00	0.01	0.01	24.34	0.00	0.00	24.39
Residential Lot Subdivision (Area V)	Area	8.18	0.15	12.13		0	1.59		0	1.59	27.34	0.06	0.00	29.23
	Energy	0.02	0.14	0.06		0	0.01		0	0.01	28.83	0.00	0.00	29.00
	Mobile	1.26	2.99	14.16	1.35	0.1	1.45	0.05	0.1	0.15	223.43	0.02	0.00	223.79
	Total	9.46	3.28	26.35	1.35	0.10	3.05	0.05	0.10	1.75	279.60	0.08	0.00	282.02
New Resort Hotel (Area M Spyglass Hill Option 1)	Area	4.03	0	0		0	0		0	0	0.00	0.00	0.00	0.00
	Energy	0.2	1.81	1.52		0	0.14		0	0.14	359.37	0.01	0.01	361.56
	Mobile	6.51	14.14	68.06	5.99	0.46	6.45	0.21	0.46	0.66	1,006.60	0.08	0.00	1,008.30
	Total	10.74	15.95	69.58	5.99	0.46	6.59	0.21	0.46	0.80	1,365.97	0.09	0.01	1,369.86
New Residential Lots (Area M Spyglass Hill Option 2)	Area	5.84	0.1	8.67		0	1.14		0	1.14	19.53	0.04	0.00	20.88
	Energy	0.01	0.1	0.04		0	0.01		0	0.01	20.59	0.00	0.00	20.72
	Mobile	0.9	2.14	10.11	0.96	0.07	1.03	0.03	0.07	0.11	159.59	0.01	0.00	159.85
	Total	6.75	2.34	18.82	0.96	0.07	2.18	0.03	0.07	1.26	199.71	0.05	0.00	201.45
Meeting Facility Expansion (PBL)	Area	0.06	0	0		0	0		0	0	0.00	0.00	0.00	0.00
	Energy	0	0.01	0.01		0	0		0	0	1.93	0.00	0.00	1.94
	Mobile	0.18	0.42	1.99	0.18	0.01	0.2	0.01	0.01	0.02	30.52	0.00	0.00	30.57
	Total	0.24	0.43	2.00	0.18	0.01	0.20	0.01	0.01	0.02	32.45	0.00	0.00	32.51

Project Element	Category	Pounds/Year									Metric Tons/Year			
		ROG	NO _x	CO	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	NBio-CO ₂	CH ₄	N ₂ O	CO ₂ e
Residential Lot Subdivisions (without Area V and Corporation Yard)	Area	37.4	0.67	55.47		0	7.28		0	7.28	125.00	0.27	0.01	133.6
	Energy	0.07	0.62	0.27		0	0.05		0	0.05	131.78	0.00	0.00	132.58
	Mobile	5.74	13.67	64.72	6.15	0.46	6.61	0.21	0.46	0.67	1,021.38	0.08	0.00	1,023.04
	Total	43.21	14.96	120.46	6.15	0.46	13.94	0.21	0.46	8.00	1,278.16	0.36	0.01	1,289.23
Residential Lot Subdivision (Corporation Yard)	Area	5.84	0.1	8.67		0	1.14		0	1.14	19.53	0.04	0.00	20.88
	Energy	0.01	0.1	0.04		0	0.01		0	0.01	20.59	0.00	0.00	20.72
	Mobile	0.9	2.14	10.11	0.96	0.07	1.03	0.03	0.07	0.11	159.59	0.01	0.00	159.85
	Total	6.75	2.34	18.82	0.96	0.07	2.18	0.03	0.07	1.26	199.71	0.05	0.00	201.44
Fairway One Reconstruction (PBL)	Area	1.41	0	0		0	0		0	0	0.00	0.00	0.00	0.00
	Energy	0.07	0.63	0.53		0	0.05		0	0.05	125.78	0.00	0.00	126.55
	Mobile	1.96	4.26	20.49	1.80	0.14	1.94	0.06	0.14	0.2	303.09	0.02	0.00	303.60
	Total	3.44	4.89	21.02	1.80	0.14	1.99	0.06	0.14	0.25	428.87	0.03	0.00	430.15
Total Emissions with Option 1	Area	59.49	0.92	76.27	0.00	0.00	10.01	0.00	0.00	10.01	171.88	0.38	0.01	183.71
	Energy	0.49	4.42	3.37	0.00	0.00	0.34	0.00	0.00	0.34	888.84	0.02	0.01	894.25
	Mobile	20.93	47.27	225.89	20.55	1.56	22.12	0.71	1.56	2.26	3,436.68	0.27	0.00	3,442.39
	Total	80.91	52.61	305.53	20.55	1.56	32.47	0.71	1.56	12.61	4,497.39	0.66	0.03	4,520.35
<i>MBUAPCD threshold (lbs./day)</i>		137	137	550	NA	NA	82	NA	NA	NA	NA	NA	NA	NA
Above MBUAPCD threshold?		No	No	No	NA	NA	No	NA	NA	NA	NA	NA	NA	NA
Total Emissions with Option 2	Area	61.30	1.02	84.94	0.00	0.00	11.15	0.00	0.00	11.15	191.41	0.42	0.01	413.57
	Energy	0.30	2.71	1.89	0.00	0.00	0.21	0.00	0.00	0.21	550.06	0.01	0.01	553.40
	Mobile	15.32	35.27	167.94	15.52	1.17	16.70	0.53	1.17	1.71	2,589.67	0.20	0.00	2,593.95
	Total	76.92	39.00	254.77	15.52	1.17	28.06	0.53	1.17	13.07	3,331.13	0.63	0.02	3,351.94
<i>MBUAPCD threshold (lbs./day)</i>		137	137	550	NA	NA	82	NA	NA	NA	NA	NA	NA	NA
Above MBUAPCD threshold?		No	No	No	NA	NA	No	NA	NA	NA	NA	NA	NA	NA

Notes:

NA = Not Applicable; PBL = The Lodge at Pebble Beach; SBI = The Inn at Spanish Bay.

1 C. Construction Emissions

2 **Impact AQ-C1: The proposed project would result in a short-term increase in PM10 emissions** 3 **due to grading and construction. (Significant and unavoidable)**

4 Construction of the proposed project could result in the temporary generation of PM10 emissions
5 associated with earth moving and site grading, construction worker commute trips, and mobile and
6 stationary construction equipment exhaust. According to the MBUAPCD CEQA guidelines,
7 construction projects that temporarily emit precursors of ozone (i.e., ROG or NO_x) are
8 accommodated in the emission inventories of state and federally required air plans and would not
9 have a significant impact on the attainment and maintenance of state or federal ozone AAQS
10 (Monterey Bay Unified Air Pollution Control District 2008). The MBUAPCD guidelines have an
11 exception if a project uses “non-typical equipment, e.g., grinders, and portable equipment”; the
12 proposed project would use standard construction equipment for residential, commercial, and
13 recreational element construction.

14 Sources of construction-related PM10 emissions include construction equipment exhaust and
15 fugitive dust entrained into the air from construction activities. The proposed project would involve
16 grading at almost all development sites, and up to approximately 247,000 cubic yards of soil would
17 be disturbed with excavation and grading.² Table 2-4 in Chapter 2, Project Description, identifies the
18 cut-and-fill amounts by location. Project elements that would result in substantial excavation (>
19 20,000 cubic yards) at the development site include:

- 20 ● Pebble Beach Driving Range Relocation from Area V to Collins Field (36,500 cubic yards).
- 21 ● Area M Spyglass Hill New Resort Hotel (Option 1) (99,800 cubic yards) or New Residential Lots
22 (Option 2) (48,500 cubic yards).
- 23 ● Residential Lot Subdivision at the Corporation Yard (58,000 cubic yards).

24 The analysis of the construction-related PM10 emissions for project components is based on
25 CalEEMod modeling and construction data provided by the project applicant. Table 3.2-7 and Table
26 3.2-8 present project-related construction emissions of PM10 for each project element by
27 construction activity (i.e., grading/demolition, building construction, paving, and architectural
28 coating) in addition to activity period (i.e., month of construction activity). The modeling analysis
29 evaluated maximum daily emissions. It is assumed that construction activities occurring during a
30 specific month would occur over the entire one-month period, thereby assuming that all
31 construction phases scheduled for a specific month would occur concurrently to represent a worst-
32 case scenario of maximum construction activities operating concurrently.

33 Table 3.2-7 presents unmitigated construction emissions, and Table 3.2-8 presents mitigated
34 construction emissions. The data in Table 3.2-7 indicates that the MBUAPCD’s PM10 significance
35 threshold of 82 pounds/day would be exceeded at various times during the anticipated construction
36 schedule, with a maximum PM10 of approximately 570 pounds/day expected to occur the month of
37 March 2014. Consequently, this impact is considered significant. The mitigated emissions presented
38 in Table 3.2-8 indicate that even with mitigation, construction-related emissions are still anticipated

² Approximately 247,000 cubic yards would be excavated for the Area M Spyglass Hill New Resort Hotel (Option 1) project element; approximately 196,000 cubic yards would be excavated for the Area M Spyglass Hill New Residential Lots (Option 2) project element.

DEL MONTE FOREST PROJECT - PHASE I, II, III, IV PRELIMINARY CONSTRUCTION DURATION

Table 3.2-7. Unmitigated Construction PM10 Emissions

CONSTRUCTION PHASE	Development Site (Duration)	11-19	12-19	1-20	2-20	3-20	4-20	5-20	6-20	7-20	8-20	9-20	10-20	11-20	12-20	1-21	2-21	3-21	4-21	5-21	6-21	7-21	8-21	9-21	10-21	11-21	12-21	1-22	2-22	3-22	4-22	5-22	6-22	7-22				
PHASE I																																						
Residential Lot Subdivisions (66 Lots, all except Area V and Corporate Yard)	(6 months)																																					
Congress Rd/ Lopez Rd Intersection Improvements	(2 months)																																					
SR 1/SR 68/17-Mile Dr Intersection Improvements	(9 months)																																					
Congress Rd /17-Mile Dr Intersection Improvements	(2 months)																																					
New Employee Parking Lot (SBI)	(4 months)																																					
Parking and Circulation Reconstruction (PBL)	(9 months)																																					
Pebble Beach Links Driving Range Relocation from Area V to Collins Field	(8 months)																																					
PHASE II																																						
Meeting Facility Expansion (PBL)	(10 months)																																					
New Colton Building (PBL)	(10 months)																																					
Portola Rd/ Stevenson Dr Intersection Improvements	(2 months)																																					
Equestrian Center Reconstruction/Special Events Area	(8 months)																																					
Lopez Rd/Sunridge Rd Intersection Improvements	(2 months)																																					
Residential Lot Subdivisions (10 Lots, Corporate Yard)	(6 months)																																					
Conference Center Expansion, Meeting Rooms (SBI)	(10 months)																																					
PHASE III																																						
Conference Center Expansion, Ballroom (SBI)	(10 months)																																					
Fairway One Reconstruction (PBL)	(16 months)																																					
New Guest Cottages (SBI)	(16 months)																																					
PHASE IV																																						
Residential Lot Subdivisions (14 Lots, Area V)	(5 months)					G	G	G	P	P																												
Area M Spyglass Hill, Option 1 New Resort Hotel	(29 months)					G	G	G	G	G	G	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	P	AC	AC	AC
Area M Spyglass Hill, New Residential Lots (10 Lots)						G	G	G	P	P	P																											
						263.46	263.46	263.46	1.46	1.46	1.46																											
Total PM10 Emissions with Option 1 (lbs/day)						508.82	508.82	508.82	452.06	452.06	450.60	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	5.34	2.13	0.24	0.24	0.24	
Above MBUAPCD 82 lbs/day threshold?						Yes	Yes	Yes	Yes	Yes	Yes	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO		
Total PM10 Emissions with Option 2 (lbs/day)						321.68	321.68	321.68	2.92	2.92	1.46																											
Above MBUAPCD 82 lbs/day threshold?						Yes	Yes	Yes	NO	NO	NO																											

PBL = The Lodge at Pebble Beach, SBI = The Inn at Spanish Bay
 G = grading / demo, B = building construction, P = paving, AC = architectural construction

1 to exceed the MBUAPCD's PM10 significance threshold of 82 pounds/day, with a maximum PM10 of
2 approximately 550 pounds/day expected to occur the month of March 2014. The CalEEMod
3 modeling indicates that the maximum emissions presented in Table 3.2-7 and Table 3.2-8 during
4 this period, as well as other periods in excess of the MBUAPCD's threshold, are primarily the result
5 of soil transport with on-road vehicles.

6 Implementation of Mitigation Measures AQ-C1 and AQ-C2 would reduce construction-related
7 emissions, but not to a less-than-significant level. Consequently, this impact is considered significant
8 and unavoidable.

9 **Mitigation Measure AQ-C1. Implement measures to control fugitive dust emissions during**
10 **construction.**

11 The applicant will ensure the construction specifications include the following measures,
12 recommended by the MBUAPCD, to the extent feasible and practicable, to control PM10
13 emissions from construction activities:

- 14 ● Water all active construction areas at least twice daily. Frequency should be based on the
15 type of operation, soil, and wind exposure.
- 16 ● Prohibit all grading activities during periods of high wind (more than 15 miles per hour).
- 17 ● Apply chemical soil stabilizers on inactive construction areas (disturbed lands within
18 construction projects that are unused for at least four consecutive days).
- 19 ● Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut-and-fill
20 operations and hydroseed area.
- 21 ● Maintain at least 2 feet of freeboard on haul trucks.
- 22 ● Cover all trucks hauling dirt, sand, or loose materials.
- 23 ● Plant tree windbreaks on the windward perimeter of construction projects if adjacent to
24 open land, prior to construction.
- 25 ● Plant vegetative ground cover in disturbed areas as soon as possible.
- 26 ● Cover inactive storage piles.
- 27 ● Install wheel washers at the entrance to construction sites for all exiting trucks.
- 28 ● Pave all roads on construction sites prior to use by construction equipment.
- 29 ● Sweep streets if visible soil material is carried out from the construction site (to be checked
30 at least once daily and swept as needed).
- 31 ● Post a publicly visible sign that specifies the telephone number and person to contact
32 regarding dust complaints. This person will respond to complaints and take corrective
33 action within 48 hours. The phone number of the MBUAPCD will be visible to ensure
34 compliance with Rule 402 (Nuisance).
- 35 ● Limit the area under construction at any one time.

1 **Mitigation Measure AQ-C2. Implement measures to control construction-related exhaust**
2 **emissions during construction.**

3 Prior to project construction, the applicant will ensure that construction specifications include
4 the following measures, recommended by the MBUAPCD, to the extent feasible and practicable,
5 to reduce emissions from heavy duty off-road diesel-powered construction equipment:

- 6 ● Limit use of equipment.
- 7 ● Replace diesel-powered equipment with gasoline-powered equipment.
- 8 ● Modify engine with ARB-verified retrofit.
- 9 ● Repower with current standard diesel technology.
- 10 ● Repower with compressed natural gas/liquid natural gas technology.

11 The construction contractor will ensure these measures are implemented during
12 construction.

13 **D. Sensitive Receptors**

14 **Impact AQ-D1: The proposed project would result in the emission of diesel toxic air**
15 **contaminants, which pose a risk to human health, from diesel truck and equipment use**
16 **during construction. (Less than significant with mitigation)**

17 Construction of some project elements would require substantial amounts of diesel truck and
18 equipment use. Diesel particulate matter in exhaust is considered a TAC. Construction projects
19 typically involve the use of diesel-powered equipment such as trucks, dozers, graders, scrapers,
20 rollers, and tractors. The scale of the proposed project would require a large amount of construction
21 truck and equipment use that would result in localized concentrations of exhaust and possible
22 exposure of sensitive receptors to that exhaust. Some of the development sites (such as Pebble
23 Beach Driving Range Relocation to Collins Field, Fairway One Reconstruction, Residential Lot
24 Subdivisions, and other project elements) are adjacent to residential areas. While some of the
25 development sites (such as the Residential Lot Subdivision at the Corporation Yard) are not located
26 near sensitive receptors, haul routes for development sites pass through residential areas in Del
27 Monte Forest. MBUAPCD does not have a threshold of significance for diesel exhaust, so a threshold
28 of 10 cases of cancer per million is used to determine if the proposed project would result in a
29 significant risk to human health.

30 As previously indicated, a screening-level (worst-case) analysis of potential health risks developed
31 by ICF consistent with OEHHA was evaluated for construction activities associated with the Pebble
32 Beach Driving Range Relocation from Area V to Collins Field (driving range relocation). The driving
33 range relocation was modeled as it represents a worst-case scenario for potential health risks due to
34 the location of nearby sensitive receptors and the anticipated level of construction activity,
35 representing the greatest amount of earthwork in close proximity to existing sensitive land
36 uses). The results of the screening-level health risk assessment for the driving range relocation are
37 summarized in Table 3.2-9, while Table 3.2-10 presents the estimated scaled potential health risks
38 at the other project development areas based on the calculated risks associated with the driving
39 range relocation. The screening-level assessment assumes worst-case meteorology and, as a result,
40 often overstates the actual likely level of exposure for sensitive receptors.

1 **Table 3.2-9. Potential Health Risks to Air Quality Sensitive Receptors Near the Driving Range**
 2 **Relocation to Collins Field**

Distance from Project Fence Line (feet)	Unmitigated Cancer Risk (risk per million)	Unmitigated Acute Non-Cancer HI	Mitigated Cancer Risk (risk per million)	Mitigated Acute Non-Cancer HI
10	149	1.2	22	0.1
20	133	1.3	20	0.1
39	100	1.4	15	0.1
82	62	1.2	9	0.1
98	53	1.1	8	0.1
197	24	0.7	4	0.1
246	18	0.6	3	0.1
295	13	0.5	2	0.1
312	12	0.5	2	0.1
328	11	0.4	2	0.0
410	8	0.3	1	0.0
492	6	0.3	1	0.0
574	5	0.2	1	0.0

Note:

Adverse health risks (exceeding the threshold) are indicated in **bold**. Nearest residences (as identified in Table 3.2-5) are approximately 100 feet from the construction site and would have significant impacts before mitigation but less-than-significant impacts after mitigation.

1 **Table 3.2-10. Scaled Cancer Risks to Air Quality Sensitive Receptors in the Vicinity of Other Project Development Areas**

Project Development Areas	Distance to Sensitive Receptors (feet)	Unmitigated Cancer Risk (risk per million)	Unmitigated Acute Non-Cancer HI	Mitigated Cancer Risk (risk per million)	Mitigated Acute Non-Cancer HI
The Lodge at Pebble Beach	100	52	1.1	8	0.1
The Inn at Spanish Bay	400	13	0.3	2	0.0
Collins Field-Equestrian Center-Special Events Area	100	52	1.1	8	0.1
Area M Spyglass Hill	750	7	0.1	1	0.0
Residential Lot Subdivisions					
F-2	400	13	0.3	2	0.0
I-2	100	52	1.1	8	0.1
J	100	52	1.1	8	0.1
K	100	52	1.1	8	0.1
L	100	52	1.1	8	0.1
U	450	12	0.2	2	0.0
V	100	52	1.1	8	0.1
Collins Residence	100	52	1.1	8	0.1
Corporation Yard	650	8	0.2	1	0.0
Roadway Improvements					
SR 1/SR 68/17-Mile Drive	200	26	0.5	4	0.0
17-Mile Drive/Congress Road	350	15	0.3	2	0.0
Lopez Road/Congress Road	450	12	0.2	2	0.0
Lopez Road/Sunridge Road	250	21	0.4	3	0.0
Portola Road/Stevenson Drive	500	10	0.2	2	0.0

1 The results of the screening-level health risk assessment indicate that the worst-case construction
2 activities associated with the driving range relocation have the potential to result in 53 cases of
3 cancer per million within approximately 100 feet of construction activities at Collins Field and an
4 acute HI of 1.1 (chronic HI is anticipated to be less than acute). However, with mitigation (Table 3.2-
5 9), impacts would be reduced to a less-than-significant level within less than 100 feet of
6 construction (nearest residences are approximately 100 feet from the site). The amount of exposure
7 adjacent to other development sites in the project area (Table 3.2-10) would be less than adjacent to
8 the Collins field location due to the lower level of construction activity.

9 This impact is considered significant for construction at all project development sites, except Area M
10 Spyglass Hill (New Resort Hotel or New Residential Lots) and the Residential Lot Subdivision at the
11 Corporation Yard, where the impact would be less than significant. Tables 3.2-9 and 3.2-10 indicate
12 that this impact would be reduced to a less-than-significant level (cancer risks below 10 in one
13 million and an HI less than 1.0) relative to the location of sensitive receptors with implementation of
14 Mitigation Measure AQ-C2, which would apply BMPs to reduce construction-related exhaust
15 emissions and potential related health risks, and Mitigation Measure AQ-D1, which would
16 implement emissions control technology to reduce construction-related emissions and potential
17 related health risks.

18 **Mitigation Measure AQ-D1. Implement after-market emissions control technology on on-**
19 **road and off-road construction equipment.**

20 The applicant will ensure that the construction specifications require construction contractor(s)
21 to retrofit and install diesel particulate filters (DPFs) capable of achieving an 85% reduction in
22 PM10 exhaust emissions (Tier 3) on all off-road construction equipment and diesel oxidation
23 catalysts and Tier 3 DPFs on all on-road soil hauling.

24 **Impact AQ-D2. The proposed project would expose sensitive receptors to less-than-**
25 **substantial pollutant concentrations of CO from project-related traffic. (Less than significant)**

26 Three conditions³—2011, 2015, and 2030—were modeled to evaluate CO concentrations relative to
27 the NAAQS and CAAQS (Table 3.2-11). Emissions of CO concentrations under design-year (2015)
28 and future year (2030) conditions were modeled at five intersections: SR 68/Skyline Forest Drive,
29 SR 68/Carmel Hill Professional Center, SR 68/SR 1 Southbound Off-Ramp, SR 1/Carpenter Street,
30 and Congress Road/SFB Morse Drive. These intersections were modeled because they were
31 identified by the traffic engineers as having the greatest peak-hour traffic volumes and worst delay
32 in the project area (Fehr & Peers 2011).

33 Table 3.2-11 summarizes the results of the CO modeling and indicates that concentrations are not
34 expected to contribute to any localized violations of the 1- or 8-hour ambient standards. This impact
35 is considered less than significant.

³ This analysis uses the same conditions as the transportation analysis: 2011, which is the existing or baseline conditions, 2015, which is considered the likely timeframe for the proposed project, and 2030, which is full buildout of the proposed project (Fehr & Peers 2011).

1 **Table 3.2-11. Results of Localized Carbon Monoxide Modeling**

Intersection	Receptor ^a	2011		2011 Option 1		2011 Option 2		2015 No Project		2015 Option 1		2015 Option 2		2030 No Project		2030 Option 1		2030 Option 2	
		1-hour CO ^{b, c}	8-hour CO ^{b, c}	1-hour CO ^{b, c}	8-hour CO ^{b, c}	1-hour CO ^{b, c}	8-hour CO ^{b, c}	1-hour CO ^{b, c}	8-hour CO ^{b, c}	1-hour CO ^{b, c}	8-hour CO ^{b, c}	1-hour CO ^{b, c}	8-hour CO ^{b, c}	1-hour CO ^{b, c}	8-hour CO ^{b, c}	1-hour CO ^{b, c}	8-hour CO ^{b, c}	1-hour CO ^{b, c}	8-hour CO ^{b, c}
SR 68/Skyline Forest Drive	1	5.53	2.83	5.53	2.83	5.53	2.83	3.03	1.33	4.53	2.23	4.53	2.23	3.33	1.51	3.33	1.51	3.33	1.51
	2	5.53	2.83	5.53	2.83	5.53	2.83	3.03	1.33	4.53	2.23	4.53	2.23	3.33	1.51	3.33	1.51	3.33	1.51
	3	5.63	2.89	5.73	2.95	5.73	2.95	3.03	1.33	4.63	2.29	4.63	2.29	3.33	1.51	3.33	1.51	3.33	1.51
	4	5.33	2.71	5.43	2.77	5.43	2.77	3.13	1.39	4.43	2.17	4.43	2.17	3.23	1.45	3.33	1.51	3.33	1.51
SR 68/Carmel Hill Professional Center	5	5.53	2.83	5.63	2.89	5.63	2.89	3.03	1.33	4.53	2.23	4.53	2.23	3.33	1.51	3.33	1.51	3.33	1.51
	6	5.63	2.89	5.73	2.95	5.73	2.95	3.03	1.33	4.63	2.29	4.63	2.29	3.33	1.51	3.33	1.51	3.33	1.51
	7	5.63	2.89	5.73	2.95	5.73	2.95	3.03	1.33	4.63	2.29	4.63	2.29	3.33	1.51	3.33	1.51	3.33	1.51
	8	5.63	2.89	5.73	2.95	5.73	2.95	3.03	1.33	4.63	2.29	4.63	2.29	3.33	1.51	3.33	1.51	3.33	1.51
SR 68/SR 1 Off-Ramp	9	6.13	3.19	5.83	3.01	5.73	2.95	3.03	1.33	4.63	2.29	4.63	2.29	3.33	1.51	3.33	1.51	3.33	1.51
	10	5.63	2.89	5.93	3.07	5.93	3.07	3.03	1.33	4.73	2.35	4.73	2.35	3.33	1.51	3.43	1.57	3.43	1.57
	11	6.53	3.43	6.23	3.25	6.23	3.25	3.13	1.39	5.03	2.53	5.03	2.53	3.53	1.63	3.53	1.63	3.53	1.63
	12	5.93	3.07	6.13	3.19	6.13	3.19	3.23	1.45	4.93	2.47	4.93	2.47	3.53	1.63	3.43	1.57	3.43	1.57
SR 1/Carpenter Street	13	9.33	5.11	9.33	5.11	7.83	4.21	3.93	1.87	7.13	3.79	7.03	3.73	4.03	1.93	4.03	1.93	4.03	1.93
	14	9.33	5.11	9.33	5.11	7.83	4.21	3.93	1.87	7.13	3.79	7.03	3.73	4.03	1.93	4.03	1.93	4.03	1.93
	15	9.03	4.93	9.03	4.93	7.63	4.09	3.83	1.81	6.93	3.67	6.93	3.67	4.03	1.93	4.03	1.93	4.03	1.93
	16	9.93	5.47	9.93	5.47	8.53	4.63	4.03	1.93	7.53	4.03	7.53	4.03	4.23	2.05	4.23	2.05	4.23	2.05
Congress Road/SFB Morse Drive	17	2.83	1.21	2.93	1.27	2.93	1.27	2.43	0.97	2.73	1.15	2.73	1.15	2.43	0.97	2.43	0.97	2.43	0.97
	18	2.83	1.21	2.83	1.21	2.83	1.21	2.33	0.91	2.63	1.09	2.63	1.09	2.43	0.97	2.43	0.97	2.43	0.97
	19	2.83	1.21	2.83	1.21	2.83	1.21	2.33	0.91	2.63	1.09	2.63	1.09	2.43	0.97	2.43	0.97	2.43	0.97
	20	2.73	1.15	2.83	1.21	2.83	1.21	2.33	0.91	2.63	1.09	2.63	1.09	2.43	0.97	2.43	0.97	2.43	0.97

Notes:

^a Receptors 1 through 20 are located 100 feet from the center of each intersection diagonal, 71 feet from the roadway centerline, and at the boundary of the mixing zone.

^b Background concentrations of 2.2 ppm and 0.85 ppm were added to the modeling 1-hour and 8-hour results, respectively.

^c The federal and state 1-hour standards are 35 and 20 ppm, respectively.

2

1 E. Odors

2 **Impact AQ-E1. The proposed project would expose new sensitive receptors to objectionable** 3 **odors from the Equestrian Center. (Less than significant with mitigation)**

4 Residential Lot Subdivision in Area U would situate seven residences, considered a sensitive
5 receptor, along Drake Road adjacent to the Equestrian Center, which could generate objectionable
6 odors (Figure 2-24). This impact is considered significant. As stated in Chapter 2, Equestrian Center
7 Reconstruction includes preparation of a manure management plan to be approved by the County
8 Health Department. However, the specifics of the plan are not included, and it has not been reviewed
9 and approved by the County Health Department. Mitigation Measure AQ-E1 below identifies the
10 specific measures that would be included in the Plan, and it is anticipated that these measures would
11 reduce odors from animal wastes. The proposed project would not increase operations at or expand
12 the footprint of the Equestrian Center. Because the proposed project would rebuild the Equestrian
13 Center in its current location, odors from the Equestrian Center are part of the current existing
14 conditions and no odor complaints have been lodged by surrounding residences (Stilwell pers.
15 comm.). Therefore, it is not anticipated that odors would result in any significant impact after
16 mitigation. If odors associated with the Equestrian Center were to become an issue, the applicant
17 would be required to eliminate any offensive odors to comply with the MBUAPCD's nuisance rule
18 (Rule 402) and with measures set forth in the manure management plan. Therefore, with
19 implementation of the manure management plan, Mitigation Measure AQ-E1, and Rule 402, this
20 impact would be less than significant.

21 **Mitigation Measure AQ-E1: Prepare and implement a manure management plan.**

22 Prior to issuance of a building permit for the equestrian center reconstruction, the applicant will
23 prepare a manure management plan and submit it to the Monterey County Health Department,
24 Environmental Health Bureau (EHB) for review and approval. The plan will require daily
25 management of liquid and solid wastes, and disposal of these wastes off the site at least twice
26 weekly or as required by EHB. In accordance with EHSP04—Manure Management Plan, the
27 manure management plan will include:

- 28 ● The volume of waste generated, method and time frame of continual disposal off-site, and
29 necessary controls for vector, odor and waste run-off.
- 30 ● Detailed timeline to provide evidence to EHB that the plan is being implemented and the
31 methods in place are controlling vectors, odor and waste run-off.
- 32 ● Appropriate mechanism to allow for public comment of neighbors to assess compliance of
33 the plan.

34 Additionally, the plan will include the following measures.

- 35 ● Odor complaint tracking and abatement program. The applicant will design and implement
36 an odor complaint tracking and abatement program to address and respond to odor
37 complaints for the Equestrian Center. The program will require the project applicant to post
38 a telephone number and contact person at the project site where odor complaints may be
39 made. The program will detail how, upon receipt of an odor complaint, the project applicant
40 will evaluate facility operations to ensure that odor complaints are tracked, investigated,
41 and minimized. The program will be developed after the Equestrian Center is reconstructed

- 1 and before residential lots in Area U are prepared for development (whichever occurs first),
2 and the program will be developed in coordination with and approved by the County.
- 3 ● Place manure and waste receptacles as far as possible from sensitive receptors. The
4 applicant will locate manure and waste receptacles as far as possible from sensitive
5 receptors to reduce the potential for exposure of sensitive receptors to odors from animal
6 waste. The location will be included in the final design plans which will be approved by the
7 County.
 - 8 ● Include additives and supplements to feedstock to help reduce manure odors. Various
9 feedstock additives and supplements are available that will help minimize odor-generating
10 microorganisms and compounds. The applicant will make available additives and
11 supplements to animals housed or using the Equestrian Center at cost to help reduce odors
12 from animal waste.
- 13 The approved manure management plan will be on file at EHB, File Number APN008-313-
14 001/000/008-991-001-000 and available to the public upon request. The applicant will
15 operate the Equestrian Center in a manner consistent with the plan and any additional
16 requirements set forth by EHB.

17 Cumulative Impacts and Mitigation Measures

18 The impact zone for air quality is the Monterey Peninsula and beyond. The methodology for
19 determining cumulative impacts is described under Analysis of Cumulative Impacts at the beginning
20 of Chapter 3.

21 A. Air Quality Plan Consistency

22 **Impact AQ-A1(C): The proposed project would be consistent with the 2008 AQMP and would**
23 **not contribute to significant regional air quality impacts due to inconsistency with the AQMP,**
24 **which considers cumulative impacts on air quality.**

25 Per the MBUAPCD's consistency analysis, discussed above, the proposed project is not anticipated to
26 exceed the AMBAG 2020 forecast, population would be less than what was forecasted, and there
27 would be no impact. Therefore, the proposed project would not contribute to a cumulative impact
28 related to inconsistency with the AQMP.

29 B. Long-Term Emissions

30 **Impact AQ-B1(C). Cumulative development on the Monterey Peninsula and beyond might**
31 **result in a substantial adverse long-term increase in criteria pollutant emissions, but the**
32 **proposed project's contribution would be less than significant.**

33 According to the 2010 General Plan update, cumulative development in Monterey County would
34 result in less than significant impacts for criteria pollutants except for volatile organic compound
35 (VOC) emissions due to winery operations (County of Monterey 2010).

36 The proposed project's land uses would generate motor-vehicle trips that would in turn generate
37 operational criteria air pollutant emissions. Emission estimates for with-project conditions are
38 based on the daily trip generation data (Fehr & Peers 2011). The results of those calculations are
39 summarized under Project Impacts and Mitigation Measures. Project-related operational emissions

1 would not exceed the MBUAPCD’s thresholds for project operations at buildout and thus would not
 2 contribute considerably to regional air quality impacts relative to regional criteria air pollutants.

3 The proposed project would add traffic volumes on roads and in the project area and would worsen
 4 levels of service at nearby intersections. The CO screening analysis included CO concentrations for
 5 2015 (interim) and 2030 (buildout) years. CO emissions were estimated at the intersection of SR
 6 1/Carpenter Street (representing worst case scenarios). Modeled results (at the receptor with the
 7 highest concentration) showed no violation of either the 1- or the 8-hour CO state or federal
 8 standards (Table 3.2-12). It should be noted that with improvements, LOS will improve at this
 9 location and other modeled intersections. The proposed project would not exceed MBUAPCD’s
 10 thresholds, and the proposed project’s contribution would not be considerable relative to CO
 11 emissions.

12 **Table 3.2-12. Carbon Monoxide Screening Analysis Emissions (ppm)**

Scenario	1-Hour Concentration	8-Hour Concentration
Cumulative Plus Project	4.23	2.05
State Standard	20.0	9.0
Federal Standard	35.0	9.0

Source:
 Results of localized carbon monoxide modeling, presented in detail in Table 3.2-11.

13
 14 **C. Construction Emissions**

15 **Impact AQ-C1(C). Cumulative development on the Monterey Peninsula and beyond might**
 16 **result in a short-term increase in PM10 emissions due to construction at times, and the**
 17 **proposed project’s contribution is considerable even with mitigation.**

18 Earth moving and site grading from cumulative projects, construction worker trips, and mobile and
 19 stationary construction equipment exhaust all could contribute to increases in PM10 emissions. Per
 20 MBUAPCD CEQA Guidelines, construction projects that temporarily emit precursors of ozone (i.e.,
 21 ROG or NO_x) are accommodated in the emission inventories of state and federally required air plans
 22 and would not have a significant impact on the attainment and maintenance of state or federal ozone
 23 AAQS (Monterey Bay Unified Air Pollution Control District 2008).

24 Similarly, earth moving and site grading, including construction included in the proposed project,
 25 would also result in the temporary generation of PM10. No other major developments are planned
 26 in Del Monte Forest other than the proposed project, but there could be projects on the Monterey
 27 Peninsula and beyond that could occur at the same time as construction of the proposed project.
 28 Even with implementation of Mitigation Measures AQ-C1 and C2, the proposed project would exceed
 29 MBUAPCD’s PM10 significance threshold of 82 pounds/day, with a maximum PM10 of
 30 approximately 550 pounds/day expected to occur the month of March 2014. Therefore, cumulative
 31 construction impacts are considered to be potentially significant, and the proposed project would
 32 make a considerable contribution even with mitigation.

1 **D. Sensitive Receptors**

2 **Impact AQ-D1(C) and Impact AQ-D2(C). Cumulative development in Del Monte Forest might**
3 **result in the limited construction emissions of diesel toxic air contaminants, but the**
4 **proposed project's contribution to a potentially significant cumulative impact would be**
5 **reduced to a less-than-significant level with mitigation.**

6 Cumulative development could result in exposure of people to diesel TACs during construction or
7 operations. Potential exposures of sensitive receptors to diesel TACs are localized impacts, and no
8 major developments are planned in Del Monte Forest other than the proposed project. However,
9 there might be smaller-scale TAC emissions associated with construction of single-family
10 development. It is also possible that sensitive residential receptors in Del Monte Forest might also
11 be exposed to TAC emissions at other non-residential locations outside Del Monte Forest during
12 work or trips outside the area. This cumulative impact is considered potentially significant. With
13 implementation of Mitigation Measure AQ-D1, which would implement after-market emissions
14 control technology that would reduce project TAC emissions, the proposed project's contribution
15 would be less than significant.

16 Impacts related to localized exposure to CO emissions are discussed separately above (see Impact
17 AQ-B1[C]).

18 **E. Odors**

19 **Impact AQ-E1(C). The proposed project would expose new sensitive receptors to**
20 **objectionable odors from the Equestrian Center but there are no other contributors to this**
21 **impact and thus no cumulative impact is identified.**

22 This would be a localized impact. No other cumulative developments are proposed adjacent to this
23 project location. Therefore, the proposed project would not contribute to a cumulative odor impact.
24 See the discussion under Project Impacts and Mitigation Measures for details of the proposed
25 project's effect on odors at this location.
26

Section 3.3
Biological Resources

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Section 3.3 Biological Resources

This section identifies impacts on biological resources located in the project area, including ESHAs; other sensitive habitats, including Monterey pine forest and wetlands; special-status plant and wildlife species; wildlife habitat, populations, movements, breeding, and nesting; and tree removal. This section will:

- Describe ESHA as defined in the existing LCP and proposed LCP, and based on consultation with the CCC.
- Describe sensitive natural communities (e.g., Monterey pine forest, unique vegetation, dunes, wetlands), some of which may also be identified as ESHA.
- Identify special-status plant and wildlife species, including listed and non-listed rare, threatened, or endangered species and habitats.
- Identify direct and indirect impacts on the resources identified above, including ESHA and other sensitive habitats; special-status plant and wildlife species; wildlife habitat, populations, movements, breeding, and nesting; and tree removal.
- The impact analysis will also include the following impacts:
 - Impacts of removing Monterey pine trees and other native trees (coast live oak and Gowen cypress) on the native forest habitat, existing native seed stock, and other sensitive habitat areas, and in relation to County regulations.
 - Impacts of tree removal and/or construction activities upon known or potential nesting raptors protected under the MBTA.
 - Indirect impacts on wetlands, such as alteration of drainage/water quality issues.

This analysis is based on review of an extensive body of existing studies and data (including a peer review of studies prepared for the applicant) and consultation with resources agencies. The prior analysis for the 2005 EIR has been updated to account for changes in project locations and elements. In addition to the information in the 2005 EIR, additional information was obtained through botanical surveys conducted in 2011 at the Equestrian Center, Collins Field, and surrounding areas; Area L; Area M Spyglass Hill; and Area F-2.

Due to the number of project locations and the complexity of the biological resources found in the project area, only a brief summary of the biological resources setting is presented in this section. A detailed biological resources setting is provided separately in Appendix F, including details of existing studies, reviews, and species characteristics. Appendix F presents the detailed baseline upon which the impacts identified below are based. Impacts are summarized in

Table 3.3-1. The detailed impact analysis is presented later in this section.

Impacts on biological resources in the Carmel River related to water supply and demand issues are addressed separately in Section 3.12, Water Supply and Demand.

1 **Table 3.3-1. Summary of Project Impacts on Biological Resources**

Impact Topic	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Environmentally Sensitive Habitat Areas										
BIO-A1. Project development would result in direct removal and indirect disturbance to ESHA areas while preserving far larger areas of ESHA.	—	—	⊙	⊙	⊙	⊙	⊙	—	⊙	⊙
Mitigation Measures:	BIO-A1. Develop and implement a site-specific resource management plan, based on the Master RMP, for each preservation area. BIO-A2. Dedicate conservation easements to the Del Monte Forest Foundation for all preservation areas. Additional Mitigation Measures for individual resources are noted below (BIO-B1, BIO-B2, etc.)									
B. Sensitive Habitats										
BIO-B1. Project development would result in direct disturbance and indirect impacts on Monterey pine forest (including maritime chaparral) while preserving far larger areas of Monterey pine forest (including maritime chaparral).	—	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-B1(C). Dedicate additional area of undeveloped Monterey pine forest.									
BIO-B2. Project development would result in potential direct and indirect disturbance of coastal dune habitat near Areas M and L while preserving the entire remnant dune area in Area M.	—	—	—	⊙	⊙	⊙	—	—	—	⊙
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-B2. Include additional measures in the resource management plan to avoid indirect impacts on dune habitat near Areas M and L.									
BIO-B3. Project would indirectly disturb Monterey pygmy forest and other sensitive plant habitat areas and plant and wildlife species in the HHNHA due to increased trail use and adjacent residential use.	—	—	—	—	—	⊙	—	—	—	⊙
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-B3. Include additional measures in the resource management plan for Huckleberry Hill Natural Habitat Area to avoid indirect trail use impacts on sensitive resources and use directed lighting at the Corporation Yard residential area.									

Impact Topic	Project Elements										Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF		
				MH	MR						
C. Wetlands/Waters											
BIO-C1. Project development would result in potential disturbance of 0.06 acre of wetlands/drainages and result in indirect effects to wetlands and waters in and adjacent to project development areas.	—	—	⊙	—	—	⊙	—	—	—	—	⊙
Mitigation Measures:	BIO-C1. Avoid or compensate for the loss of wetlands and implement resource management measures to maintain wetlands in the preservation areas. HYD-A1. Ensure on-site detention of stormwater run-off at development sites and oil/grease separators at parking lots; prepare final drainage plan with flow calculations and construction detail, and implement approved drainage plan. HYD-A2. Maintain and monitor drainage and flood control facilities, and prepare annual report(s) that describe the condition, maintenance performed, and required improvements of drainage and flood control facilities. HYD-C1. Prepare and implement a stormwater pollution prevention plan to prevent and reduce sediments and contaminants in stormwater runoff during construction. HYD-C2. Provide regular inspection and maintenance of operational best management practices to ensure function and minimize the discharge of pollutants to surface water. HYD-C3. Prepare and implement an integrated pest management program for the relocated Pebble Beach Driving Range.										
D. Special-Status Plant Species											
BIO-D1. Project development would result in the direct loss of individual Yadon’s piperia plants and habitat and indirect impacts on adjacent occupied piperia habitat, while preserving far larger areas of occupied piperia habitat.	—	—	—	—	—	⊙	—	—	—	—	⊙
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-D1. Implement resource management measures to maintain and enhance Yadon’s piperia habitat.										
BIO-D2. Project development would result in potential loss or disturbance of up to 16 Gowen cypress trees due to residential development while preserving 3.5 acres of Gowen cypress/Bishop pine pygmy forest.	—	—	—	—	—	⊙	—	—	—	—	⊙
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-D2. Restore 1.6 acres of Gowen cypress/Bishop pine habitat at the Huckleberry Hill Natural Habitat Area, and implement resource management measures to maintain and enhance Gowen cypress habitat.										

Impact Topic	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
BIO-D3. Project development would result in loss of one occurrence (0.2 acre) of Pacific Grove clover and indirect effects to a second occurrence.	—	—	⊙	—	—	⊙	—	—	—	⊙
Mitigation Measures:	BIO-D3. Redesign the proposed driving range to avoid Pacific Grove clover, or create or enhance a 0.2-acre compensation area for this species within another preservation area on the Monterey Peninsula. BIO-D4. Manage the Indian Village occurrence of Pacific grove clover to ensure its continued survival.									
BIO-D4. Project development would result in direct loss and indirect impacts to Hooker’s manzanita habitat while preserving larger areas of habitat.	—	—	—	—	—	○	—	—	—	○
BIO-D5. Project development could result in potential loss or disturbance of pine rose and habitat for pine rose while preserving larger areas of development.	—	—	—	—	—	⊙	—	—	⊙	⊙
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-D5. Conduct preconstruction surveys for pine rose, implement avoidance and protection measures, if found, and conduct construction monitoring.									
BIO-D6. Project development in Area L could result in indirect effects on one occurrence of Hickman’s potentilla.	—	—	—	—	—	⊙	—	—	—	⊙
Mitigation Measures:	BIO-D6. Avoid hydrological effects to the Indian Village Hickman’s potentilla population and expand existing protection and management.									
BIO-D7. Trail development could result in small amounts of lost habitat for special-status plant species.	—	—	—	—	—	—	—	⊙	—	⊙
Mitigation Measures:	BIO-D7. Minimize special-status species habitat disturbance during trail construction.									
E. Special-Status Wildlife Species										
BIO-E1. Project construction could result in direct mortality to California red-legged frog, degradation of aquatic habitat, loss of and degradation of upland habitats, which would be partially offset by preservation of existing known occupied and suitable habitat.	—	—	—	—	—	⊙	—	—	—	⊙

Impact Topic	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-E1. Conduct preconstruction surveys for California red-legged frog, implement protection measures if found, and conduct construction monitoring. BIO-E2. Design new California red-legged frog breeding habitat along Seal Rock Creek in accordance with criteria to establish California red-legged frog habitat characteristics.									
BIO-E2. Development in Areas L and M could result in loss of Smith's blue butterfly host plants, while preservation of Area M dunes will preserve host plant and habitat.	—	—	—	○	○	○	—	—	—	—
BIO-E3. Stormwater runoff from project developments during construction and operation could degrade nearshore water quality and result in indirect impacts on the southern sea otter, western snowy plover, California brown pelican and other marine resources, including the Carmel Bay Area of Special Biological Significance.	◎ (Applies to proposed project as a whole)									◎
Mitigation Measures:	HYD-A1, HYD-A2, HYD-C1, HYD-C2, HYD-C3. See above. GSS-C1. Prepare and implement an erosion and sediment control plan. GSS-D1. Dewater excavations and shore temporary cuts during construction of underground parking facilities.									
BIO-E4. Project construction and development would result in potential loss or disturbance to habitat occupied by certain non-listed special-status wildlife species while preserving large, unfragmented areas of habitat for these species.	See below by specific species									
Legless Lizard	—	—	—	◎	◎	◎	—	—	—	◎
Mitigation Measures:	BIO-A1, BIO-A2, BIO-B2. See above. BIO-E5. Conduct pre-construction surveys for legless lizard, implement protection measures if found, and conduct construction monitoring for ground-disturbing construction activities.									
California Horned Lizard	—	—	—	○	○	○	—	—	—	○
Western Pond Turtle	—	—	—	—	—	○	—	—	—	○
Monterey Dusky-Footed Woodrat	—	—	—	—	—	◎	—	—	—	◎
Mitigation Measures:	BIO-E6. Conduct a preconstruction survey for woodrats and woodrat nests, and implement protection measures if found for ground-disturbing construction activities.									

Impact Topic	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
Pallid bat	—	—	—	—	—	⊙	—	—	—	⊙
Mitigation Measures:	BIO-E7. Retain dead trees or snags wherever feasible in development and preservation areas to provide roosting habitat for pallid bats.									
Ringtails and Monterey Ornate Shrew	—	—	—	—	—	⊙	—	—	—	⊙
Mitigation Measures:	BIO-A1, BIO-A2, BIO-B2. See above.									
F. Common Wildlife Habitat/Populations/Plant Communities										
BIO-F1. The project would remove habitat of common wildlife species and plant communities within Del Monte Forest while preserving far larger areas of habitat for common species.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	BIO-A1, BIO-A2. See above.									
G. Indirect Impacts on Habitat Resulting from Human Use										
BIO-G1. The project would increase trail use by pedestrians and equestrians and could adversely affect common and rare wildlife and plant species within existing and proposed preservation areas.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	BIO-B2, BIO-B3, BIO-D4, BIO-D6. See above. BIO-G1. Include additional measures in the resource management plan for Preservation Areas J, K and PQR to avoid indirect trail use impacts on sensitive resources.									
H. Wildlife Movement										
BIO-H1. The project would fragment certain existing forested habitats and could interfere with wildlife movement while preserving larger, unfragmented areas of habitat providing wildlife movement opportunities.	—	—	—	—	—	⊙	—	—	—	⊙
Mitigation Measures:	BIO-A1. BIO-A2. See above.									
I. Wildlife Breeding and Nesting										
BIO-I1. Project construction, including tree removal and grading, could result in potential disturbance to nesting raptors, including several special-status raptor species, if present during construction.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	BIO-I1. Conduct pre-construction and breeding-season raptor surveys and implement protection measures.									

Impact Topic	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
J. Tree Removal										
BIO-J1. Project construction and development could result in removal or disturbance of native Monterey pine trees and coast live oak trees while preserving far larger areas and numbers of trees in the Del Monte Forest.	◎ (Applies to proposed project as a whole)									◎
Mitigation Measures:	BIO-A1, BIO-A2. See above. BIO-J1. Incorporate specific tree removal and replanting guidelines into the site-specific RMPs. BIO-J2. Protect retained trees from construction disturbance.									
Notes: ● = Significant unavoidable impact. ◎ = Significant impact that can be reduced to less than significant. ○ = Less-than-significant impact. — = No impact or not applicable to the development site. PBL – The Lodge at Pebble Beach; SBI –The Inn at Spanish Bay; COL-EQC – Collins Field–Equestrian Center–Special Events Area; MH – Area M Spyglass Hill New Hotel (Option 1); MR – Area M Spyglass Hill New Residential Lot (Option 2); RES SUB – Residential Subdivisions; RD – Roadway Improvements; TRA – Highway 1/Highway 68/17-Mile Drive Improvement; INF – Infrastructure Improvements. CUMULATIVE – Proposed Project’s Contribution to Cumulative Impacts										

1

2 Regulatory Setting

3 This section describes the federal, state, and local plans, policies, and laws that are relevant to
 4 biological resources in the project area.

5 Federal Regulations

6 National Environmental Policy Act

7 NEPA (42 USC 4321; 40 Code of Federal Regulations [CFR] 1500.1) is the nation’s broadest
 8 environmental law. It provides an interdisciplinary framework for federal agencies to prevent
 9 environmental damage and contains action-forcing procedures to ensure that federal agency
 10 decision makers take environmental factors into account. NEPA applies to all federal agencies and to
 11 most of the activities they manage, regulate, or fund that affect the environment. It requires all
 12 agencies to consider and to publicly disclose the environmental implications of their proposed
 13 actions through the preparation of appropriate documents.

14 Because the proposed project may require an incidental take permit from the U.S. Fish and Wildlife
 15 Service (USFWS) pursuant to effects on the California red-legged frog (CRLF), a permit under the
 16 Clean Water Act (CWA) from the U.S. Army Corps of Engineers (USACE) pursuant to effects on
 17 wetlands at Area L (and possibly at Areas J, K, and/or L related to wetlands enhancement for
 18 breeding habitat), or both, compliance with NEPA may be required by the actions of these federal

1 agencies in issuing these permits. In some case, as in the notification of authorization under a USACE
2 nationwide permit, NEPA compliance has already been completed programmatically. However
3 issuance of individual, project-specific permitting would trigger requirement for further NEPA
4 compliance.

5 This document was prepared to comply with the requirements of CEQA alone. NEPA compliance, if
6 required, would be done separately.

7 **Federal Endangered Species Act**

8 The federal Endangered Species Act (ESA) protects species, and their habitats, that have been
9 identified by USFWS or the National Oceanic and Atmospheric Administration (NOAA) Fisheries
10 (formerly known as the National Marine Fisheries Service) as threatened or endangered.
11 *Endangered* refers to species, subspecies, or distinct population segments that are in danger of
12 extinction through all or a significant portion of their range; *threatened* refers to species, subspecies,
13 or distinct population segments that are likely to become endangered in the near future.

14 The ESA is administered by USFWS and NOAA Fisheries. In general, USFWS has authority over listed
15 terrestrial plants on lands under federal jurisdiction and over listed wildlife species, regardless of
16 whether publicly or privately owned. Relevant to this project, USFWS has authority over the CRLF,
17 the Southern sea otter, and any other listed wildlife species found in Del Monte Forest. Because Del
18 Monte Forest lands are privately owned, USFWS has no direct permit authority over Yadon's piperia
19 or any other listed plant species (Gowen cypress, Hickman's potentilla, Monterey clover and a
20 number of dune plant species) found within the project area. However, when seeking a permit from
21 USACE in regard to CWA Section 404, USACE will need to consult with USFWS on listed federal
22 species; depending on the scope of the area for which USACE consults with USFWS, this consultation
23 may or may not include listed federal plants. In general, NOAA Fisheries is responsible for
24 protection of ESA-listed marine species and anadromous fish, whereas other listed species are under
25 USFWS jurisdiction. Because no habitats that might contain listed fish would be directly affected by
26 the proposed project, NOAA Fisheries, and its responsibility under ESA is not discussed further in
27 this section. Provisions of Sections 7, 9, and 10 of ESA could be relevant to the proposed project and
28 are summarized below.

29 **Federal Endangered Species Act Prohibitions (Section 9)**

30 ESA Section 9 prohibits the take of any fish or wildlife species listed under ESA as endangered. Take
31 of threatened species is also prohibited under Section 9, unless otherwise authorized by federal
32 regulations. *Take*, as defined by ESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap,
33 capture, or collect, or to attempt to engage in any such conduct." *Harm* is defined as "any act that
34 kills or injures the species, including significant habitat modification." In addition, Section 9
35 prohibits removing, digging up, cutting, and maliciously damaging or destroying federally listed
36 plants on sites under federal jurisdiction. Section 9 does not prohibit take of federally listed plants
37 on sites not under federal jurisdiction.

38 **Federal Endangered Species Act Authorization Process (Sections 7 and 10)**

39 Take of listed species can be authorized through either the Section 7 consultation process for actions
40 by federal agencies or the Section 10 permit process for actions by nonfederal entities. Federal
41 agency actions include activities that are:

- 1 • On federal land.
- 2 • Conducted by a federal agency.
- 3 • Funded by a federal agency.
- 4 • Authorized by a federal agency (including issuance of federal permits and licenses).

5 Under Section 7, the federal agency conducting, funding, or permitting an action (the lead federal
6 agency) must consult with USFWS, as appropriate, to ensure that the proposed action will not
7 jeopardize endangered or threatened species or destroy or adversely modify designated critical
8 habitat. If a proposed project “may affect” a listed species or designated critical habitat, the lead
9 agency is required to prepare a biological assessment evaluating the nature and severity of the
10 expected effect. In response, USFWS issues a biological opinion with a determination that the
11 proposed action:

- 12 • Might jeopardize the continued existence of one or more listed species (jeopardy finding) or
13 result in the destruction or adverse modification of critical habitat (adverse modification
14 finding); or
- 15 • Will not jeopardize the continued existence of any listed species (no jeopardy finding) or result
16 in adverse modification of critical habitat (no adverse modification finding).

17 The biological opinion issued by USFWS may stipulate discretionary “reasonable and prudent”
18 conservation measures. If the project would not jeopardize a listed species, USFWS issues an
19 incidental take statement to authorize the proposed activity.

20 In cases where a nonfederal entity is undertaking an action that does not require federal
21 authorization, the take of listed species must be permitted by USFWS through the Section 10
22 process. If the proposed project would result in the incidental take of a listed species, the project
23 proponent must first obtain a Section 10(a)(1)(B) incidental take permit (ITP). *Incidental take* is
24 defined under Section 10 as the take of federally listed fish and wildlife species “that is incidental to,
25 but not the purposes of, otherwise lawful activities.”

26 To receive an ITP, the nonfederal entity is required to prepare a Habitat Conservation Plan (HCP).
27 The HCP must include conservation measures that avoid, minimize, and mitigate the project’s
28 impact on listed species and their habitat.

29 **Applicability to Proposed Project**

30 The federal ESA could apply to the proposed project through several distinct regulatory processes.
31 First, a federally listed wildlife species, CRLF, has been found on and adjacent to some of the areas
32 affected by the proposed project; consequently, the proposed project might result in incidental take
33 of a federally listed species. Absent any other federal permit, this process would be conducted in
34 accordance with Section 10 of ESA, necessitating preparation of an HCP. As part of its review,
35 USFWS would need to review, through an internal Section 7 consultation, the potential effects of
36 issuing an ITP on federally listed species. An ITP can be issued through the Section 10 process that
37 can allow for take of a federal species.

38 The requirements of ESA could also apply to any permit issued by USACE for fill of any jurisdictional
39 wetlands (see discussion below). The applicant has proposed certain activities that are within the
40 jurisdiction of CWA Section 404; they will require authorization for these activities from USACE.
41 USACE is required to consult with USFWS regarding actions that may affect federally listed species

1 and for which a permit application is submitted. This process is conducted in accordance with
2 Section 7 of ESA. A biological opinion can be issued through the Section 7 process that can allow for
3 take of a federal species. The consultation may be limited to only those parts of the project involving
4 federal jurisdictional wetlands.

5 **Migratory Bird Treaty Act**

6 The Migratory Bird Treaty Act (MBTA) (16 USC 703) enacts the provisions of treaties between the
7 United States, Great Britain, Mexico, Japan, and the Soviet Union and authorizes the U.S. Secretary of
8 the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag
9 limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC
10 703; 50 CFR 21; 50 CFR 10). Most actions that result in taking or in permanent or temporary
11 possession of a protected species constitute MBTA violations. Examples of permitted actions that do
12 not violate MBTA are the possession of a hunting license to pursue specific game birds, legitimate
13 research activities, display in zoological gardens, bird-banding, and other similar activities. USFWS is
14 responsible for overseeing compliance with MBTA, and the U.S. Department of Agriculture's Animal
15 Damage Control Officer makes recommendations on related animal protection issues.

16 MBTA applies to migratory birds, their occupied nests, and eggs within the project area.

17 **Clean Water Act**

18 CWA was enacted as an amendment to the federal Water Pollution Control Act of 1972, which
19 outlined the basic structure for regulating discharges of pollutants to waters of the United States.
20 CWA now serves as the primary federal law protecting the quality of the nation's surface waters,
21 including lakes, rivers, and coastal wetlands.

22 CWA empowers EPA to set national water quality standards and effluent limitations and includes
23 programs addressing both point-source and nonpoint-source pollution. Point-source pollution is
24 pollution that originates or enters surface waters at a single, discrete location, such as an outfall
25 structure or an excavation or construction site. Nonpoint-source pollution originates over a broader
26 area and includes urban contaminants in stormwater run-off and sediment loading from upstream
27 areas. CWA operates on the principle that all discharges into the nation's waters are unlawful unless
28 specifically authorized by a permit; permit review is CWA's primary regulatory tool.

29 The following discussions address specific sections of CWA.

30 **Permits for Fill Placement in Waters and Wetlands (CWA Section 404)**

31 CWA Section 404 regulates the discharge of dredged and fill material into waters of the United
32 States. Waters of the United States refers to oceans, bays, rivers, streams, lakes, ponds, and wetlands,
33 including any or all of the following:

- 34 ● Areas within the ordinary high water mark of a stream, including non-perennial streams with a
35 defined bed and bank.
- 36 ● Any stream channel that conveys natural run-off, even if it has been realigned.
- 37 ● Seasonal and perennial wetlands, including coastal wetlands.

38 Applicants must obtain a permit from the USACE for all discharges of dredged or fill material into
39 waters of the United States, including wetlands, before proceeding with a proposed activity. As

1 stated by the Counsel for EPA's January 19, 2001, determination in response to the *Solid Waste*
2 *Agency of Northern Cook County (SWANCC) v. United States Army Corps of Engineers* ruling, non-
3 navigable, isolated waters may not be regulated by the USACE as jurisdictional waters based solely
4 on their use as habitat by migratory waterfowl.

5 The USACE may issue either an individual permit evaluated on a case-by-case basis or a general
6 permit evaluated at a program level for a series of related activities. General permits are
7 preauthorized and are issued to cover multiple instances of similar activities expected to cause only
8 minimal adverse environmental effects. Nationwide Permits (NWP) are a type of general permit
9 issued to cover particular fill activities. Each NWP specifies particular conditions that must be met in
10 order for the NWP to apply to a given project. Waters of the United States in the project area are
11 under the jurisdiction of the USACE San Francisco District. Wetland restoration is covered under
12 NWP 27, and bridge or road crossings are covered under NWP 14.

13 Compliance with CWA Section 404 requires compliance with several other environmental laws and
14 regulations. The USACE cannot issue an individual permit or verify the use of a general permit until
15 the requirements of NEPA, ESA, and the National Historic Preservation Act (NHPA) have been met.
16 In addition, the USACE cannot issue or verify any permit until water quality certification has been
17 issued pursuant to CWA Section 401.

18 Certain activities are exempt from the Section 404 permitting process. Exempt activities include:

- 19 • Farming, ranching, and forestry activities that are considered normal and ongoing (as of 1985
20 conditions), such as plowing, harvesting, and minor drainage of upland areas to waters of the
21 United States.
- 22 • Construction and maintenance of stock ponds and irrigation ditches.
- 23 • Maintenance of drainage ditches.
- 24 • Construction of temporary sedimentation basins in upland areas.
- 25 • Construction and maintenance of farm, forest, and mining roads in accordance with best
26 management practices (BMPs).
- 27 • Other activities regulated by an approved program of BMPs authorized by CWA
28 Section 208(b)(4).

29 Section 404 permits may be issued only for the project's least environmentally damaging practicable
30 alternative. That is, authorization of a proposed discharge is prohibited if there is a practicable
31 alternative that would have less adverse impacts and lacks other significant adverse consequences.

32 **Wetland Assessments on PBC Lands**

33 Wetland assessments have been completed for various development proposals on PBC lands
34 beginning with the proposed Lot Program in the mid-1990s¹. The County of Monterey completed an
35 initial assessment for its 1995 Draft EIR on the Lot Program based primarily on a reconnaissance
36 level field review (County of Monterey 1995). Subsequently, the County determined that more
37 detailed analyses were required, especially in critical areas proposed for development (e.g.

¹ There have been four distinct iterations of development and preservation proposed by the applicant, resulting in several biological studies over the years. As described in Chapter 1, Introduction, they are the Lot Program, Refined Alternative 2, Del Monte Forest and Preservation Plan, and the current proposed project.

1 proposed new golf course, proposed new equestrian center). During the period between May 1999
2 and August 2000, the County and the applicant jointly collected field data to complete a wetland
3 delineation in conformance with requirements of the County's Local Coastal Program and the
4 California Coastal Act on properties located within the proposed Lot Program development area.
5 That delineation work was led by the County's consultant, Dr. Adrian Juncosa (EcoSynthesis), with
6 assistance from the applicant's consultants, Michael Zander (Zander Associates) and Dr. Michael
7 Josselyn (Wetlands Research Associates). The team also collected field data to determine the
8 presence of "waters of the United States," including wetlands that could be subject to federal
9 jurisdiction under CWA Section 404.

10 A wetland delineation report for the Refined Alternative 2 project was prepared for the County by
11 Dr. Juncosa in August 2000 (Ecosynthesis Scientific & Regulatory Services, Inc. 2000) to address LCP
12 requirements while PBC concurrently submitted a CWA Section 404 delineation report to the USACE
13 for verification using Juncosa's data sheets. Meanwhile, PBC developed the Del Monte Forest and
14 Preservation Plan based on a County-wide ballot initiative in November 2000 (Measure A) that
15 defined the ultimate buildout of Del Monte Forest. Wetlands Research Associates prepared a
16 wetlands assessment of the proposed Measure A plan on behalf of PBC, relying primarily on
17 Juncosa's data supplemented by some additional work at selected sites in the project area (Wetland
18 Research Associates 2001).

19 In November 2002, the USACE confirmed the Section 404 delineation for certain development areas,
20 but Coastal Commission Ecologist Dr. John Dixon recommended further assessment and revisions to
21 the County report to better define wetlands subject to the requirements of the LCP. Dr. Juncosa
22 collected additional data and revised the County report (which now evaluated wetlands within
23 development areas of PBC's Measure A plan) in May 2003 (Ecosynthesis Scientific & Regulatory
24 Services, Inc. 2003). The locations and boundaries of some of the wetlands identified in the 2003
25 EcoSynthesis report, especially in the proposed new golf course area, remained in dispute with
26 Coastal Commission staff when the Measure A plan was denied by the Coastal Commission in June
27 2007.

28 Between mid 2007 and late 2009, PBC and Coastal Commission staff negotiated a compromise
29 development plan for PBC lands in Del Monte Forest that both agreed to support before all
30 approving agencies. During that process several areas proposed for development under the
31 compromise plan (e.g., Area B, Area K, Area L, and Area U) were re-evaluated for wetlands. Zander
32 Associates biologists visited those areas in April and early May 2008 to evaluate potential wetland
33 characteristics at specific locations. PBC, Zander Associates, County, and Coastal Commission staff
34 met at Pebble Beach on April 22, 2008, to review some of those areas in the field. On June 9, 2008,
35 Zander Associates produced a letter report that provided the results of the preliminary wetlands
36 evaluation for those areas (See Appendix A in Zander Associates 2011)

37 In May 2010, Zander Associates conducted reconnaissance level surveys of all proposed
38 development areas of the new Del Monte Forest Plan to confirm that wetland and other habitat
39 characteristics had not substantially changed since more thorough surveys were done. Most of the
40 areas selected for development in the new plan had been evaluated for wetlands under previous
41 plans or by Zander Associates in 2008 as noted above. In August 2010, Zander Associates prepared a
42 report summarizing the existing vegetation and wildlife habitat conditions, including wetlands, in
43 the proposed development areas based on the extensive background information and the May 2010
44 reconnaissance (Zander Associates 2010).

1 In June 2011, Zander Associates revisited all Del Monte Forest Plan proposed development areas but
2 focused on selected areas for data collection to supplement the previous wetland delineations noted
3 above. Only areas that had been added to the development plans, or areas where there remained
4 some question about the nature and extent of wetlands, were included in the 2011 delineation work.
5 Other areas, especially those where the absence of wetlands was confirmed in the past, or areas now
6 proposed for open space preservation, were not reevaluated. In a few cases, they reviewed and
7 revised data collected for the previous delineations, but most disputed areas from the Measure A
8 plan are now in designated open space preservation areas and are no longer critical to delineate.

9 A September 2011 report (Zander Associates 2011) presents the findings of this prior evaluation
10 effort for all areas of proposed development for this project. To date, the USACE has not made a
11 formal determination regarding the federal jurisdictional status of the wetlands identified in the
12 2008 report or 2011 report. However, during an October 2011 field visit, USACE staff indicated that
13 they intended to verify the wetland delineation provided several modifications were made,
14 including: 1) the USACE would take jurisdiction over a smaller area of certain wetlands identified in
15 the report; and 2) the USACE would take jurisdiction over the erosion gully feature at Area I-2 as an
16 "other water of the United States" that was not identified as such in the September 2011 report. The
17 Coastal Commission has reviewed the 2011 report, and has concurred that the report identifies
18 wetlands under Coastal Act jurisdiction (Butler pers. comm.).

19 **Permits for Stormwater Discharge (Section 402)**

20 CWA Section 402 regulates construction related stormwater discharges to surface waters through
21 the National Pollutant Discharge Elimination System (NPDES) program, administered by the EPA. In
22 California, the State Water Resources Control Board (SWRCB) is authorized by EPA to oversee the
23 NPDES program through the Regional Water Quality Control Boards (RWQCBs) (see the related
24 discussion of the Porter-Cologne Water Quality Control Act, below).

25 NPDES permits are required for projects that disturb more than 1 acre of land. The NPDES
26 permitting process requires the applicant to file a public notice of intent to discharge stormwater
27 and to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP
28 includes a site map and a description of proposed construction activities. In addition, it describes the
29 BMPs that will be implemented to prevent soil erosion and discharge of other construction-related
30 pollutants (e.g., petroleum products, solvents, paints, cement) that could contaminate nearby water
31 resources. Permittees are required to conduct annual monitoring and reporting to ensure that BMPs
32 are correctly implemented and effective in controlling the discharge of stormwater-related
33 pollutants.

34 The applicant will prepare a SWPPP and Notice of Intent (NOI) to support the NPDES permit and
35 comply with CWA Section 402.

36 **Water Quality Certification (CWA Section 401)**

37 CWA Section 401 requires that applicants for a federal license or permit to conduct activities that
38 may result in the discharge of a pollutant into waters of the United States must obtain certification
39 from the state in which the discharge would originate or, if appropriate, from the interstate water
40 pollution control agency with jurisdiction over affected waters at the point where the discharge
41 would originate. Therefore, all projects that have a federal component and may affect state water
42 quality (including projects that require federal agency approval, such as issuance of a Section 404
43 permit) must also comply with CWA Section 401.

1 The RWQCB cannot provide Section 401 certification until after CEQA is complete. The applicant will
2 apply for water quality certification from RWQCB to comply with CWA Section 401. The USACE will
3 require compliance with Section 401 as a prerequisite to authorization of the project under Section
4 404.

5 **Fish and Wildlife Coordination Act**

6 The Fish and Wildlife Coordination Act requires consultation by federal agencies with USFWS when
7 the waters of any stream or other body of water are proposed, authorized, permitted, or licensed to
8 be impounded, diverted, or otherwise controlled or modified under a federal permit or license (16
9 USC 661-667[e]).

10 Most USFWS comments on applications for permits under CWA Section 404 are conveyed to the
11 USACE through the consultation process required by this coordination act. This act may apply to the
12 proposed project through the USACE relevant to permitting for the project.

13 The USFWS provides advisory comments and recommends mitigation measures to avoid impacts on
14 wetlands or to modify activities that may directly affect wetlands. Mitigation recommended by
15 USFWS may include restoring or creating habitat to avoid a net loss of wetland functions and values.
16 Although consultation with USFWS is required, the USACE is not required to implement USFWS
17 recommendations.

18 **Federal Executive Order 13112—Invasive Species**

19 Executive Order (EO) 13112 (February 3, 1999) directs all federal agencies to refrain from
20 authorizing, funding, or carrying out actions or projects that may spread invasive species. The order
21 further directs federal agencies to prevent the introduction of invasive species, control and monitor
22 existing invasive species populations, restore native species to invaded ecosystems, research and
23 develop prevention and control methods for invasive species, and promote public education on
24 invasive species.

25 USFWS and the USACE may be issuing permits for the proposed project and would therefore be
26 responsible for ensuring that permitted activities comply with EO 13112 and do not contribute to
27 the spread of invasive species.

28 **State Regulations**

29 **California Environmental Quality Act**

30 CEQA is the regulatory framework by which California public agencies identify and mitigate
31 significant environmental impacts. A project normally has a significant environmental impact on
32 biological resources if it substantially affects a rare or endangered species or the habitat of that
33 species; substantially interferes with the movement of resident or migratory fish or wildlife; or
34 substantially diminishes habitat for fish, wildlife, or plants. The State CEQA Guidelines define rare,
35 threatened, or endangered species as those listed under CESA and ESA, as well as other species that
36 meet the criteria of the resource agencies or local agencies—for example, DFG-designated species of
37 special concern and some California Native Plant Society (CNPS)-listed species (see further
38 discussion below under Special-Status Species). The State CEQA Guidelines state that the lead
39 agency preparing an EIR must consult with and receive written findings from DFG concerning
40 project impacts on species listed as endangered or threatened. The effects of a proposed project on

1 these resources are important in determining whether the project has significant environmental
2 impacts under CEQA.

3 **California Endangered Species Act**

4 The California Endangered Species Act CESA was implemented in 1984. The act prohibits the take of
5 endangered and threatened species; however, habitat destruction is not included in the state's
6 definition of take. Section 2090 of CESA requires state agencies to comply with endangered species
7 protection and recovery and to promote conservation of these species. DFG administers the act and
8 authorizes take through Section 2081 agreements (except for species designated as fully protected).

9 **California Native Plant Protection Act**

10 Regarding rare plant species, CESA defers to the California Native Plant Protection Act (NPPA) of
11 1977, which prohibits importing rare and endangered plants into California, taking rare and
12 endangered plants (in certain circumstances), and selling rare and endangered plants. State-listed
13 plants are protected mainly in cases where state agencies are involved in projects under CEQA. The
14 NPPA does not prohibit take of rare and endangered plants incident to possession or sale of real
15 estate (Fish and Game Code 1908); as such it does not prohibit removal of a rare or endangered
16 plant in the course of development of land, but rather only in the context or removal of the plant for
17 the purposes of sale. Owners of land with known rare or endangered species are required to notify
18 DFG of plans to change land use a minimum of 10 days prior to the change to allow DFG time to
19 salvage the plants. However, if DFG fails to respond within these 10 days, then the land owner may
20 proceed with the land use change (Fish and Game Code 1913(c)).

21 **California Coastal Act of 1976**

22 The California Coastal Act of 1976 (California Public Resources Code section 30000 et seq.)
23 (California Coastal Act) requires preparation of a local coastal program (LCP) by local municipalities.
24 The LCP consists of a land use plan and its implementing measures (e.g., zoning ordinances).
25 Monterey County's LCP for Del Monte Forest was certified by the CCC in 1987 and is now the basis
26 for issuance and review of coastal development permits by the County. The Coastal Act requires that
27 proposed amendment of a local LCP be reviewed and certified by the CCC prior to issuance of any
28 coastal development permit pursuant to the amendment.

29 The California Coastal Act requires the incorporation of California Coastal Act policies into local
30 LCPs. Several California Coastal Act policies relevant to biological resources are noted below:

- 31 • California Coastal Act Section 30121 defines wetlands as "lands within the coastal zone which
32 may be covered periodically or permanently with shallow water and include saltwater marshes,
33 freshwater marshes, open or closed brackish water marshes, swamps, mudflats."
- 34 • California Coastal Act Section 30233 (a) states that the diking, filling, or dredging of wetlands
35 can only be permitted for certain specified activities where there is no feasible less
36 environmentally damaging alternative, and where feasible mitigation measures have been
37 provided to minimize adverse environmental effects. The specified activities include several
38 uses potentially relevant to this project, including: incidental public service purposes, including
39 but not limited to, burying cables and pipes; restoration purposes; and nature study or similar
40 resource-dependent activities.

- 1 • California Coastal Act Section 30107.5 defines an *environmentally sensitive area* as “any area in
2 which plant or animal life or their habitats are either rare or especially valuable because of their
3 special nature or role in an ecosystem and which could be easily disturbed or degraded by
4 human activities.”
- 5 • California Coastal Act Section 30240 states that “environmentally sensitive habitat areas shall be
6 protected against any significant disruption of habitat values, and only uses dependent on those
7 resources shall be allowed within those areas.” This section also states that “development in
8 areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall
9 be sited and designed to prevent impacts which would significantly degrade those areas, and
10 shall be compatible with the continuance of those habitat and recreation areas.”

11 The Del Monte Forest LUP is the certified document that implements the California Coastal Act
12 within Del Monte Forest. The LUP contains a number of specifically applicable policies relevant to
13 biological resources. These are discussed in a separate section below.

14 **California Fish and Game Code**

15 **Fully Protected Species**

16 The California Fish and Game Code provides protection from take for a variety of species, referred to
17 as fully protected species. Section 3511 lists fully protected birds, Section 3515 lists fully protected
18 fish, Section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians
19 and reptiles. The California Fish and Game Code, Section 86, defines take as “hunt, pursue, catch,
20 capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Except for take related to scientific
21 research, all take of fully protected species is prohibited.

22 Ringtail, golden eagle, American peregrine falcon, and white-tailed kite are the only fully protected
23 species with potential to occur in the project area.

24 **Additional Wildlife Protections**

25 Section 3503 of the California Fish and Game Code prohibits the killing, possession, or destruction of
26 bird eggs or of bird nests. Section 3503.5 and 3513 prohibit the killing, possession, or destruction of
27 all nesting birds (including raptors and passerines). Section 3513 prohibits the take or possession of
28 any migratory nongame birds designated under the federal MBTA. Section 3800 prohibits take of
29 nongame birds. Mammals are protected under Section 4700.

30 **Streambed Alteration Agreements (Section 1600 et seq.)**

31 DFG has jurisdictional authority over wetland resources associated with rivers, streams, and lakes
32 under the California Fish and Game Code Sections 1600–1607. DFG has the authority to regulate all
33 work under the jurisdiction of the State of California that would substantially divert, obstruct, or
34 change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a
35 river, stream, or lake; or use material from a streambed. Activities of agencies that are project
36 proponents are regulated under Section 1601. Activities of private individuals who are project
37 proponents are regulated under Section 1603. In practice, DFG marks its jurisdictional limit at the
38 top of the stream or lake bank or the outer edge of the riparian vegetation, where present, and
39 sometimes extends its jurisdiction to the edge of the 100-year floodplain. Because riparian habitats
40 do not always support wetland hydrology or hydric soils, wetland boundaries, as defined by Section

1 404, sometimes include only portions of the riparian habitat adjacent to a river, stream, or lake.
2 Therefore, jurisdictional boundaries under Section 1600 may encompass a greater area than those
3 regulated under Section 404.

4 DFG enters into a streambed alteration agreement with an applicant and can impose conditions on
5 the agreement to ensure that no net loss of wetland values or acreage will be incurred. The lake or
6 streambed alteration agreement is not a permit but, rather, a mutual agreement between DFG and
7 the applicant.

8 The applicant would apply for a streambed alteration agreement if any streams or their associated
9 riparian habitats would be affected. For example, the entrance road at Residential Area L may affect
10 a drainage.

11 **Local Regulations**

12 **Existing Del Monte Forest Local Coastal Plan**

13 **Del Monte Forest Land Use Plan**

14 The Del Monte Forest LUP serves as the specific land use plan for Del Monte Forest. This document
15 is required to satisfy the requirements of two state-mandated planning programs: the LCP required
16 by the California Coastal Act and the General Plan Program mandated by the General Planning
17 Provisions of the California Government Code.

18 **Monterey County Coastal Implementation Plan**

19 Part 5 of the Monterey County CIP provides standards for development in Del Monte Forest and
20 execution of the LUP and is part of the LCP. In many cases, policies listed in the LUP are also stated
21 as standards in the CIP.

22 **Del Monte Forest Open Space Management Plan**

23 The OSAC Plan describes standards for designated open space forested areas in Del Monte Forest
24 (County of Monterey 1984). The OSAC Plan has been incorporated into the County's LUP as Chapter
25 7. The objective of the OSAC Plan is "to ensure continued existence of the fundamental character of
26 the Forest and its natural plant communities in concert with uses allowed by the Del Monte Forest
27 Area LCP Land Use Plan." The OSAC Plan provides general open space management policies for 11
28 open-space classifications and site-specific forest maintenance standards for nine sites in Del Monte
29 Forest.

30 **Proposed LCP Amendment**

31 As described in Chapter, 2, Project Description, the proposed LCP Amendment will make significant
32 changes in the LUP and CIP related to ESHA if adopted. The proposed project includes amendments
33 to the Del Monte Forest LCP to amend, delete, and add text to policies of the Del Monte Forest LUP
34 and to amend, delete, and add text to the regulations of the CIP, Part 5. The key changes in the
35 proposed LUP relative to biological resource protection are as follows:

- 36 • Chapter 2, Resource Management Element. This chapter would be revised and updated to reflect
37 current conditions. Major changes are proposed to allow for exception to ESHA and other

1 resource policies, but only for Concept Plan development areas due to the extensive land
2 preservation encompassed in the Concept Plan. Major changes are also proposed in how to
3 delineate ESHA to require identification based on current physical conditions and current
4 evaluation of sensitivity, whereas the existing LCP defines ESHA in terms of a defined list of
5 habitats (Appendix A). Other changes include moving technical detail to the CIP concerning tree
6 removal requirements and grading, addition of new policies seeking to minimize shoreline
7 armoring and bluff protection and a number of other changes.

- 8 • Chapter 3. Land Use and Development Element. This chapter would be revised and updated to
9 reflect current conditions and the Concept Plan would be added to the LUP. The most
10 substantive change to this chapter is to add the Concept Plan as a specifically allowed
11 development in Del Monte Forest, including exceptions to certain ESHA and other requirements.
- 12 • Chapter 6. Implementation and Administration. This chapter is proposed to be updated to
13 reflect current practices in implementing the LCP. References to the OSAC Plan and site-specific
14 shoreline public access design criteria were deleted (see discussion below).
- 15 • Chapter 7. Del Monte Forest Open Space Management Plan (OSAC). This chapter would be
16 removed in favor of policies in the LUP that provide for forest protection and in favor of an
17 implementation plan to be developed outside the LUP (making the LUP document more of a
18 policy document and leaving technical detail to other documents). The existing Open Space
19 Management Plan will be used as a key resource for development of a new Master Resource
20 Management Plan that will be prepared with the participation of the same interested groups
21 (e.g., County, CCC, PBC, OSAC, PBCSD, CNPS Del Monte Forest Foundation, etc.) that originally
22 helped to develop the OSAC Plan.
- 23 • Appendix A, List of Environmental Sensitive Habitats. As described above, changes are proposed
24 to require delineation of ESHA based on current resource conditions and evaluations of
25 sensitivity instead of through use of a specific list. The LUP Appendix A is proposed to be
26 deleted.

27 Table 2-6 in Chapter 2, Project Description provides a more detailed summary of proposed changes
28 to the LUP. The Proposed LUP is included in Appendix D of the EIR. The key changes in the proposed
29 CIP are similar in intent and scale to those proposed for the LUP. The proposed CIP is included in
30 Appendix D.

31 Environmental Setting

32 Del Monte Forest lies on the Monterey Peninsula, an area that is overlain by nutrient-poor, sandy
33 soils derived from uplifting ancient marine terraces and decomposed granite soils. Most of Del
34 Monte Forest is subject to marine fog incursion and other maritime climatic influences, such as wind
35 and salt spray. Historically, fires occurred frequently and were an integral part of ecosystems found
36 on the peninsula. All these physical influences have resulted in the evolution and/or persistence of
37 many plants, biological communities, and conditions that are endemic to the Monterey Peninsula.

38 Due to the multiple project development and preservation sites and the complexity of the biological
39 resources found in the proposed project area, a detailed existing setting for biological resources is
40 presented in Appendix F. What follows is a summary overview of the biological resources in the
41 project area. For further detail and site-specific descriptions of the resources, please refer to

1 Appendix F which presents the detailed baseline upon which the impact assessment above was
2 based.

3 **Biological Communities**

4 The project area is dominated by six major biological communities: Monterey pine forest, central
5 maritime chaparral (Monterey Phase), Monterey pygmy forest, central dune scrub, riparian habitats,
6 and wetland habitats. Shoreline and marine habitats are also briefly described below as background
7 for assessment of indirect effects (e.g., run-off). The descriptions of biological communities were
8 derived from sources discussed in Appendix F.

9 **Monterey Pine Forest**

10 Monterey pine forest is the dominant biological community, occupying approximately 684 acres
11 (including development and preservation areas) within the project area. Monterey pine forest is
12 found on or adjacent to all the project sites within the project area as summarized in Table 3.3-2.

13 **Table 3.3-2. Acreages of Monterey Pine Forest Within Project Areas**

Project Location/Element	Total Acres
The Lodge at Pebble Beach	0.00
The Inn at Spanish Bay	
Conference Center Expansion	0.00
New Guest Cottages	3.20
New Employee Parking	4.45
Collins Field–Equestrian Center–Special Events Area	
Driving Range Relocation from Area V to Collins Field	1.10
Equestrian Center Reconstruction	2.07
Special Events Staging Area Grading & Expansion	1.77
Area M Spyglass Hill	
New Resort Hotel (Option 1)	6.50 ¹
New Residential Lots (Option 2)	6.50 ¹
Residential Lot Subdivisions	
Area F-2 (16 lots)	19.50
Area I-2 (16 lots)	18.74
Area J (5 lots)	9.85
Area K (8 lots)	10.57
Area L (10 lots)	18.16
Area U (7 lots)	23.03
Area V (14 lots)	17.65
Collins Residence (4 lots)	0.00
Corporation Yard (10 lots)	4.25
Preservation Areas	
Area B	19.74
Area C	29.88
Area F-1	10.24

Project Location/Element	Total Acres
Area F-3	17.12
Area G	60.53
Area H	50.89
Area I-1	38.82
Area N	48.87
Area O	19.98
Area PQR	245.89
Roadway Improvements	
SR 1/SR 68/17-Mile Drive Intersection Reconfiguration	0.33
Internal Road Improvements	0.40
Total	683.53

Sources:

LSA 2001, WWD Corporation 2011.

Note:

¹ Does not include Monterey pines on dunes located on part of 34.12 acres of preservation area which are classified as dune habitat.

1

2 The natural range of native Monterey pine forest comprises five areas: three in California and two
 3 on islands off the coast of Baja California. The three occurrences of Monterey pine forest in
 4 California are on and adjacent to the Monterey Peninsula, near Año Nuevo in San Mateo and Santa
 5 Cruz Counties, and in and around Cambria in San Luis Obispo County (Figure 3.3-1).

6 The Monterey Peninsula supports the largest Monterey pine forest of the extant natural occurrences
 7 (Figure 3.3-2). It is estimated that Monterey pine forest historically covered approximately 18,000
 8 acres on the Monterey Peninsula and vicinity, of which approximately 9,400 acres of Monterey pine
 9 forest with natural understory (i.e., undeveloped forest) remained as of 1994 (Jones & Stokes
 10 1994a). Estimates of the historical extent and remaining undeveloped forest vary depending on
 11 inventory methodology. Another study conducted in the mid-1990s (Huffman 1994) estimated that
 12 the historical extent of the Monterey pine forest in the Monterey area covered 11,000 to 12,000
 13 acres and that the remaining undeveloped natural stands cover about 6,400 acres (Huffman and
 14 Associates 1994). The extent of remaining native stands of Monterey pine forest at Año Nuevo
 15 (1,500 acres), Cambria (2,300 acres), Cedros Island (370 acres), and Guadalupe Island (220 trees in
 16 2001) are far smaller than those on the Monterey Peninsula (Jones & Stokes 1996b; Rogers 2002).
 17 For this report, the estimate of undeveloped Monterey pine forest used is 9,289 acres (Monterey
 18 County 2005). As described in Appendix F, approximately 3,100 acres are currently protected from
 19 development.

20 More than 70 pathogens are known to affect Monterey pine (Offord 1964). In addition to pathogens,
 21 more than 56 insect species are known to attack Monterey pine (Furniss and Carolin 1977).
 22 Important fungal diseases that affect California’s native stands and plantations include pine pitch
 23 canker, which affects many parts of the tree; western gall rust and coast gall rust, which attack the
 24 stem; and annosus root rot, shoestring fungus rot, and velvet top fungus, which are diseases of the
 25 root system. Monterey pine has evolved in the presence of all of these diseases except the pitch
 26 canker, which has recently entered California and is now found in all three California populations of

1 Monterey pine forest. Pine pitch canker and other pathogens are discussed in more detail in
2 Appendix F.

3 Monterey pine forest provides a variety of microhabitat conditions that may be used by several
4 common wildlife species. The canopy may be used as perching, roosting, and nesting sites by raptors
5 such as red-tailed hawks. Small insectivorous birds, such as pygmy nuthatch and Townsend's
6 warbler, forage on the trunks and branches of the pines. Dark-eyed junco, Northern flicker, and
7 rufous-sided towhee forage on or near the forest floor. Anna's hummingbird also occurs in Monterey
8 pine forest, foraging on nectar produced by shrub and herbaceous plant species in the understory.
9 The scattered coast live oak trees in the Monterey pine forest produce acorns, an important food
10 source for Western scrub-jays, acorn woodpeckers, and black-tailed deer. Downed wood on the
11 forest floor provides cover for amphibians such as slender and arboreal salamanders.

12 **Central Maritime Chaparral**

13 Central maritime chaparral (Monterey phase) is found scattered through the project area in project
14 sites and occurs in openings in the forest. Specific locations of maritime chaparral in the project area
15 have not been delineated as this community most commonly occurs in Del Monte Forest within
16 Monterey pine forest, often as an understory assemblage. Thus, no specific mapping of this
17 community has been developed.

18 The Monterey phase of central maritime chaparral is limited to the coastal areas of stabilized
19 Pleistocene dunes between Watsonville and the Carmel Highlands. The largest patches of this
20 chaparral type are found on BLM lands at the former Fort Ord. The Monterey phase of central
21 maritime chaparral includes endemic species not found in other chaparral communities. The
22 community as represented in Del Monte Forest includes shaggy-barked, Hooker's, and sandmat
23 manzanita which may occur with coyote brush, sticky monkeyflower, California lilac, Monterey
24 ceanothus, and other shrubs and herbs.

25 Birds such as orange-crowned warbler, rufous-sided towhee, California thrasher, and California
26 quail feed and nest in chaparral. California mouse, brush rabbit, Heerman's kangaroo rat, and brush
27 mouse find forage and cover in dense chaparral, while narrow-faced kangaroo rat favors sparsely
28 vegetated openings within the thick vegetation. These small mammals are preyed upon by gray fox,
29 bobcat, spotted skunk, and western rattlesnake. Chaparral communities also provide important
30 forage and cover for resident black-tailed deer.

31 **Monterey Pygmy Forest**

32 Monterey pygmy forest is found at the HHNHA and is the largest stand of this natural community
33 known to occur in California. The only other occurrence is found inland of the Point Lobos
34 Peninsula.

35 The dominant trees in Monterey pygmy forest are Bishop pine (*Pinus muricata*) and Gowen cypress
36 (*Cupressus goveniana* spp. *goveniana*). These trees are typically 10 to 25 feet tall. Monterey pines are
37 sometimes scattered through the pygmy forest; they grow taller (about 20 to 30 feet) than Bishop
38 pine or Gowen cypress, but are severely stunted in comparison to their normal height. The
39 understory of mature pygmy forest is dominated by shaggy-barked manzanita and huckleberry,
40 with occasional California coffeeberry.

1 Open canopy stands of pygmy forest support a more diverse shrub understory, including shaggy-
2 barked manzanita, Hooker's manzanita, chamise, and huckleberry. Scattered individuals of bush
3 monkeyflower, toyon, and black sage may be present. Open canopy pygmy forest occurs at sites of
4 recent fires and on the most shallow, severe pygmy forest soils. These soils also have easily damaged
5 cryptogamic crusts of special interest.

6 Monterey pygmy forest can be subdivided into three types: stands that support pure Bishop pine,
7 stands that are a mix of Bishop pine and Gowen cypress, and stands that are nearly pure Gowen
8 cypress. Preliminary evidence indicates that these types may represent a sequence in soil
9 development, with pure Gowen cypress pygmy forest occurring on the shallowest and most acidic
10 soils, the mixed pygmy forest on intermediate soils, and Bishop pine pygmy forest on the least
11 extreme of the pygmy forest soils (Jones & Stokes 1996a).

12 Central Dune Scrub

13 In the project area, approximately 34.12 acres of remnant dune (Signal Hill Dune) occur along the
14 western edge of Area M (Resort Hotel/Residential Lots) and the northern end of Preservation Area
15 N; and 3.74 acres occurs west of the area proposed for residential development at Area L (Zander
16 Associates 2001a). Central dune scrub is the predominant plant community in these areas. It is
17 characterized by low-to-prostrate growing vegetation that often consists of succulents. This coastal
18 community is typically dominated by herbaceous perennial or subshrub species with a
19 subdominance of annual species that grow on sand dunes and form associations based on the
20 stability of the sand. Where the sand is dynamic, herbaceous plants spread by burying long rhizomes
21 deep in the sand; these species are adapted to the constant accumulation and erosion of sand caused
22 by the wind. As the sand becomes more stable, the species diversity increases from the low
23 herbaceous species to shrubby species that provide greater cover. Dunes that have been stabilized
24 for longer periods of time may also be vegetated by Monterey pine forest or central maritime
25 chaparral.

26 Total cover in central dune scrub communities varies from 20% to 100%. Herbaceous species in this
27 community include sand verbena, beach bur, live-forever, dune aster, beach evening primrose, sand
28 mat, and dune blue grass. Shrubby species may include coyote brush, mock heather, dune wild
29 buckwheat, and lizardtail.

30 Wildlife diversity is greater in dune scrub than in other dune communities because soils are more
31 stable and vegetation is more abundant. White-crowned sparrow is a common nesting species and
32 golden-crowned sparrow is a common winter visitor in dune scrub habitat. Deer mouse and brush
33 rabbit burrow in the more stable soils and feed on seeds and native vegetation. Western fence lizard
34 is common. These small animals are preyed upon by raptors, foxes, and coyote.

35 The former Spyglass Quarry, a sand mine, is adjacent to the east side of the Signal Hill Dune ESHA.
36 Much of the dune habitat in this area, including most of the sandy dune substrate, was removed in
37 the course of sand mining. Moreover, portions of the site have been used for equestrian activities, as
38 a skeet-shooting range, and for equipment and materials staging and storage.

39 Remnant dune areas are shown in the biological resource figures in Appendix F for the areas
40 adjacent to the proposed New Resort Hotel (Option 1) and New Residential Lots (Option 2) in Area
41 M Spyglass Hill and in the previously preserved area adjacent to Area L.

1 Wetland Habitat and Federal/State Waters

2 Wetlands

3 Wetlands are uncommon and important biological resources in Del Monte Forest. A total of 9.59
 4 acres of wetlands occur within the project area: 0.06 acre within development site boundaries and
 5 9.53 acres within proposed preservation areas (see Table 3.3-3 in this Section and Appendix F).
 6 Additional wetlands are located within the existing preserved area in HHNHA and SFB Morse
 7 Botanical Preserve.

8 **Table 3.3-3. Summary of Wetlands and Riparian Areas Within Project Development and**
 9 **Preservation Areas**

Project Location/Element	Freshwater Marsh	Seasonal Wetland	Total Wetland Area (acres)	Riparian Linear Feet (LF)
The Lodge at Pebble Beach	0.00	0.00	0.00	0
The Inn at Spanish Bay				
Conference Center Expansion	0.00	0.00	0.00	0
New Guest Cottages	0.00	0.00	0.00	0
New Employee Parking	0.00	0.00	0.00	0
Collins Field-Equestrian Center-Special Events Area				
Driving Range Relocation from Area V to Collins Field	0.00	0.00	0.00	0
Equestrian Center Reconstruction	0.00	0.00	0.00	0
Special Events Staging Area Grading & Expansion	0.00	0.03	0.03	0
Area M Spyglass Hill				
New Resort Hotel (Option 1)	0.00	0.00	0.00	0
New Residential Lots (Option 2)	0.00	0.00	0.00	0
Residential Lot Subdivisions				
Area F-2 (16 lots)	0.00	0.00	0.00	0
Area I-2 (16 lots) ^a	0.00	0.00	0.00	0
Area J (5 lots)	0.00	0.20	0.20	917
Area K (8 lots)	0.00	0.59	0.59	553
Area L (10 lots) ^b	0.00	0.06	0.06	215
Area U (7 lots) ^c	0.00	1.99	1.99	0
Area V (14 lots)	0.00	0.87	0.87	0
Collins Residence (4 lots)	0.00	0.00	0.00	0
Corporation Yard (10 lots)	0.00	0.44	0.44	0
Preservation Areas				
Area B	0.00	0.00	0.00	1,147
Area C	0.81	0.00	0.81	0
Area F-1	0.00	0.00	0.00	0
Area F-3	0.00	0.00	0.00	0
Area G	0.00	0.00	0.00	0
Area H	0.00	1.30	1.30	0

Project Location/Element	Freshwater Marsh	Seasonal Wetland	Total Wetland Area (acres)	Riparian Linear Feet (LF)
Area I-1	0.00	0.00	0.00	2,309
Area N	0.00	1.57	1.57	0
Area O	0.00	0.00	0.00	0
Area PQR	0.00	1.73	1.73	5,300
Roadway Improvements				
SR 1/SR 68/17-Mile Drive Intersection Reconfiguration	0.00	0.00	0.00	0
Internal Road Improvements	0.00	0.00	0.00	0
Total Wetlands in Project Development and Preservation Areas	0.81	8.77	9.59	10,441

Source:

WWD Corporation 2011.

Notes:

^a The erosional gully at I-2 is not considered a wetland according to the California Coastal Commission. Although the USACE has indicated during a field review that they intend to take jurisdiction over the erosional gully as an “other water of the U.S.,” the USACE did not indicate that the gully qualified as a wetland.

^b Includes human-made drainage on west side of Area L.

^c Includes small human-made drainage receiving Equestrian Center run-off.

1

2 For the purpose of this Draft EIR, wetlands are grouped into freshwater marsh, seasonal wetlands
 3 and streams/drainages. These general wetland types are described below. The biological resource
 4 figures in Appendix F show the locations of wetlands for all development and preservation areas in
 5 the project area.

6 **Freshwater Marsh**

7 Freshwater marsh is located on the proposed preservation Area C (0.81 acre). Freshwater marsh is
 8 characterized by year-round surface ponding or soil saturation from groundwater seepage and/or
 9 run-off. This wetland type primarily supports hydrophytic herbaceous vegetation such as sedges,
 10 soft rush iris-leaved rush, horsetail, and cattails. Freshwater marsh occurs in openings in the forest
 11 canopy; Monterey pine does not tolerate prolonged soil saturation. Cattails and rushes growing in
 12 freshwater marshes provide nesting habitat and cover for species such as sora, red-winged
 13 blackbird, and marsh wren. Pacific treefrog and western toad use marshes for egg laying and larval
 14 development. These aquatic species are preyed upon by such species as garter snakes and raccoons.
 15 Northern rough-winged swallow and violet-green swallow forage for insects over marshes.

16 **Seasonal Wetland**

17 The project development areas contain 8.77 acres of seasonal wetland (County of Monterey 1997;
 18 Wetlands Research Associates 2001; Ecosynthesis Scientific & Regulatory Services, Inc. 2000, 2003;
 19 WWD Corporation 2011). Approximately 0.06 acres of seasonal wetlands are present in areas that
 20 would be disturbed, and 8.71 acres of seasonal wetlands occur in the proposed preservation areas.
 21 According to previously conducted wetland studies, many of these areas appear to have been
 22 created by road construction and other anthropogenic sources.

1 Seasonal wetlands in the project area occur where soil is saturated to a level below the surface, or
2 where surface saturation occurs but is of relatively short duration, or is seasonal. These wetlands
3 are typically dominated by toad rush and sedges with a subdominance of spikerush, hydrophytic
4 grasses, and other hydrophytes.

5 **Streams/Drainages**

6 Within areas of development, there are only three drainage features that would be affected by the
7 project, of which only two are considered drainages by the County under jurisdiction of the Del
8 Monte Forest Land Use Plan.

- 9 ● There is a small human-made drainage in Area U that receives Equestrian Center run-off; this
10 drainage is considered a wetland under Coastal Act jurisdiction and may also be considered a
11 state jurisdictional water by the Central Coast RWQCB and DFG; however, the USACE has
12 indicated that it is unlikely to take federal jurisdiction over this feature.
- 13 ● There is a small drainage on the west end of Area L that receives run-off from the Spyglass Hill
14 golf course that is considered a wetland under the Coastal Act, that the USACE considers a
15 wetland under federal jurisdiction, and which the Central Coast RWQCB and DFG are also likely
16 to consider state jurisdictional waters.

17 The impact analysis to wetlands presented below also addresses these two drainages.

18 The third drainage feature is in Area I-2 and consists of an approximately 780-foot-long erosion
19 gully through the easterly part of this site. The gully was created by stormwater run-off diverted
20 from a roadway and adjacent areas upslope. The local roadway drainage problem that created the
21 gully has since been remedied, and the gully no longer receives the local roadway drainage, but
22 receives local upslope drainage now that it has been created. Localized run-off also follows
23 pedestrian and equestrian trails through the length of Area I-2. During reconnaissance surveys in
24 May 2010 and June 2011, the channel was dry and without any ponding or saturated conditions.

25 The channel is an artificial, human-induced feature of the landscape in this area, not a natural
26 watercourse and does not exhibit wetland characteristics under any one of the three wetland
27 parameters. Although the gully shows evidence of flash flows (e.g. scour, deposition of material)
28 during the rainy season, under normal circumstances (i.e. without concentrated surface run-off from
29 areas upslope diverted toward the area), it would not occur in the area. The Coastal Commission has
30 indicated that the gully does not qualify as a wetland under the Coastal Act. The USACE has indicated
31 in a field review that it intends to take jurisdiction over the gully as an “other water of the United
32 States” but not as a wetland. It is also possible that the Central Coast RWQCB may take jurisdiction
33 over the gully under the Porter-Cologne Water Quality Control Act and DFG may take jurisdiction
34 under Section 1600 of the Fish and Game Code. While these jurisdictional permits may ultimately be
35 required for fill of the erosion gully, the County considers the gully to be an atypical situation
36 previously created by inadequate roadway drainage, lacking riparian or wetland habitat, and to lack
37 normal stream or drainage function. As such, although federal and state permits may ultimately be
38 required in relation to this gully, the County does not consider it to be a drainage or stream under
39 local jurisdiction of the LUP.

40 There are various drainages within preservation areas, including tributaries to Seal Rock Creek in
41 preservation areas in Area I-1, J, K, and L, tributaries to Pescadero Creek in Area PQR, and an
42 unnamed drainage on the east side of Area B (see Figure 3.7-1 in Section 3.7, Hydrology and Water

1 Quality). None of these drainages would be directly affected by the project. Hydrologic and water
2 quality impacts are discussed in Section 3.7, Hydrology and Water Quality.

3 **Riparian Habitat**

4 In the project area, approximately 10,441 linear feet of riparian habitat occurs in and adjacent to
5 Areas B, I-1, J, K, L, and PQR (WWD Corporation 2011). Refer to Table 3.3-3 and to the tables and
6 biological resources figures in Appendix F. Riparian habitats in the project area occur along
7 intermittent and perennial drainage systems. These drainage systems generally drain to the west
8 and north, eventually discharging into either Carmel Bay or the Pacific Ocean.

9 Riparian habitat in the project area is generally dominated by sedges, rushes, nettle, poison oak, and
10 hemlock. Woody riparian species, such as willows, occur along a few drainages in the project area
11 (Wetlands Research Associates 2001).

12 The moist conditions associated with riparian areas provide habitat for California newt, Pacific
13 treefrog, California slender salamander, and arboreal salamander. As discussed below, some of the
14 riparian habitat (in lower Seal Rock Creek) is occupied by CRLF, and other riparian areas and
15 adjacent wetlands provide suitable habitat for the species. The thickly vegetated understory is used
16 by Wilson's warbler, dark-eyed junco, common bushtit, and song sparrow for nesting and cover.
17 Riparian corridors provide important forage, cover, and water for resident black-tailed deer, as well
18 as serving as travel corridors for predators such as coyote.

19 **Marine Habitat**

20 Del Monte Forest marine resources include significant intertidal areas, offshore rocks which are
21 used as major rookeries, roosting, and haul-out sites, extensive kelp beds which support numerous
22 species of sport fish as well as the threatened southern sea otter, the endangered California brown
23 pelican, the Carmel Bay State Ecological Resource, and the Carmel Bay Area of Special Biological
24 Significance (ASBS) (County of Monterey 1984). Most of the Pebble Beach planning area drains to
25 Carmel Bay. The remaining watersheds drain directly to the Pacific Ocean (see Figure 3.7-1 in
26 Section 3.7, Hydrology and Water Quality).

27 **Environmentally Sensitive Habitat Areas**

28 *Environmentally Sensitive Habitat Areas* are defined under the California Coastal Act (Public
29 Resources Code, Section 30107.5) as:

30 Areas in which plant or animal life or their habitats are either rare or especially valuable because of
31 their special nature or role in an ecosystem, and which could be easily disturbed or degraded by
32 human activities and developments. In addition, some of these sensitive habitats require further
33 protection from disturbance, and this subset of sensitive habitats is called environmentally sensitive
34 habitat areas.

35 While the current LUP provides a specific list of ESHA in Del Monte Forest in Appendix A, the County
36 has decided for this project to use the definition in the Coastal Act as the definition for ESHA and has
37 identified ESHAs based on the current resources on the ground, Coastal Commission staff guidance,
38 and the current understanding of the sensitivity of different ecological areas and resources. For this
39 project, the County has used the Coastal Commission findings for Measure A from June 2007 (CCC
40 2007) to guide identification of ESHA, and the CCC findings regarding ESHA are hereby incorporated
41 by reference for the purposes of identifying ESHA for this project only.

1 Resource areas that qualify as ESHAs are summarized in Table 3.3-4. The biological resource maps
 2 in Appendix F show the locations of ESHA in different project areas. In many areas, the entire site is
 3 considered ESHA, while in some areas only part of the site is considered ESHA.

4 **Table 3.3-4. Environmentally Sensitive Habitat Areas within Project Development and Preservation**
 5 **Areas**

Project Location/Element	ESHA	ESHA Location
The Lodge at Pebble Beach	None within project area	
The Inn at Spanish Bay		
Conference Center Expansion	None within project area	
New Guest Cottages	None within project area	
New Employee Parking*	Monterey pine forest (except for disturbed areas on east side of lot)	Parking lot area
Collins Field-Equestrian Center-Special Events Area		
Driving Range Relocation from Area V to Collins Field	None within project area; isolated occurrence of PG clover in existing active recreational use area is not considered ESHA because PG clover can exist in disturbed environments	
Equestrian Center Reconstruction	Monterey pine forest on west side of equestrian center is ESHA; other Monterey pine forest is not ESHA.	West side of center
Special Events Staging Area Grading and Expansion	Monterey pine forest (w/YP) on north side of staging area is ESHA	North side of special event area
Area M Spyglass Hill		
New Resort Hotel (Option 1)	Monterey pine forest	North side of hotel
New Residential Lots (Option 2)	Monterey pine forest	North side of subdivision
Residential Lot Subdivisions		
Area F-2 (16 lots)*	Monterey pine forest (w/YP, GC, MC/HM)	Development area
Area I-2 (16 lots)*	Monterey pine forest (w/YP, MC/HM)	Development area
Area J (5 lots)*	Monterey pine forest (w/YP)	Development area
Area K (8 lots)*	Monterey pine forest (w/YP)	Development area
Area L (10 lots)*	Monterey pine forest	Development area
Area U (7 lots)	Monterey pine forest [Note: fragmented Monterey pine forest not considered ESHA, but intact forest in Lot 7 considered ESHA]	Lot 7 Development area
Area V (14 lots)	Yadon's piperia [Note: areas of Monterey pine forest to be removed are not considered ESHA]	Lot 10 and 11 Development area
Collins Residence (4 lots)	None within project area	None
Corporation Yard (10 lots)	None within project area	None
Roadway Improvements		
Internal Road Improvements	Monterey pine forest	Along existing roadways
SR 1/SR 68/17-Mile Drive Intersection Reconfiguration	None within project area	None

Project Location/Element	ESHA	ESHA Location
Preservation Areas (includes Open Space Parcels with Conservation Easements)		
Area B (19.8 acres)	Monterey pine forest (w/YP) Riparian habitat along unnamed drainage [Note: small disturbed area not considered ESHA]	Preservation area
Area C (29.9 acres)*	Monterey pine forest Wetlands	Preservation area
Area F-1 (10.2 acres)*	Monterey pine forest (w/YP, MC/HM, GC)	Preservation area
Area F-3 (17.1 acres)*	Monterey pine forest (w/YP, MC/HM) Gowen's Cypress/Bishop Pine Forest	Preservation area
Area G (60.5 acres)*	Monterey pine forest (w/YP, MC/HM) Monterey Clover Habitat	Preservation area
Area H (50.9 acres)*	Monterey pine forest (w/YP, MC/HM, SM, HO) Wetlands, riparian habitat	Preservation area
Area I-1 (38.8 acres)*	Monterey pine forest (w/YP, MC/HM, SM, HO) Riparian/CRLF Habitat (Seal Rock Creek) Wetlands	Preservation area
Area I-2 (0.3 acres)*	Monterey pine forest (w/MC/HM)	Preservation area
Area J (6.1 acres)*	Riparian/CRLF Habitat (Seal Rock Creek) Monterey pine forest (w/YP)	Preservation area
Area K (5.8 acres)*	Monterey pine forest (w/YP) Riparian/CRLF Habitat, wetlands	Preservation area
Area L (9.2 acres)*	Monterey pine forest (w/YP) Riparian/CRLF habitat (Seal Rock Creek), wetlands	Preservation area
Area M (34.1 acres)*	Remnant dunes with ESHA plants and host-plant for Smith's blue butterfly	Preservation area
Area N (48.9 acres)*	Monterey Pine forest (w/YP) Seasonal Pond/CRLF habitat Wetlands	Preservation area
Area O (20.0 acres)*	Monterey pine forest (w/YP, MC/HM)	Preservation area
Area PQR (245.9 acres)*	Monterey pine forest (w/YP, MC/HM, SM, HO) Riparian habitat (Pescadero Creek trib.) Sandmat manzanita (sig. occurrence)	Preservation area
Area U (17.4 acres)*	Monterey pine forest (w/YP) Wetlands	Preservation area
Area V (12.8 acres)*	Monterey pine forest (w/YP) Wetlands	Preservation area
Corporation Yard (4.3 acres)*	Monterey pine forest (w/YP, MC/HM)	Preservation area

Notes: Based on CCC findings for Measure A

* = Entire site considered ESHA

CRLF = California red-legged frog

HM = Hooker's manzanita

HO = Hickman's onion

MC = Monterey chaparral (co-located with Hooker's Manzanita as understory to pine forest)

Project Location/Element	ESHA	ESHA Location
PG = Pacific Grove		
SM = Sandmat manzanita		
YP = Yadon's piperia		

1

2 **Monterey Pine Forest**

3 Although locally abundant in Del Monte Forest, native Monterey pine forest is extremely rare. The
 4 world's remaining native Monterey pine forests are found in just five locations on the face of the
 5 globe: three in coastal California (in Año Nuevo, Cambria, and the Monterey peninsula) and two on
 6 Mexican islands off the coast of Baja California (the Guadalupe and Cedros Islands). The Monterey
 7 Peninsula occurrence has always been and remains the largest of the native Monterey pine forests; it
 8 is also the native forest that has suffered the largest reduction over time, primarily due to
 9 residential, golf course, and highway/road developments that have cut forest acreage roughly in
 10 half—a reduction of over 9,000 acres.

11 DFG considers Monterey pine forest a natural community of special concern and is identified by DFG
 12 in the CNDDDB (2011). Natural communities of special concern are habitats that are especially
 13 diverse, regionally uncommon, or of special concern to local, state, and federal agencies. Monterey
 14 pine has a CNPS Rank of 1B.1 (California Native Plant Society 2011), but the species is not listed as
 15 rare, threatened, or endangered by the state or federal government.

16 The Monterey pine forest community also provides a variety of biological functions and values for a
 17 wide range of special-status plants (including Yadon's piperia, Hooker's Manzanita, sandmat
 18 manzanita, Hickman's onion, and pine rose) and for resident and migratory wildlife species,
 19 (including CRLF, Monterey dusky-footed woodrat, and various raptor and other bird species). In
 20 certain locations with a Hooker's manzanita understory, the Monterey pine forest also includes
 21 maritime chaparral, which is a unique vegetation community on its own.

22 Monterey pine forest overall is not specifically identified as ESHA in the current Del Monte Forest
 23 LUP (County of Monterey 1984). However, remnant coastal dune habitat where the natural
 24 landform is stabilized by Monterey pine forest or other native vegetation and the endemic Monterey
 25 pine/Bishop pine association is specified in the LUP as ESHA.

26 The existing LCP does not specifically identify all Monterey pine forest as ESHA. For this project, the
 27 County has determined, based on Coastal Commission precedent, that intact large contiguous areas
 28 of Monterey pine forest meets the Coastal Act definition of ESHA. For the proposed project, this
 29 means that all Monterey pine forest is considered ESHA with the following exceptions:

- 30 ● Inn at Spanish Bay. The fragmented remnant forest (approximately 7.7 acres) at The Inn at
 31 Spanish Bay, west of 17-Mile Drive, is not considered ESHA because this area is small in extent,
 32 partially disturbed, fragmented, contains no special-status plant species and provides limited
 33 value for common and rare wildlife species.
- 34 ● Area B Parking Facility. The 2.9 acre area where the new parking lot is planned is partially ESHA
 35 except for the area of prior disturbance on the east side of the proposed lot.
- 36 ● Equestrian Center. Monterey pine forest or individual Monterey pines within the developed
 37 areas of the Equestrian Center are not considered ESHA.

- 1 • Part of Area V. The forested areas (approximately 1 acre) between the existing Pebble Beach
2 Driving Range and Stevenson Drive to the west and Forest Lake Road to the east, and which do
3 not contain Yadon's piperia or wetlands, is not considered ESHA because this area is small in
4 extent partially disturbed, fragmented, contains no special-status plant species, and provides
5 limited value for common and rare wildlife species.
- 6 • Part of Collins Field. The 4-acre area at the corner of Ondulado Drive and Stevenson Drive is not
7 considered ESHA because this area is small in extent, disturbed, fragmented, contains no
8 special-status plant species, and provides limited value for common and rare wildlife species.
9 The area has historically been used for parking and special events staging.
- 10 • SR 1/SR 68/17-Mile Drive Interchange. The project area for the interchange improvement is
11 located within a disturbed and degraded urbanized area of Monterey pine forest which is not
12 considered ESHA.

13 **Coastal Sand Dunes**

14 Coastal dune is a sensitive biological community because it provides habitat for several special-
15 status plant and wildlife species (including the Smith's blue butterfly) in the Monterey Bay region
16 and has been reduced from its historic extent along the California coast and is thus considered
17 ESHA. Remnant dunes are found in the Signal Hill area adjacent to Area M Spyglass Hill
18 (approximately 34.12 acres). Coastal dunes are also found west of the development area at Area L.
19 Most of these dune areas were previously placed in a conservation easement and are not part of the
20 current project but an additional small area will be added to the preservation area (0.74 acre).

21 **Maritime Chaparral**

22 Central maritime chaparral has a patchy distribution from Monterey County to northern Santa
23 Barbara County. There are about 60 species of manzanita in the world. All of these species are found
24 in California and most are found nowhere else. Within California, many are endemic to small
25 geographic areas. The central maritime chaparral in Del Monte Forest generally occurs as
26 understory within native Monterey pine forest and is typically characterized by the presence of
27 shaggy-barked Manzanita, huckleberry, blue blossom, and Hooker's manzanita. DFG lists central
28 maritime chaparral as a rare habitat type in the CNDDDB. As individual species, Hooker's manzanita is
29 a low growing, mound forming, evergreen shrub endemic primarily to Monterey County. CNPS lists
30 this species as 1B.2 (rare, threatened, or endangered).

31 Central maritime chaparral is rare and is considered valuable due to its important ecosystem
32 function of providing habitat for individual rare species, as those terms are understood in a Coastal
33 Act and LUP (and LCP overall) context. Because it also is easily disturbed and degraded by human
34 activities and developments (e.g., by conversion to residential or recreation use), it meets the
35 definition of ESHA under the Coastal Act and the LUP (and the LCP). Although not explicitly mapped,
36 there is a presumption that central maritime chaparral within the LCP amendment area includes, at
37 a minimum, the mapped areas of Hooker's manzanita.

38 **Monterey Pygmy Forest and Disjunct Bishop Pine Forest, Mixed and Pure Stands**

39 DFG considers Monterey pygmy forest (Gowen cypress/Bishop pine) a sensitive biological
40 community because it is restricted in distribution. The forest community also provides a variety of
41 biological functions and values to resident and migratory wildlife species. The areas of pygmy forest

1 on Huckleberry Hill are considered ESHA under the Del Monte Forest LUP (County of Monterey
2 1984). Additionally, an adjacent portion of a proposed preservation area (Area F-3) also contains a
3 mixed stand of Bishop pine/Gowen cypress (approximately 3.5 acres) and is also considered ESHA.
4 These communities are not found within proposed development areas.

5 **Natural Wetlands and Seasonal Ponds**

6 Natural wetlands provide habitat for terrestrial and aquatic wildlife, help to protect water quality,
7 are sensitive to disturbance and are relatively rare in the coastal zone and thus are considered
8 ESHA. Human-made wetlands are found within two development areas: Area L (golf course drainage
9 related) and Area U (equestrian center drainage related). Other natural and human-made wetlands
10 are also found in many of the preservation areas. Human-made detention ponds and ditches, while
11 also helping to protect water quality, are not considered ESHA because they are much less
12 susceptible to disturbance, and are created features that can be easily recreated.

13 Natural seasonal ponds in the project area are considered ESHA. A natural seasonal pond area
14 (approximately 15 feet in diameter, roughly 0.004 acre) was delineated within a drainage in the
15 Area N preservation area.

16 **Riparian Habitat**

17 Riparian habitats are considered sensitive biological communities because they provide a variety of
18 ecological and water quality functions. DFG also supports a “no net loss” policy for riparian habitat
19 acreage and value. A number of riparian areas (approximately 10,441 linear feet) are located within
20 proposed preservation areas. No riparian areas are within development sites.

21 **California Red-Legged Frog Habitat**

22 CRLF was federally listed as threatened on June 24, 1996. It is also a state species of special concern.
23 The CNDDDB lists numerous occurrences of CRLF in Monterey County; however, only one of these is
24 from the Monterey Peninsula. CRLFs have been identified in the lower watershed of Seal Rock
25 Creek; in water hazards immediately adjacent to Spyglass Hill Golf Course; and in two locations in
26 the proposed Area N preservation area. Since the CRLF population in these areas is the only known
27 CRLF on the Monterey Peninsula, and given the threatened status of this species, natural aquatic
28 habitat (including Seal Rock Creek) and supporting riparian corridors are considered ESHA in Del
29 Monte Forest. Human-made aquatic habitat, such as golf course ponds, drainage swales, and
30 retention/detention ponds are not considered ESHA, because such habitats are human made and far
31 less susceptible to damage as they can be readily recreated.

32 **Yadon’s Piperia**

33 Yadon’s piperia (also referred to as Yadon’s rein orchid) was federally listed as endangered in 1996
34 and has a CNPS Rare Plant Rank of 1B.1. Distribution of this species is centered in the Monterey
35 Peninsula, where plants are found throughout large undeveloped tracts of Del Monte Forest. The
36 species’ range extends north to Las Lomas near Santa Cruz County and south to near Palo Colorado
37 Canyon along the Big Sur Coast. Yadon’s piperia has been found only 4–6 miles inland despite
38 searches of lands further east. The county has determined that due to the rarity of this species, its
39 highly limited range, and the fact that the center of the population is on the Monterey Peninsula

1 (specifically within the Del Monte Forest part of the peninsula), all areas within the project area
 2 containing Yadon's piperia meet the Coastal Act definition of ESHA.

3 **LUP-Specified ESHA Plants and Other Federal/State-Listed Plants**

4 Project areas that support the following specified special-status plants are considered ESHA by the
 5 LUP:

- 6 • Hickman's potentilla (also known as Hickman's cinquefoil; known from Indian Village, adjacent
 7 to Area L).
- 8 • Menzies' wallflower (Area L preserved dunes and Area M preservation area).
- 9 • Tidestrom's lupine (Area M preservation area).
- 10 • Monterey clover habitat, Gowen cypress area (Area G preservation area).
- 11 • Sandmat manzanita, significant occurrences only (Area PQR preservation area).
- 12 • Monterey Indian paintbrush (Area L preserved dunes and Area M preservation area).
- 13 • Pt. Lobos buckwheat (a synonym for seacliff buckwheat), in shoreline areas within Smith's blue
 14 butterfly habitat (Area M preservation area).

15 Project areas that support the following specified listed plants are also considered ESHA because
 16 these plants are threatened or endangered, though not mentioned by name in the LUP:

- 17 • Monterey spineflower (Area L preserved dunes and Area M dunes preservation area).
- 18 • Sand gilia (Area M dune preservation area).
- 19 • Beach layia (Area M dune preservation area).
- 20 • Gowen's cypress individuals (Area F-2 development area).

21 **Special-Status Species**

22 Special-status species are plants and animals that are legally protected under CESA, the federal ESA,
 23 or other regulations, as well as species considered sufficiently rare by the scientific community to
 24 qualify for such listing (such as Species of Special Concern identified by DFG or CNPS List 1B species
 25 and other species that meet the CEQA definition of "rare"). The CNPS is a private organization
 26 dedicated to the preservation of native plant species and vegetation communities. Although CNPS is
 27 a private organization, CNPS' *Inventory of Rare and Endangered Vascular Plants of California*
 28 (California Native Plant Society 2011) contains useful information about the distribution and rarity
 29 of native plants and is a common reference used by professional botanists to identify plant species
 30 that fit the definition of *rare* under CEQA.

31 The definitions used to identify special-status species for this analysis other than federal or state
 32 listed species are presented in Appendix F.

33 **Special-Status Plants**

34 Extensive botanical surveys have been conducted through the entire Del Monte Forest and have
 35 resulted in the identification of several special-status plants, primarily associated with Monterey
 36 pine forest and coastal dune and terrace communities. The most recent and comprehensive surveys

1 were conducted during the spring and summer months of 2001; these covered the entire Del Monte
2 Forest. The results of these surveys are reported in the Del Monte Forest Plan Biological Resources
3 Report —Special-Status Species (Zander Associates 2001b) and are summarized in this section. An
4 updated reconnaissance was completed in 2010 to confirm that conditions are relatively unchanged
5 from the earlier period (Zander Associates 2010).

6 Based on a review of botanical survey results, the CNDDDB (2011), the prior uncertified Final EIR
7 (County of Monterey 1997), the prior certified Final EIR (Monterey County 2005), other sources of
8 information (see the “Approach and Methods” section of this Section), and the presence of suitable
9 habitat conditions, a number of special-status plants were identified as having the potential to occur
10 in Del Monte Forest and surrounding region (see Appendix F). Sixteen of these species have been
11 documented in the project area, and several others are located in nearby areas. Table 3.3-5
12 summarizes the total acres of occupied habitat and/or number of individual species located on each
13 of the project sites. Special-status plant population/occurrences in the project area are shown on a
14 site-by-site basis in the biological resource figures in Appendix F.

15 The USFWS has developed a draft recovery plan for five plant species on the Monterey Peninsula,
16 three of which have been documented within project development and/or preservation areas:
17 coastal dunes milk vetch, Monterey clover (occurs in one of the preservation areas of the project),
18 Hickman’s potentilla, Yadon’s piperia (occurs in the project area), and Gowen cypress (occurs in the
19 project area) (U.S. Fish and Wildlife Service 2002a). Recovery plans were developed for these
20 species because of their narrow distributions and immediate threats from coastal development.
21 Detailed information on each of these species can be found in Final Recovery Strategies for Six
22 Coastal Plant Species on the Monterey Peninsula (Jones & Stokes 1996a) and Draft Recovery Plan for
23 Five Plants from Monterey County (U.S. Fish and Wildlife Service 2002a). Where appropriate,
24 information from this report is discussed in Appendix F.

1 **Table 3.3-5. Special-Status Plant Location Summary by Project Area**

Project Location/Element	Yadon's Piperia		Hooker's Manzanita Habitat	Other Special-Status Plants Occurrences
	Acres	Individuals	Acres	
The Lodge at Pebble Beach	0.0	0	0.0	Monterey pine (planted)
The Inn at Spanish Bay				
New Guest Cottages	0.0	0	0.0	Monterey pine
New Employee Parking	0.0	0	0.0	Monterey pine
Collins Field-Equestrian Center-Special Events Area				
Pebble Beach Driving Range Relocation from Area V to Collins Field	0.0	0	0.0	Pacific grove clover (0.20 acre)
Equestrian Center Reconstruction	0.0	0	0.0	Monterey pine
Special Events Area Grading and Expansion	0.5	201	0.0	Monterey pine
Area M Spyglass Hill				Monterey pine, Monterey spineflower, Menzies' wallflower, beach layia, sand gilia, Tidestrom's' lupine, and Monterey Coast paintbrush in dune preservation area
New Resort Hotel (Option 1)	0.0	0	0.0	Monterey pine
New Residential Lots (Option 2)	0.0	0	0.0	Monterey pine
Residential Lot Subdivisions				
Area F-2 (16 lots)	1.92	514	18.40	Monterey pine, Gowen cypress, pine rose, sandmat Manzanita
Area I-2 (16 lots)	1.59	203	15.60	Monterey pine, pine rose
Area J (5 lots)	2.02	2,470	0.0	Monterey pine
Area K (8 lots)	4.49	5,931	0.0	Monterey pine
Area L (10 lots)	0.08	4	0.0	Monterey pine, Monterey spineflower, Menzies' wallflower, Monterey Coast paintbrush in existing conservation area at west end; pine rose in preservation area at east end. Hickman's potentilla in adjacent Indian Village preservation area.
Area U (7 lots)	2.46	2,119	0.0	Monterey pine
Area V (14 lots)	6.25	3,893	0.0	Monterey pine

Project Location/Element	Yadon's Piperia		Hooker's Manzanita Habitat	Other Special-Status Plants Occurrences
	Acres	Individuals	Acres	
Collins Residence (4 lots)	0.0	0	0.0	
Corporation Yard (10 lots)	0.36	3	0.02	Monterey pine
Preservation Areas				
Area B	1.98	274	0.0	Monterey pine
Area C	0.0	0	0.0	Monterey pine
Area F-1	4.52	2,486	3.58	Monterey pine, Gowen cypress
Area F-3	1.42	135	16.80	Monterey pine, Gowen cypress, pine rose, sandmat manzanita, Hickman's onion
Area G	4.90	757	33.50	Monterey pine, Monterey clover, pine rose, Hickman's onion
Area H	4.70	624	22.50	Monterey pine, pine rose, sandmat manzanita, Hickman's onion
Area I-1	9.50	2,970	9.80	Monterey pine, pine rose, sandmat manzanita, Hickman's onion
Area N	25.45	27,967	0.0	Monterey pine
Area O	18.84	23,874	1.85	Monterey pine
PQR	43.10	56,132	29.10	Monterey pine, sandmat manzanita, Hickman's onion
Roadway Improvements				
Internal Road Improvements	0.0	0	0.0	Monterey Pine
SR 1/SR 68/17-Mile Drive Intersection Reconfiguration	0.0	0	0.0	Monterey pine (planted)
Total	134.08	130,557	151.15	

Sources:

Zander Associates 2001b ; WWD Corporation 2011.

1 **Special-Status Wildlife**

2 Based on a review of wildlife survey results (Zander Associates 2001b and 2010), the California
3 Natural Diversity Database (2011), the prior uncertified Final EIR (County of Monterey 1997), the
4 certified Final EIR (Monterey County 2005), CRLF assessments and surveys (Wetlands Research
5 Associates 2002a, 2002b, and 2003), and other sources of information (see description of data
6 sources in Appendix F), a number of special-status wildlife species were initially identified as having
7 the potential to occur in the project area (see Appendix F). Of these, 13 special-status species were
8 determined to be present or have suitable habitat within project development and preservation
9 areas with 3 additional special-status species found in adjacent offshore areas.

10 Four special-status wildlife species have been documented in project development and preservation
11 areas:

- 12 ● CRLF.
- 13 ● Monterey dusky-footed woodrat.
- 14 ● Sharp-shinned hawk.
- 15 ● White-tailed kite.

16 Suitable habitat for the following 9 additional special-status species has been identified on project
17 development and preservation areas, and thus these species have the potential to occur in the
18 project areas:

- 19 ● Smith's blue butterfly.
- 20 ● Black legless lizard.
- 21 ● Silvery legless lizard.
- 22 ● California horned lizard.
- 23 ● Western pond turtle.
- 24 ● Pallid bat.
- 25 ● Ringtail.
- 26 ● Monterey ornate shrew.
- 27 ● Cooper's hawk.

28 The following three additional special-status species might be present in shoreline habitats and
29 marine areas offshore:

- 30 ● Southern sea otter.
- 31 ● California brown pelican.
- 32 ● Western snowy plover.

33 The project does not contain any marine areas. However, these species were included in the project
34 baseline in order to assess whether indirect effects related to project run-off might affect them.

1 Impacts Analysis

2 Methodology

3 Approach

4 **Monterey Pine Forest.** The impact analysis for Monterey pine forest in the project area is based on
5 the extent of the habitat affected within the development and preservation areas, as summarized in
6 Table 3.3-6, and the extent of undeveloped Monterey pine forest in Del Monte Forest, the Monterey
7 region, and in California. The area of forest that would be directly affected at each project site was
8 derived from information provided by the applicant (WWD Corporation 2011). The areas of removal
9 for proposed residential lots presumes up to 15,000 square foot removal for each lot. ICF reviewed
10 the data originally provided by the applicant and several revisions were made to ensure that the
11 numbers accurately represented disturbance and preservation areas. ICF calculated all indirect
12 habitat impact acreages. The general disturbance areas are shown in the Biological Resource maps
13 in Appendix F. The project's effects in a regional context are summarized in Table 3.3-7.

14 **Special-Status Species.** The impact analysis for each special-status plant species documented in the
15 project area is based on the number of individuals and the extent of the population. The most
16 current data on population numbers and occupied habitat areas were used in this analysis (see
17 discussion of data sources in Appendix F). The analysis recognizes that special-status plant
18 populations may fluctuate annually, depending on amount of rainfall, herbivory, survey and
19 counting methods (e.g., counting vegetative plants rather than flowering plants), and other factors
20 that may result in an increased or decreased number of individual plants. However, the County
21 determined that the best available existing data should be used to prepare this Draft EIR. The area of
22 disturbance and number of individuals that would be directly affected at each project site were
23 provided by the applicant (WWD Corporation 2011) and reviewed by ICF.

24 The impact analysis for each special-status wildlife species documented or with potential to occur in
25 the project area is based on the species' presence, presence of suitable habitat, and the extent of the
26 population that occurs within and outside the project area. The most current data on species
27 occurrences and occupied habitat areas was used in this analysis (see discussion of data sources in
28 Appendix F). The analysis recognizes that occurrences of special-status wildlife species (e.g., CRLF)
29 may fluctuate annually depending on environmental conditions, survey methods, and other factors
30 that may result in the presence or absence of species.

31 **Tree Removal.** Two methods were used to determine the number of trees removed by the
32 proposed project. For The Lodge at Pebble Beach, The Inn at Spanish Bay, the Equestrian Center—
33 Collins Field—Special Events Area, and Area M Spyglass Hill, tree surveys were completed to
34 determine the number of trees present and the proposed impact. For all other project locations, the
35 impact was based on previous vegetation mapping and stand sampling, with the number of trees
36 affected determined from the footprint of the proposed project elements. The analysis
37 conservatively assumed that all trees would be removed within a 15,000 square foot area of
38 disturbance within each building envelope of the proposed residential lots.²

² Policies in the proposed LCP amendment require minimization of forest/tree removal to the minimum necessary for development and thus it is expected that on average, forest/tree removal will not exceed 15,000 square feet; however, there may be locations where removal may be higher or lower than 15,000 square feet.

1 Criteria for Determining Significance

2 In accordance with CEQA, the State CEQA Guidelines, Monterey County plans and policies, and
3 agency and professional standards, a project impact would be considered significant if the project
4 would:

5 A. Environmentally Sensitive Habitat Areas

- 6 • Result in any direct or indirect disturbance of habitats designated as ESHA, as defined by the
7 Coastal Act, which results in disruption of protected resources and habitat values.

8 B. Sensitive Habitats

- 9 • Have a substantial adverse effect on any riparian habitat or other sensitive natural community
10 identified in local, state, or federal regional plans, policies, or regulations, including those
11 resulting in long-term degradation of a sensitive plant community because of substantial
12 alteration of a land form or site conditions (e.g., alteration of wetland hydrology).
- 13 • For direct and indirect effects on Monterey pine forest within Del Monte Forest, a “substantial
14 adverse effect” is defined in this document as *“the loss, conversion, and/or fragmentation of
15 Monterey pine forest such that the natural forested character is not retained to the maximum
16 extent feasible consistent with allowable development under the Del Monte Forest Land Use Plan”*
17 *(per LUP Policy 31)*, or *“such that long-term protection of the natural forest resource is not
18 achieved (per LUP Policy 32), including preservation of forest plant associations, forest geographic
19 and genetic diversity, native soil cover, and overall forest health”*.
- 20 • For cumulative effects on Monterey pine forest on a regional basis, a “substantial adverse effect”
21 is defined in this document as *“the loss, conversion, and/or fragmentation of Monterey pine forest
22 such that the future conservation of Monterey pine forest, in absence of an adopted regional
23 conservation plan, would be uncertain”*; uncertainty is defined as the loss of more than 5% of
24 existing undeveloped Monterey pine forest on a regional basis. While public agencies, private
25 organizations, and individuals have conducted numerous studies on the conservation of
26 Monterey pine and Monterey pine forest, no regional forest conservation plan has been adopted.
27 In light of the prior reduction of forest areas, current threats posed by development, alteration
28 of natural forest succession (through fire suppression), the effect of pathogens (such as pine
29 pitch canker), and the introduction of exotic species, a conservative approach to further losses of
30 Monterey pine forest is warranted until a regional forest conservation plan can be adopted and
31 implemented. While at present there is no definitive scientific method or consensus by which to
32 establish a fixed amount and location of preservation needed to secure the overall conservation
33 of Monterey pine forest, in this document an interim loss of no more than 5% (meaning
34 preservation of 95% of the extant resource) is identified as providing a reasonable certainty that
35 options for future conservation will not have been foregone.

36 C. Wetlands/Waters

- 37 • Result in direct loss through direct removal or filling of wetlands or waters as defined by CWA
38 Section 404, or wetlands that meet the Coastal Act definition, or result in substantial adverse
39 affects on wetlands by hydrological interruption or other means. Result in direct or indirect
40 impacts on state waters as defined by CWA Section 401, the Porter-Cologne Water Quality Act,
41 or streams as defined by Section 1600 of the California Fish and Game Code.

1 **D. Special-Status Species**

- 2 • Have a substantial adverse effect, either directly or through habitat modifications, on any
3 species identified as a candidate, sensitive, or special-status species in local or regional plans,
4 policies, or regulations, or by designation of DFG or USFWS including reducing the number or
5 restricting the range of an endangered, rare, or threatened species.

6 **E. Wildlife Habitat/Populations/Plant Communities**

- 7 • Substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to
8 drop below self-sustaining levels, or threaten to eliminate a plant or animal community.

9 **F. Indirect Habitat Impacts Resulting from Human Use**

- 10 • Result in substantial disturbance of protected wildlife or their habitats from human activities
11 related to equestrian and pedestrian trail siting and use.

12 **G. Wildlife Movement**

- 13 • Interfere substantially with the movement of any native resident or migratory fish or wildlife
14 species, or with established native resident or migratory wildlife corridors, by blocking or
15 fragmenting access, or by permanently eliminating known wildlife corridors in areas known for
16 frequent and substantial wildlife movement that provide important links between habitat areas.

17 **H. Wildlife Breeding and Nesting**

- 18 • Impede the use of native wildlife nursery sites or directly harm nesting species protected under
19 the provisions of the Migratory Bird Treaty Act.

20 **I. Tree Removal**

- 21 • Remove any Monterey cypress, Gowen cypress or Bishop pine trees within their indigenous
22 range except in cases where life, property, or existing access is immediately threatened, or
23 where a diseased tree is determined by a qualified professional forester to represent a severe
24 and serious infection hazard to the rest of the forest.
- 25 • Inadvertently remove or damage trees not planned for removal, introduce non-local tree stock
26 such that genetic diversity is diminished and/or spread tree disease (such as pitch canker)
27 during tree removal.

28 **Project Impacts and Mitigation Measures**

29 **A. Environmentally Sensitive Habitat Areas**

30 **Impact BIO-A1. Project development would result in direct removal and indirect disturbance** 31 **to ESHA while preserving far larger ESHA. (Less than significant with mitigation)**

32 The evaluation of impacts on areas designated as ESHA is based on the identification of ESHA based
33 on current conditions and sensitivity as discussed above, and as presented in Table 3.3-4 above and
34 in the biological resource figures in Appendix F. Since ESHA areas, such as Monterey pine forest
35 (most project areas) or Yadon's piperia, are also considered significant biological resources per
36 other significance criteria, this section summarizes the results of subsequent impact analyses. For

1 details of the resource impact analysis itself, please refer to the resource by resource discussions
2 below.

3 It is long standing practice of the CCC that impacts on ESHA for non-resource dependent
4 development are to be avoided rather than mitigated. The project's proposed visitor-serving and
5 residential development are not resource dependent, although some of the ancillary developments,
6 such as trail development and internal Del Monte Forest roadway improvements are resource
7 dependent because their locations are fixed in areas containing ESHA. As described in Chapter 2,
8 Project Description, the project analyzed in this Draft EIR under CEQA includes both the proposed
9 development project as well as the LCP Amendment. As noted above, the LCP Amendment would
10 specifically allow the proposed project's development to be permitted. The agreement between the
11 CCC staff and the applicant identifies that the CCC staff has determined that the LCP Amendment
12 represents a balancing of impacts on ESHA due to development located within and adjacent to
13 previously disturbed areas with the opportunity to preserve far larger areas of ESHA containing
14 extensive, intact, contiguous habitat and high ecological values.

15 ESHA impacts can be summarized as follows.

- 16 • **Monterey Pine Forest, including Maritime Chaparral.** The proposed project would result in
17 the removal of up to 41 acres of Monterey pine forest (most of which is ESHA), including at least
18 12 acres of maritime chaparral understory. The project would also result in indirect effects to up
19 to 44 additional acres of Monterey pine forest (most of which is ESHA), including at least 22
20 acres of maritime chaparral understory. The project would preserve 598 acres of Monterey pine
21 forest (all of which is ESHA), including 117 acres of maritime chaparral understory. In concept,
22 the proposed preservation of such areas would substantially offset the direct and indirect effects
23 of the project. However, implementation of Mitigation Measures BIO-A and BIO-A2, as discussed
24 below, is required to formalize dedication of these areas and to prepare and implement site-
25 specific resource management plans for preservation areas for the benefit of Monterey pine
26 forest, including maritime chaparral.
- 27 • **Coastal Dunes Habitat, including ESHA Dune Plants and Smith's Blue Butterfly Habitat.**
28 The proposed project would not result in the removal of any coastal dunes habitat, but could
29 result in indirect effects at Area L or Area M dunes due to intrusion by new residents, hotel
30 users, escaped (invasive) landscaping, or pesticide drift. The proposed project would result in
31 the preservation of 34 acres of coastal dunes at Area M. In concept, the proposed preservation of
32 this area would substantially offset the direct and indirect effects of the project. However,
33 implementation of Mitigation Measures BIO-A1, BIO-A2, and BIO-B2, as discussed below, is
34 required to formalize dedication of these areas, implement resource management plans for
35 preservation areas for the benefit of coastal dunes habitat, ESHA dune plants, and Smith's blue
36 butterfly, and include specific measures to avoid indirect effects at Areas L and M.
- 37 • **Monterey Pygmy Forest.** The proposed project would not result in the removal of any
38 Monterey pygmy forest. The project may result in indirect effects to Monterey pygmy forest in
39 the HHNHA due to increased trail use and adjacent residential use. Implementation of Mitigation
40 Measure BIO-B3, as discussed below, is required to manage indirect effects due to increased trail
41 use and to adjacent residential use.
- 42 • **Riparian Habitat.** The proposed project would not result in removal of any riparian habitat. All
43 riparian habitat is protected by setback areas. The project would result in preservation of

- 1 approximately 10,415 linear feet of riparian habitat. This is a beneficial impact; no mitigation is
2 required.
- 3 • **Natural Wetlands/Seasonal Ponds.** The proposed project would result in the removal or fill of
4 up to 0.06 acres of wetlands at Area L and Area U. The proposed project could also result in
5 indirect effects to wetlands due to run-off at Areas J, K, L, U and V. The project will result in
6 preservation of 9.5 acres of wetlands. In concept, the proposed preservation of such areas would
7 substantially offset the direct and indirect effects of the project. However, implementation of
8 Mitigation Measures BIO-A1, BIO-A2, and BIO-C1, as discussed below, is required to formalize
9 dedication of these areas and implement resource management plans for preservation areas for
10 the benefit of natural wetlands and seasonal ponds, and to avoid or compensate for wetland
11 losses. Mitigation measures HYD-A1, A2, C1, C2, and C3 are also required to address potential
12 hydrological and water quality impacts on wetlands.
 - 13 • **Yadon's Piperia.** The proposed project would result in the removal of up to 6 acres of Yadon's
14 piperia habitat and indirect impacts on 3 acres of habitat. The proposed project would result in
15 the preservation of 125 acres of Yadon's piperia habitat, including critical habitat areas
16 identified by the USFWS (in Areas B, G, H, I-1, L and PQR), and a substantial majority of the
17 plants overall known population.³ In concept, the proposed preservation of such areas
18 substantially offsets the direct and indirect effects of the project. However, implementation of
19 Mitigation Measures BIO-A1, BIO-A2, and BIO-D1, as discussed below, is required to formalize
20 dedication of these areas and implement resource management plans for preservation areas for
21 the benefit of Yadon's piperia.
 - 22 • **Gowen Cypress.** The project could result in removal of individual Gowen cypress in Area F-2.
23 The project would result in the preservation of Gowen cypress in Areas F-1 and F-3 which are
24 adjacent to a larger area of Gowen cypress habitat in the HHNHA (which was previously
25 dedicated by the applicant). In concept, the proposed preservation of such additional areas
26 would substantially offset the direct and indirect effects of the project. However,
27 implementation of Mitigation Measures BIO-A1, BIO-A2, and BIO-D2, as discussed below, is
28 required to formalize dedication of these areas, implement resource management plans for
29 preservation areas for the benefit of ESHA, and restoring degraded areas of Gowen cypress
30 habitat.
 - 31 • **California Red-Legged Frog Habitat.** The proposed project would not result in the removal of
32 any aquatic habitat for the CRLF, but may result in mortality of individuals during construction,
33 would remove upland habitat, and could indirectly degrade CRLF habitat due to project run-off.
34 The project would also result in the preservation of CRLF habitat in Areas J, K, L and N. In
35 concept, the proposed preservation of such areas substantially offsets the direct and indirect

³ The applicant previously dedicated the 372 acre HHNHA containing Yadon's piperia habitat of 38 acres, which contains a large piperia occurrence. The applicant has also entered into a Memorandum of Understanding (MOU) with the USFWS to preserve 99 acres of Monterey pine forest and Yadon's piperia habitat outside the Del Monte Forest (83 acres at the Aguajito site in the County of Monterey and 16 acres at the Old Capitol site in the City of Monterey). The prior dedication of the HHNHA is an existing condition and thus is not credited as mitigation for the current project. As discussed below, the proposed preservation of Yadon's piperia habitat within the Del Monte Forest included with the proposed project is considered adequate preservation to offset project impacts, with implementation of resource management for this species. Thus, any additional dedications done by the Applicant at the Aguajito or Old Capitol sites outside the Del Monte Forest pursuant to the MOU between USFWS and the Applicant are in addition to that included in the current project and/or required as mitigation by Monterey County.

1 effects of the project. However, implementation of Mitigation Measures BIO-A1, BIO-A2, BIO-E1,
 2 and BIO-E2, as discussed below, is required to formalize dedication of these areas, implement
 3 resource management plans for preservation areas for the benefit of CRLF, limit construction
 4 period impacts, and provide additional and enhanced compensatory frog breeding habitat.

5 **Mitigation Measure BIO-A1. Develop and implement a site-specific resource management**
 6 **plan, based on the Master Resource Management Plan, for each preservation area.**

7 The applicant will be required to develop and implement site-specific RMPs (SSRMPs) for the
 8 following areas:

- 9 ● Signal Hill Dunes—SSRMP for the Signal Hill Dune Preservation Area in Area M.
- 10 ● Area NOUV—Combined SSRMP for the contiguous preservation areas in Areas N, O, U, and V
 11 and the preserved occurrence of Pacific Grove clover in Collins Field (if the in-situ
 12 preservation mitigation option is selected).
- 13 ● Area B & C—Combined SSRMP for Preservation Area B and C.
- 14 ● Huckleberry Hill Natural Habitat Area (HHNHA) and Contiguous Areas—combined SSRMP
 15 for contiguous areas including HHNHA/SFB Morse Preserve, Preservation Areas F-1, F-3, G,
 16 H, I-2 and Corporation Yard and possibly a portion of Area D.
- 17 ● Lower Seal Rock Creek Area—combined SSRMP for Preservation Areas I-1, J, K and L and
 18 management of Hickman’s potentilla and Pacific Grove clover in Indian Village.
- 19 ● Preservation Area PQR.

20 The SSRMPs will be developed by a qualified third-party biologist under contract to the County,
 21 will be based on the guidance and framework provided in a County-approved Master RMP
 22 (Appendix C), and will be reviewed and approved by the County.

23 Each SSRMP will include specific management measures identified for biological resources in
 24 this Draft EIR if said resource is contained in the preservation area for which the SSRMP is being
 25 prepared. These resources include:

- 26 ● Monterey pine forest (including maritime chaparral understory).
- 27 ● Monterey pygmy forest.
- 28 ● Coastal dune habitat.
- 29 ● Riparian habitat.
- 30 ● Wetlands and waters.
- 31 ● Special-status plant species.
- 32 ● Special-status wildlife species, including CRLF.
- 33 ● Nesting raptors and MBTA-regulated bird species.
- 34 ● Pallid bat (standing dead trees throughout the project area).

35 For each resource being protected, the SSRMP will include:

- 36 ● A description of the resource and detailed description of the management measures to
 37 protect the resource.

- 1 ● Specific protection, restoration, and management methods, including timing and personnel.
- 2 ● Monitoring methods and reporting procedures, including timing and personnel.

3 For Monterey pine forest restoration and management and for each special-status plant that is
4 targeted for reestablishment, transplantation, propagation, outplanting, or *in situ* management,
5 the USFWS policy guidelines regarding controlled propagation of listed species will be followed
6 for the reintroduction or establishment of new populations of federally listed species (65 FR
7 56916). As such, each site-specific RMP will contain the following elements regarding special-
8 status plants:

- 9 ● Detailed transplantation, propagation, and outplanting methods.
- 10 ● Description and mapped locations for “donor sites.”
- 11 ● Site selection methods (donor sites, reestablishment sites, and transplantation sites).
- 12 ● Site protection measures (e.g., type and location of fencing).
- 13 ● Adaptive management plan (including weed control).
- 14 ● Success criteria.
- 15 ● Monitoring and reporting methods (monitoring and reporting will be conducted annually
16 for the first 5 years and every 2 years after 5 years until the success criteria have been met).

17 Each SSRMP will include an annual work plan and monitoring report to be approved by the
18 County. The work plan will include an education program for maintenance staff whereby a
19 qualified biologist will provide information on special-status plant and wildlife species. The
20 applicant will ensure that the measures are implemented by monitoring for a minimum period
21 of 20 years.

22 **Mitigation Measure BIO-A2. Dedicate conservation easements to the Del Monte Forest**
23 **Foundation for all preservation areas.**

24 The applicant will be required to dedicate conservation easements to the Del Monte Forest
25 Foundation or other approved entity for proposed preservation areas, which includes over 635
26 acres of undeveloped land within Areas B, C, F-1, F-3, G, H, I, J, K, L, M, N, O, PQR, U, V, and
27 Corporation Yard as identified in Appendix C.

28 The conservation easements will incorporate specific development prohibitions based on the
29 protection measures outlined in the Master RMP (Appendix C) and the SSRMPs to be developed
30 (per Mitigation Measure BIO-A1). The conservation easements will contain specific restrictive
31 language that permanently prohibits all future development in the preservation areas, with the
32 following exceptions:

- 33 ● Existing trails and utility uses and their maintenance.
- 34 ● New recreational trails and utility lines within the applicant’s proposed preservation areas.
- 35 ● Limited expansion of trails, but not expansion of formal recreational facilities, utility lines or
36 corridors, nor construction of any additional supporting facilities.

37 The conservation easements will also contain:

- 1 ● A guarantee of full funding for implementation and monitoring by the applicant of all
- 2 agency-approved resource management methods established in all agreements and MOUs.
- 3 ● A statement that these dedicated areas cannot be used for the mitigation of any other past,
- 4 present, or future projects.

5 The intent of this language is to prevent the possibility of later revision, amendment, or
 6 interpretive disputes concerning the conservation easements that might directly or indirectly
 7 result in the loss of habitat area and quality that is intended and required solely as mitigation for
 8 this project's effects. The intent is also to ensure the implementation of proposed resource
 9 management activities that are intrinsic to enhancing and maintaining the forest's ecological
 10 values, such as implementation of resource and wildfire management practices.

11 **Significance Determination after Mitigation.** With the LCP Amendment's balancing of the
 12 priorities under the Coastal Act supporting the preservation of larger areas of intact ESHA at the
 13 expense of limited impacts on ESHA with areas that are previously disturbed or are adjacent to
 14 existing development, and with the implementation of the mitigation measures noted above, the
 15 project's impacts on ESHA are considered less than significant.

16 **B. Sensitive Habitats**

17 **Impact BIO-B1. Project development would result in direct disturbance and indirect impacts** 18 **on Monterey pine forest (including maritime chaparral) while preserving far larger areas of** 19 **Monterey pine forest (including maritime chaparral). (Less than significant with mitigation)**

20 As noted in the "Environmental Setting" section and in the detailed setting in Appendix F, all stands
 21 of undeveloped Monterey pine forest are considered sensitive communities for the purposes of this
 22 analysis.

23 **Impacts Related to Development Areas.** The proposed project would require the removal of
 24 existing undeveloped Monterey pine forest to accommodate project developments. In addition, as a
 25 result of the removal of understory vegetation and soil modification by the activities of future
 26 residents, additional areas of undeveloped forest would be converted to a suburban forest without
 27 native understory.

28 In addition to direct removal of forest by grading and type conversion due to understory
 29 modification, indirect effects on Monterey pine forest could also result from:

- 30 ● Disturbance of the root zone and soil compaction from adjacent grading and trenching activities.
- 31 ● Changes in soil and hydrologic conditions from increased irrigation and run-off.
- 32 ● Increased exposure to fertilizers and herbicides from adjacent developed areas.
- 33 ● Fragmentation of remnant stands.
- 34 ● Increased susceptibility to insects and diseases, including pitch canker for Monterey pine.
- 35 ● Loss of genetic diversity for Monterey pine.

36 Due to property maintenance, soil can become compacted in heavy use areas, preventing native
 37 understory and pine regeneration. The greater exposure of forest edge to development and
 38 landscaping might also result in increases within the forest of foot traffic, pesticides, herbicides,
 39 irrigation water, cats, dogs, yard waste, and trash. As mature trees die and tree regeneration is

1 suppressed over time, native Monterey pine and coast live oak canopy could be replaced by
2 nonnative ornamental trees.

3 The focus of this impact analysis is on undeveloped native Monterey pine forest supporting a
4 Monterey pine- and coast live oak-dominated overstory and native undisturbed understory.
5 Accordingly, this impact analysis of residential development is based on an assumption that the
6 undeveloped Monterey pine forest within the building envelope will be substantially converted to
7 suburban forest through removal of native understory, suppression of natural overstory
8 regeneration, and curtailment of effective forest ecosystem management practices.

9 A summary of the quantitative extent of project effects by area is presented in Table 3.3-6. Monterey
10 pine forest removal, type conversion, and fragmentation/indirect effects would occur at all project
11 development locations except at The Lodge at Pebble Beach and in all project development elements
12 except for the Conference Center at The Inn at Spanish Bay, the Collins Residence, and the
13 Corporation Yard. Narrative discussions of impacts on Monterey pine forest by project location are
14 provided below. Analysis of central maritime chaparral (Monterey phase) has been subsumed in the
15 analysis of Monterey pine forest, because it most commonly occurs as inclusions within Monterey
16 pine forest in the project area.

17 **Table 3.3-6. Summary of Project Effects on Monterey Pine Forest**

Project Location/Element	Disturbed Acres	Indirect Acres	Preserved Acres	Total Acres
The Lodge at Pebble Beach	0.00	0.00	0.00	0.00
The Inn at Spanish Bay				
Conference Center Expansion	0.00	0.00	0.00	0.00
New Guest Cottages	3.20	0.00	0.00	3.20
New Employee Parking	2.81	1.64	0.00	4.45
Collins Field-Equestrian Center-Special Events Area				
Pebble Beach Driving Range Relocation from Area V to Collins Field	0.61	0.49	0.00	1.10
Equestrian Center Reconstruction	1.41	0.66	0.00	2.07
Special Events Staging Area Grading and Expansion	1.77	0.00	0.00	1.77
Area M Spyglass Hill				
New Resort Hotel (Option 1)	5.00	1.50	0.00 ^a	6.50
New Residential Lots (Option 2)	2.43	4.07	0.00 ¹	6.50
Residential Lot Subdivisions				
Area F-2 (16 lots)	7.11	12.39	0.00	19.50
Area I-2 (16 lots)	5.74	13.00	0.00	18.74
Area J (5 lots)	1.81	1.99	6.05	9.85
Area K (8 lots)	3.18	1.55	5.84	10.57
Area L (10 lots)	4.48	4.43	9.25	18.16
Area U (7 lots)	2.45	3.14	17.44	23.03
Area V (14 lots)	1.19	3.70	12.76	17.65
Collins Residence (4 lots)	0.00	0.00	0.00	0.00

Project Location/Element	Disturbed Acres	Indirect Acres	Preserved Acres	Total Acres
Corporation Yard (10 lots)	0.00	0.00	4.25	4.25
Preservation Areas				
Area B	0.00	0.00	19.74	19.74
Area C	0.00	0.00	29.88	29.88
Area F-1	0.00	0.00	10.24	10.24
Area F-3	0.00	0.00	17.12	17.12
Area G	0.00	0.00	60.53	60.53
Area H	0.00	0.00	50.89	50.89
Area I-1	0.00	0.00	38.82	38.82
Area N	0.00	0.00	48.87	48.87
Area O	0.00	0.00	19.98	19.98
Area PQR	0.00	0.00	245.89	245.89
Roadway Improvements				
Internal Road Improvements	0.40	0.00	0.00	0.40
SR 1/SR 68/17-Mile Drive Intersection Reconfiguration	0.33	0.00	0.00	0.33
Total (with Area M Option 1)	41.49	44.49	597.83	683.53
Total (with Area M Option 2)	38.92	47.06	592.91	683.53

Source:

LSA 2001, WWD Corporation 2011.

Note:

^a Does not include Monterey pines retained in the dune preservation area.

1

2

Table 3.3-7. Summary of Project Impacts on Monterey Pine Forest in a Regional Context (acres)

Location	Historic Size ^a	Present Size ^b	Preserved at Present ^c	Change in Size ^b	Preserved by Project ^b
Project Areas	N/A	684	0	-41	598
Del Monte Forest outside of Project Areas	N/A	1,031	474	0	0
<i>Subtotal Del Monte Forest</i>	<i>N/A</i>	<i>1,715</i>	<i>474</i>	<i>-41</i>	<i>598</i>
<i>Percents</i>			<i>28%</i>	<i>-2%</i>	<i>+35%</i>
Monterey Region Outside of Del Monte Forest	N/A	7,694	2491	0	0
<i>Subtotal Monterey Region</i>	<i>18,324</i>	<i>9,405</i>	<i>2965</i>	<i>-41</i>	<i>598</i>
<i>Percents</i>			<i>32%</i>	<i><1%</i>	<i>+6%</i>
Ano Nuevo	1,500	1,500	30		
Cambria	3,500	2,300	100		
<i>Subtotal California</i>	<i>23,324</i>	<i>13,205</i>	<i>3,095</i>	<i>-41</i>	<i>598</i>
<i>Percents</i>			<i>23%</i>	<i><1%</i>	<i>+5%</i>
Cedros Island (Mexico)	370	370			
Guadalupe Island (Mexico)	Unknown	<1			
<i>Subtotal Mexico</i>	<i>370</i>	<i>370</i>	<i>3,095</i>		

Location	Historic Size ^a	Present Size ^b	Preserved at Present ^c	Change in Size ^b	Preserved by Project ^b
Total	23,694	13,575	23%	-41	598
Percents				<1%	+4%

Sources:

^a Jones & Stokes 1996b

^b Project information from WWD Corporation 2011. Source for other than project information is Jones & Stokes 1996b.

^c Jones & Stokes 1996b; Huffman & Associates 1994; Zander Associates 2002a; Pebble Beach Company 2003; Monterey County 2002. See Appendix F.

1

2 The discussions below summarize project effects by location.

- 3 ● **New Guest Cottages.** Development of New Guest Cottages at The Inn at Spanish Bay would
4 result in the removal of about 3.2 acres of Monterey pine forest west of 17-Mile Drive.
- 5 ● **New Employee Parking.** Development of New Employee Parking in Area B at The Inn at
6 Spanish Bay would result in removal of about 2.81 acres of forest and indirect impacts on 1.64
7 acres of undeveloped Monterey pine forest.
- 8 ● **Pebble Beach Driving Range Relocation from Area V to Collins Field.** Relocation and
9 construction of the new driving range at Collin Field would result in the removal (0.61 acre) and
10 type conversion (0.49 acre) of Monterey pine forest along the site margins.
- 11 ● **Equestrian Center Reconstruction.** Demolition and reconstruction of the equestrian center
12 would result in the removal (1.41 acre) and type conversion (0.66 acre) of Monterey pine forest
13 along the site margins.
- 14 ● **Special Events Staging Area.** Grading and expansion of the Special Events Staging Area would
15 result in the removal (1.77 acre) of Monterey pine forest along the north edge of the site.
- 16 ● **Residential Area F-2.** Development of Area F-2 for residential use would result in the removal
17 (7.11 acres) and type conversion (12.39 acres) within a partially fragmented area of Monterey
18 pine forest presently situated between fairways of the Poppy Hills Golf Course.
- 19 ● **Residential Area I-2.** Development of Area I-2 for residential uses would result in removal
20 (5.74 acres) and type conversion (13.0 acres) within a long, relatively narrow fragmented strip
21 of land that borders golf course and residential development along Viscaino and Ronda Roads.
- 22 ● **Residential Area J.** Development of Area J for residential uses would result in impacts on an
23 area of Monterey pine forest within fragmented stands of forest bordering existing residences
24 and fairways of Hole 13 and the northern portion of Hole 12 of the Spyglass Hill Golf Course.
25 These impacts would entail an estimated removal of and type conversion of 1.81 acres within
26 the building envelope and 1.99 acres of indirect effects on the remaining lots. Dedication of
27 conservation easements located northeast of Spyglass Woods Drive and northeast and southeast
28 of the intersection of Stevenson and Spyglass Woods Drives comprising 6.05 acres is also part of
29 this project element.
- 30 ● **Residential Area K.** Development of Area K for residential uses would result in impacts on an
31 area of Monterey pine forest at the edge of an existing stand of forest on Spyglass Hill Golf

1 Course. Area K spans Stevenson Drive and is situated between the fairways of Holes 11 and 8 of
2 the Spyglass Hill Golf Course. These impacts would entail an estimated removal and type
3 conversion of 3.18 acres within the building envelope and indirect effects on the remaining 1.55
4 acres. Dedication of a conservation easement on 5.84 acres is also proposed as part of this
5 project element.

- 6 ● **Residential Area L.** Residential development at Area L would result in removal of 4.48 acres
7 and type conversion of 5.17 acres of Monterey pine forest. Area L is located south and east of
8 The Dunes Road and north of Holes 6 and 7 of the Spyglass Hill Golf Course. Dedication of a
9 conservation easement on 8.51 acres of Monterey pine forest in Area L is also proposed as part
10 of the project.

- 11 ● **Residential Area U.** Residential development at Area U would result in removal of 2.45 acres
12 and type conversion of 3.14 acres of Monterey pine forest. Area U is located south of Drake
13 Road, north of Portola Road, and west of Stevenson Drive. Dedication of a conservation
14 easement on 17.44 acres in the western and northeastern portions of Area U is also proposed as
15 part of the project.

- 16 ● **Residential Area V.** Residential development at Area V would result in removal of 1.19 acres
17 and type conversion of 3.70 acres of Monterey pine forest. Area V is located south of Drake Road,
18 north of Portola Road, and west of Stevenson Drive. Dedication of a conservation easement on
19 12.76 acres area in the western and northern portions of Area V is also proposed as part of the
20 project

- 21 ● **Internal Road Improvements.** Improvements at four road intersections would require
22 removal of approximately 0.4 acre of Monterey pine forest. The Highway 1/68 and 17-Mile
23 Drive Intersection improvements would require removal of individual planted Monterey pine
24 trees; these are not included as an impact on pine forest in this analysis (they are included in
25 assessment of tree removal under Impact BIO-J1 below).

- 26 ● **Preservation Areas.** In addition to the proposed preservation areas discussed above for
27 Residential Areas L, U, and V, the project also includes preservation in Areas B, C, F-1, F-3, G, H, I-
28 1, N, O, and PQR for a total of 598 acres of Monterey Pine Forest.⁴

29 **Significance Determination before Mitigation.** The proposed project would result in direct loss of
30 up to 41 acres of Monterey pine forest, which represents approximately 2% of the remaining
31 undeveloped Monterey pine forest in Del Monte Forest and less than 1% of the undeveloped forest
32 in the Monterey region (Table 3.3-7).

33 Indirect effects on up to 47 acres of Monterey pine forest are more difficult to quantify, given that
34 the degree of fragmentation and character and extent of other indirect effects are site-specific.
35 Indirect effects would occur most prominently directly adjacent to direct removal or type
36 conversion and/or directly adjacent to areas of development activity.

⁴ As noted above, the applicant has entered into a Memorandum of Understanding with the USFWS to preserve another 99 acres of Monterey pine forest/Yadon's piperia habitat (83 acres at Aguajito and 16 acres at the Old Capitol site). These additional areas are outside the Del Monte Forest and are not part of the proposed project being analyzed in this Draft EIR. These areas are not required as mitigation for project effects as the proposed preservation within the Del Monte Forest, along with required resource management of the preservation areas, is considered adequate mitigation to address the identified significant impacts to Monterey pine forest.

1 The project would also result in preservation of 598 acres of Monterey pine forest, which would
2 increase preserved areas of remaining native Monterey pine forest in the world by 5%, and would
3 represent a 6% increase of preservation in the Monterey region and a 35% increase in preservation
4 of forest in Del Monte Forest.

5 In concept, the proposed preservation of such areas would substantially offset the direct and
6 indirect effects of the project. However, the proposed project includes no formal commitment to
7 manage the preservation areas for the benefit of Monterey pine forest and maritime chaparral. Thus
8 the project's adverse direct and indirect effects represent a significant impact. Mitigation Measures
9 BIO-A1 and BIO-A2 discussed above are required to formalize dedication of these areas and to
10 prepare and implement site-specific resource management plans for preservation areas for the
11 benefit of Monterey pine forest, including maritime chaparral. Implementing these measures would
12 reduce this impact to a less-than-significant level.

13 **Significance Determination after Mitigation.** Implementation of Mitigation Measures BIO-A1 and
14 BIO-A2 would reduce impacts on Monterey pine forest to a less-than-significant level.

15 **Impact BIO-B2. Project development would result in potential direct and indirect disturbance**
16 **of coastal dune habitat near Areas M and L while preserving the entire remnant dune area in**
17 **Area M. (Less than significant with mitigation)**

18 The Signal Hill remnant dunes directly adjacent to the proposed hotel or residential area at Area M
19 contain populations of five endemic dune species that are state- and/or federally listed (Monterey
20 spineflower, Menzies' wallflower, beach layia, sand gilia, and Tidestrom's lupine). The coastal dune
21 habitat and two of these species are identified as environmentally sensitive habitat areas in the Del
22 Monte Forest LUP. Plant surveys conducted in May 2011 confirmed that none of the special-status
23 plant species associated with the Signal Hill Dune occurs within the proposed development area.
24 There is also dune habitat containing special-status plant species at Area L outside of the areas
25 proposed for residential development.

26 **Impacts Related to Development Areas.** Development in Areas L and M would avoid direct
27 impacts on coastal dune habitat but would introduce new land use activities, listed below, that
28 would have indirect impacts on this habitat:

- 29
- 30 • Disturbance of the root zone and soil compaction from adjacent grading and trenching activities.
 - 31 • Changes in soil and hydrologic conditions from increased irrigation and run-off.
 - 32 • Increased exposure to fertilizers and herbicides from adjacent developed areas.
 - 33 • Trampling of plants by humans, equestrians, and pets. Depending on the time of year (e.g., when
34 the plants are flowering or fruiting), this type of disturbance could lead to increased mortality
35 and decreased reproductive success. This impact could be substantial, especially during large
36 golf tournaments if spectators encroach on remnant habitat areas.
 - 37 • Spread of invasive nonnative plants from landscaped areas that may displace special-status
38 plant species.

38 Impacts on special-status wildlife species associated with the dune habitat areas are described
39 separately under Impacts BIO-E4 (Smith's blue butterfly) and BIO-E5 (legless lizards, California
40 horned lizard).

1 **Proposed Preservation.** As part of the project, the applicant is proposing to dedicate conservation
2 easements for 34.12 acres of dune habitat immediately east of the Area M Spyglass Hill proposed
3 New Resort Hotel/New Residential Lots. The dune habitats at Area L were mostly previously
4 dedicated; approximately 0.74 acres of new dedication of dune area is included in this project.

5 **Significance Determination before Mitigation.** In concept, the proposed preservation of this area
6 would substantially offset the direct and indirect effects of the project. However, Mitigation
7 Measures BIO-A1 and BIO-A2 described above and BIO-B2 discussed below are required to
8 formalize dedication of these areas, implement resource management plans for preservation areas
9 for the benefit of coastal dunes habitat, and ESHA dune plants, and include specific measures to
10 avoid indirect effects at Areas L and M.

11 **Mitigation Measure BIO-B2. Include additional measures in the resource management**
12 **plan to avoid indirect impacts on dune habitat near Areas M and L.**

13 The applicant previously prepared a site-specific RMP for coastal dune scrub (Zander Associates
14 2001a) for a previously proposed DMF/PDP project. The applicant subsequently prepared a
15 Biological Resources Review for the current project that summarized recommended mitigation
16 measures to maintain and manage dune habitat in Area L as well as in Area M (Zander
17 Associates 2010). As part of the project conditions of approval, a site-specific RMP will
18 implement protection, restoration, and preservation measures to avoid direct and deleterious
19 indirect effects to special-status dune plant species within the dune habitat in Preservation
20 Areas L and M including the following:

- 21 ● Irrigation systems will be designed to ensure that, under windless conditions, restored dune
22 habitat is not subject to substantial overspray.
- 23 ● Drainage improvements will direct run-off from roads and paved surfaces away from dune
24 habitat. Drainage improvements within the adjacent Spyglass Hill Golf Course will be located
25 entirely within the golf course, not dune habitat.
- 26 ● Nonnative species will be removed and controlled to prevent invasion of dune species
27 habitat.
- 28 ● Rare plant dune restoration areas will be located away from the perimeter of existing golf
29 courses.
- 30 ● Permanent physical barriers will be installed along the edge of the “Green Trail,” the Dunes
31 Road, and other portions of the dune habitat as necessary to prevent encroachment into this
32 habitat. Adequate signage will identify dune habitat and indicate that pedestrian traffic
33 within such areas is not permissible.
- 34 ● Monitoring shall be conducted as necessary to support resource management.

35 **Significance Determination after Mitigation.** Implementation of Mitigation Measures BIO-A1,
36 BIO-A2, and BIO-B2 would reduce this impact to a less-than-significant level.

37 **Impact BIO-B3. Project would indirectly disturb Monterey pygmy forest and other sensitive**
38 **plant habitat areas and plant and wildlife species in the HHNHA due increased trail use and**
39 **adjacent residential use. (Less than significant with mitigation)**

40 The proposed project would not result in the removal of any Monterey pygmy forest or other
41 habitats in the HHNHA. The project may result in indirect effects to Monterey pygmy forest and

1 other sensitive habitats in the HHNHA (including Monterey pine forest, rare plants, wetlands, and
 2 riparian areas) due to increased trail use and indirect effects to wildlife within the HHNHA (which
 3 could include pallid bat, Monterey shrew ringtail, CRLF, and nesting raptors) and to special status
 4 plant species due to indirect effects from the residential area at the Corporation Yard. The project
 5 would result in preservation of 4.25 acres of Monterey pine forest adjacent to the Corporation Yard
 6 residential area and 17.1 acres in Area F-3; both are adjacent to the HHNHA.

7 Increased trail use could result in trampling of special-status plant species, disturbance of wildlife,
 8 introduction of invasive non-native plant species, and increased erosion and disturbance at stream
 9 crossings. New residential use could also result in indirect impacts due to light intrusion at the edge
 10 of the preservation area, escape of non-native landscaping species, as well as impacts of domestic
 11 pets (including predation by domestic cats and possible escape and creation of feral cat colonies).

12 In concept, the proposed preservation of such areas around the HHNHA substantially offsets the
 13 indirect effects of the project. However, Mitigation Measures BIO-A1 and BIO-A2 discussed above
 14 and BIO-B3 discussed below are required to formalize dedication of these adjacent areas, implement
 15 resource management plans for preservation areas for the adjacent areas, and manage indirect
 16 effects within the HHNHA due to increased trail use and adjacent residential use.

17 **Mitigation Measure BIO-B3. Include additional measures in the resource management**
 18 **plan for Huckleberry Hill Natural Habitat Area to avoid indirect trail use and other**
 19 **impacts on sensitive resources, and use directed lighting and provide environmental**
 20 **education for new residences at the Corporation Yard residential area.**

21 The following measures will be incorporated into the site-specific RMPs and Annual Work Plan
 22 and Monitoring Plan required by Mitigation Measure BIO-A1 to control trail use impacts in the
 23 HHNHA:

- 24 ● Implement an annual program of erosion control and trail maintenance along trails in the
 25 HHNHA.
- 26 ● Permanently close and revegetate all informal “social” trails in the HHNHA.
- 27 ● Provide environmental education about the sensitive resources of the HHNHA for new
 28 residents at the Corporation Yard including measures that individuals can implement to
 29 lower their impact such as staying on marked trails, crossing drainages only at marked
 30 crossings, and avoiding the introduction of invasive species.
- 31 ● Monitor trails and trail crossings of drainages during the wet season, temporarily close
 32 single-track trails and other HHNHA trails when monitoring identifies that a substantial
 33 erosion potential exists, and conduct periodic maintenance as necessary to prevent soil
 34 erosion and sedimentation from subsequent storm events. The applicant will develop a
 35 protocol for implementing monitoring, temporary trail closures, and periodic maintenance
 36 that will be incorporated into the HHNHA RMP.
- 37 ● Conduct at least annual (and more frequent if necessary) weed control surveys of the
 38 HHNHA (both along trails and off trails) and use manual, mechanical, and appropriate
 39 chemical or other means of control where infestation of noxious weeds is identified.
- 40 ● Monitor HHNHA for feral animals (i.e. dogs, cats) and in cooperation with the Monterey
 41 County Animal Services, and remove feral colonies to protect native wildlife species.

1 The following measures will be incorporated into site conditions for all residential development
2 at the Corporation Yard:

- 3 ● Outside lighting will not be directed at the HHNHA preservation areas.
- 4 ● Outside lighting will be directed downward or inward toward development areas.
- 5 ● Provide environmental education about the sensitive resources of the HHNHA to
6 homebuyers and residents at the Corporation Yard residential area including measures that
7 individuals can implement to lower their impact such as crossing drainages at marked
8 crossings, staying on designated trails, controlling pets (including keeping cats indoors and
9 dogs on leash), avoiding spread of non-native invasive species, and directing temporary and
10 permanent lighting inward (as opposed to outward into adjacent preservation areas).

11 C. Wetlands/Waters

12 **Impact BIO-C1. Project development would result in potential disturbance of 0.06 acre of** 13 **wetlands/drainages and result in indirect effects to wetlands and waters in and adjacent to** 14 **project development areas. (Less than significant with mitigation)**

15 Seven project elements contain wetlands (see Table 3.3-3). The project would also directly affect
16 two small drainages at two locations (Area L and Area U); as described previously, both of these
17 drainages are classified as wetlands as well. The proposed project would avoid development within
18 all wetlands and waters except for these small areas within Areas L and U.

19 As discussed above, the USACE has indicated an intention to take jurisdiction over the erosional
20 gully in Area I-2 as an “other water of the United States.” It is possible that the Central Coast RWQCB
21 may also assert jurisdiction over this gully under state law (Porter-Cologne Water Quality Act) or
22 that DFG may take jurisdiction under Section 1600 of the state Fish and Game Code. However, the
23 California Coastal Commission does not consider the gully to be a wetland under the Coastal Act and
24 Monterey County does not consider the gully to be a drainage, wetland, or riparian area under the
25 Del Monte Forest Land Use Plan for the reasons previously discussed.

26 **Impacts Related to Development Areas.** Direct impacts on wetlands would occur as a result of
27 development activities described below:

- 28 ● Approximately 0.03 acre of a seasonal wetland/drainage in Area L falls within the proposed
29 access road alignment. This wetland would be subject to fill or disturbance as a result of road
30 construction.
- 31 ● Approximately 0.03 acre of a seasonal wetland/drainage in Area U would be filled for
32 residential development.

33 Indirect impacts on wetlands/drainages would occur as a result of the activities described below:

- 34 ● Existing LUP Policy No. 27 (LUP Amendment Policy No. 25) requires a setback of 100 feet from
35 wetlands, but allows for landscape alteration within the 100-foot buffer if accomplished in
36 conjunction with restoration and enhancement, if it is demonstrated that no significant
37 disruption of environmentally sensitive habitat will result. Infringement into the 100-foot buffer
38 would occur in Areas K and V.
- 39 ● Wetlands and drainages adjacent to project development sites would be subject to indirect
40 impacts. Topographic modification and removal of forest cover in watersheds supporting

1 existing wetlands, addition of irrigation flow, and use of herbicides and pesticides could result in
2 indirect changes of existing wetlands. Modification of supporting watersheds could change the
3 hydrologic regime both in terms of volume and timing of flow. Addition of flow could result in
4 perennialization of seasonal wetlands. Additional storm flows could result in channelization of
5 wetlands and erosion. Run-off from development sites could contain herbicides and pesticides
6 and other contaminants related to site activity.

7 **Proposed Preservation.** Approximately 9.47 acres of wetlands would be preserved within Areas C,
8 G, J, K, L, N, PQR, U, V, and the Corporation Yard.

9 **Significance Determination before Mitigation.** In concept, the proposed preservation of such
10 areas would substantially offset the direct and indirect effects of the project. However, Mitigation
11 Measures BIO-A1 and BIO-A2 discussed above and BIO-C1 discussed below are required to
12 formalize dedication of these areas and implement resource management plans for preservation
13 areas for the benefit of natural wetlands and seasonal ponds, and to avoid or compensate for
14 wetland losses. Mitigation Measures HYD-A1, HYD-A2, HYD-C1, HYD-C2 and HYD-C3 (refer to
15 Section 3.7, Hydrology and Water Quality) are also required to address potential hydrological and
16 water quality impacts on wetlands and waters. With implementation of these measures, impacts on
17 waters and wetlands would be reduced to a less-than-significant level.

18 **Mitigation Measure BIO-C1. Avoid or compensate for the loss of wetlands and implement**
19 **resource management measures to maintain wetlands in the preservation areas.**

20 The applicant will modify the lot in Area U and the roadway in Area L to avoid direct impacts on
21 wetlands/drainages, and/or the applicant will compensate for the loss of wetlands and wetland
22 functions through creation of new wetlands or enhancement of existing wetlands in one or more
23 preservation areas, such that no net loss of wetland functions occurs. The applicant previously
24 prepared a Wetland Management Plan for the project that includes general measures for
25 wetland and riparian management within preservation areas. These measures include
26 maintaining existing water budgets, protecting water quality, restoring hydrologic continuity
27 and movement corridors for wildlife, enhancing plant community diversity, and regulating use
28 (Wetlands Research Associates 2001). These measures will be incorporated into the site-specific
29 RMPs specified in Mitigation Measure BIO-A1.

30 Hydrology and water quality Mitigation Measures HYD-A1 (stormwater detention and treatment),
31 HYD-A2 (maintenance and improvement of drainage and flood control facilities), HYD-C1 (stormwater
32 pollution prevention plan for construction), HYD-C2 (inspection and maintenance of best
33 management practices), and HYD-C3 (integrated pest management for the relocated driving range),
34 would reduce indirect hydrology and water quality impacts on waters and wetlands to a less-than-
35 significant level. All are discussed in greater detail in Section 3.7, Hydrology and Water Quality.

36 **Significance Determination after Mitigation.** Implementation of Mitigation Measures BIO-A1,
37 BIO-A2, BIO-C1, and HYD-A1, HYD-A2, HYD-C1, HYD-C2 and HYD-C3 would reduce impacts on
38 wetlands relating to loss of function to a less-than-significant level.

1 D. Special-Status Plant Species

2 Yadon's Piperia

3 **Impact BIO-D1. Project development would result in the direct loss of individual Yadon's** 4 **piperia plants and habitat and indirect impacts on adjacent occupied piperia habitat, while** 5 **preserving far larger areas of occupied piperia habitat. (Less than significant with mitigation)**

6 Seventeen project elements contain occupied habitat for Yadon's piperia, which is federally listed as
7 endangered. Seven project elements would disturb approximately 6 acres of occupied habitat and
8 the loss of about 4,507 plants (Table 3.3-8). Overall, 125 acres of occupied habitat would be
9 preserved (122,570 total plants) in Del Monte Forest, which is 94% of the 134 acres of occupied
10 Yadon's piperia habitat in the project area.⁵

11 **Impacts Related to Development Areas.** Direct and indirect effects on Yadon's piperia would
12 occur as a result of the development activities described below.

- 13 ● Special Events Staging Area Grading and Expansion would result in the loss or disturbance of a
14 portion of a small occurrence (0.50 acre with 201 individual plants).
- 15 ● Residential Lot Subdivision Areas F-2 (Lots 1, 5, 9, 15 and 16); I-2 (Lots 1, 3, 4, 5, 6, and 12); J
16 (Lots 1, 4, and 5); K (all lots); U (one lot); and V (two lots) would also affect this species. As
17 noted above, it was conservatively assumed that construction, landscaping, or indirect effects
18 would eventually remove the entire population within proposed lot areas for the purposes of
19 the analysis in this Draft EIR. Small, isolated occurrences are found on these project sites, with
20 the exception of Areas J and K, which support substantial numbers (2,470 and 5,931 plants).
21 Collectively, development from these five project elements could result in the loss of 5.65 acres
22 of occupied habitat (4,306 plants).

23 Indirect impacts on piperia within open space and preservation parcels located adjacent to the
24 project elements are described below:

- 25 ● Trampling of plants by humans, equestrians, and pets. Depending on the time of year (e.g., when
26 the plant is flowering or fruiting), such disturbance could lead to increased mortality and
27 decreased reproductive success. This impact could be substantial, especially during large golf
28 tournaments if spectators encroach on remnant habitat areas.
- 29 ● Mowing and other road maintenance activities.
- 30 ● Changes in soil and hydrologic conditions from increased irrigation and run-off.
- 31 ● Increased exposure to fertilizers and herbicides from the residential areas.
- 32 ● Spread of invasive nonnative plants from landscaped areas that may displace Yadon's piperia.

⁵ As noted above, the applicant has previously dedicated the HHNHA, which contains another 38 acres of occupied Yadon's piperia habitat. The applicant has also entered into a MOU with the USFWS to preserve another 99 acres of Monterey pine forest/Yadon's piperia habitat (83 acres at the Aguajito site in the County of Monterey and 16 acres at the Old Capitol site in the City of Monterey). The HHNHA is a previous dedication and is part of the existing baseline. As described in this Draft EIR, the County has determined that the proposed preservation included with the project in the Del Monte Forest, along with resource management, is adequate to reduce identified significant impacts to a less than significant level. Thus, the preservation of additional piperia habitat at the Old Capitol and Aguajito sites under the Applicant's MOU with the USFWS is considered in addition to that proposed or required to address significant impacts identified in this EIR.

1 **Table 3.3-8. Summary of Project Impacts on Special-Status Plant Species**

Project Location/Element	Yadon's piperia (acres)				Yadon's Piperia (individuals)				Hooker's manzanita (acres)				Hickman's Onion (acres)		
	Total	Dist.	Indirect	Pres.	Total	Dist.	Indirect	Pres.	Total	Dist.	Indirect	Pres.	Total	Dist.	Pres.
The Lodge at Pebble Beach	0.00	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
The Inn at Spanish Bay															
Conference Center Expansion	0.00	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Guest Cottages	0.00	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Employee Parking	0.00	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Collins Field-Equestrian Center-Special Events Area															
Driving Range Relocation from Area V to Collins Field	0.00	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equestrian Center Reconstruction	0.00	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Special Events Staging Area Grading and Expansion	0.50	0.50	0.00	0.00	201	201	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area M Spyglass Hill															
New Resort Hotel (Option 1)	0.00	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Residential Lots (Option 2)	0.00	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Residential Lot Subdivisions															
Area F-2	1.92	1.60	0.32	0.00	514	474	40	0	18.40	7.00	11.40	0.00	0.00	0.00	0.00
Area I-2	1.59	1.22	0.37	0.00	203	196	7	0	15.60	4.70	10.62	0.28	0.00	0.00	0.00
Area J	2.02	0.28	0.53	1.21	2,470	128	732	1,610	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area K	4.49	2.45	1.11	0.93	5,931	3,507	1,795	629	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area L	0.08	0.00	0.00	0.08	4	0	0	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area U	2.46	0.02	0.13	2.31	2,119	0	900	1,219	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area V	6.25	0.08	0.09	6.08	3,893	1	6	3,886	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Collins Residence (4 lots)	0.00	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corporation Yard (10 lots)	0.36	0.00	0.00	0.36	3	0	0	3	0.02	0.00	0.00	0.02	0.00	0.00	0.00
Preservation Areas															
Area B	1.98	0.00	0.00	1.98	274	0	0	274	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Project Location/Element	Yadon's piperia (acres)				Yadon's Piperia (individuals)				Hooker's manzanita (acres)				Hickman's Onion (acres)		
	Total	Dist.	Indirect	Pres.	Total	Dist.	Indirect	Pres.	Total	Dist.	Indirect	Pres.	Total	Dist.	Pres.
Area C	0.00	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area F-1	4.52	0.00	0.00	4.52	2,486	0	0	2,486	3.58	0.00	0.00	3.58	0.00	0.00	0.00
Area F-3	1.42	0.00	0.00	1.42	135	0	0	135	16.80	0.00	0.00	16.80	<0.10	0.00	<0.10
Area G	4.90	0.00	0.00	4.90	757	0	0	757	33.50	0.00	0.00	33.50	<0.10	0.00	<0.10
Area H	4.70	0.00	0.00	4.70	624	0	0	624	22.50	0.00	0.00	22.50	<0.10	0.00	<0.10
Area I-1	9.50	0.00	0.00	9.50	2,970	0	0	2,970	9.80	0.00	0.00	9.80	<0.10	0.00	<0.10
Area N	25.45	0.00	0.00	25.45	27,967	0	0	27,967	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area O	18.84	0.00	0.00	18.84	23,874	0	0	23,874	1.85	0.00	0.00	1.85	0.00	0.00	0.00
Area PQR	43.10	0.00	0.00	43.10	56,132	0	0	53,132	29.10	0.00	0.00	29.10	5.50	0.00	5.50
Roadway Improvements															
Internal Road Improvements	0.00	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SR 1/SR 68/17-Mile Drive Intersection Reconfiguration	0.00	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	134.08	6.15	2.55	125.38	130,557	4,507	3,480	122,570	151.15	11.70	22.02	117.43	5.60	0.00	5.60

Sources: Zander Associates 2001b; WWD Corporation 2011

1 **Proposed Preservation.** The applicant has proposed to preserve extensive areas of occupied
2 habitat (125 acres) containing an estimated 122,570 individuals in nine preservation areas as well
3 as in open space and preservation parcels within five residential lot subdivisions (J, K, L, U, and V).
4 Preservation of these lands is proposed to be accomplished through amendments to the LCP to
5 change land uses and densities, dedication of conservation easements to the Del Monte Forest
6 Foundation, and management of the newly dedicated lands by PBC for the benefit of biological
7 resources. The proposed project would also protect the single largest known occurrence of Yadon's
8 piperia within preservation areas in N,O,U and V (total 56,946 plants on 53 acres) and the second
9 largest known occurrence in Area PQR (56,132 plants on 43 acres).⁶

10 Preservation of Yadon's piperia by the proposed project is considered important to the recovery of
11 the species for several interrelated reasons:

- 12 ● **Extinction probability.** Work done in the field of conservation biology has shown that the
13 extinction probability increases as size of a population or species decreases (Shaffer 1981;
14 Lande 1988; Lawton 1995), thus the preservation of a large number of plants and occupied
15 habitat, particularly in Areas M, N, O, U, V, and PQR, along with areas previously preserved such
16 as the HHNHA, may substantially reduce the probability that the Del Monte Forest population
17 and the species might become extinct.
- 18 ● **Importance of preserving large contiguous habitat blocks.** Abundant data indicates that
19 large pieces of contiguous habitat with high numbers of the species in question and with a low
20 perimeter to area ratios are of more conservation value and have a greater probability of
21 persistence than small, fragmented habitat patches with lower numbers of individuals (Shaffer
22 1981; Lande 1988; Saunders et al. 1991). Rationale supporting this conclusion include the
23 slowing of random genetic drift in large occurrences and the consequent maintenance of genetic
24 diversity; the buffering effect of high numbers against catastrophic events (especially important
25 in this species because it sets significantly more seed upon outcrossing (pollination from
26 different plants) compared to selfing (self pollination) [Doak and Graff 2001] so it would be
27 expected to be affected by bottlenecks); the increased extinction probability of small
28 occurrences due to random demographic processes; the decrease in deleterious edge effects in
29 larger occurrences; and the greater ease of managing large areas compared to fragments.
- 30 ● **Metapopulation dynamics.** Given that piperia seeds are extremely light and wind dispersed
31 (although most seeds will fall comparatively close to the parent plant, orchid seeds may disperse
32 as far as 5 to 10 kilometers, and even much farther [Rasmussen 1995]), it can be argued that
33 Yadon's piperia occurrences on the Monterey Peninsula function as a metapopulation. A
34 metapopulation is a group of populations, each occurring on a discrete patch of land, which
35 interact via the processes of patch extinction and colonization. In the case of Yadon's piperia,
36 colonization of empty patches would occur by seed dispersal. Work done on metapopulation
37 dynamics indicates that, as a general "rule of thumb," decreasing extinction probability of
38 patches is more important for the persistence of the metapopulation than is increasing the
39 likelihood of colonization of new patches (Etienne and Heesterbeek 2001). In general, an
40 increased rate of patch extinction compared to patch colonization will greatly increase the
41 extinction probability of a metapopulation (Hanski 1991). In addition, it can be argued that the
42 largest patches would likely function as superior sources of seeds for the colonization of new
43 sites or recolonization of extinct patches.

⁶ The applicant previously preserved HHNHA, which also contains a large occurrence of 38 acres of piperia habitat.

- 1 ● **Importance of occupied and adjacent unoccupied habitat.** Areas M,N,O,U,V, and PQR not
2 only contain a high proportion of occupied habitat compared to other smaller planning areas, it
3 also has much high-quality potential habitat that serves to buffer the occupied habitat.
4 Unoccupied habitat that is contiguous with occupied habitat and has the same edaphic profile
5 and vegetation structure has a high probability of being suitable habitat for Yadon's piperia. The
6 occurrence of this unoccupied habitat in Areas M,N,O,U,V and PQR gives the species room for
7 expansion and room to shift its distribution as vegetation structure changes with time through
8 the creation of gaps or forest maturation. It is likely that suitable habitat exists in a continually
9 shifting patch mosaic. If Areas M,N,O,U,V (preserve areas only) and PQR (all of the area) were
10 not preserved but were subject to future development, it would be possible that Yadon's piperia
11 could become marginalized onto many small habitat islands in a matrix of residential or
12 recreational development, with no room for expansion and no safe haven in the event of an
13 unforeseen loss of some of the existing occurrences due to random or other events. As noted
14 above, large occurrences are far more resilient to such potential impacts than are small
15 occurrences.

16 **Significance Determination before Mitigation.** In concept, the proposed preservation of such
17 extensive areas of habitat substantially offsets the direct and indirect effects of the project. However,
18 Mitigation Measures BIO-A1 and BIO-A2 discussed above and BIO-D1 discussed below are required
19 to formalize dedication of these areas and implement resource management plans for preservation
20 areas for the benefit of Yadon's piperia. Mitigation Measure BIO-D1 will be implemented to ensure
21 that the proposed preservation areas are effectively managed to preserve the populations of Yadon's
22 piperia.

23 **Mitigation Measure BIO-D1. Implement resource management measures to maintain and**
24 **enhance Yadon's piperia habitat.**

25 The following resource management measures will be incorporated into site-specific RMPs for
26 preservation areas:

- 27 ● Maintain natural conditions (including current drainage patterns and understory
28 vegetation) and prohibit understory clearing in proposed Yadon's piperia preservation
29 areas (Zander Associates 2001b).
- 30 ● Protect the populations adjacent to existing golf courses (preservation parcels at Areas K
31 and L) from unintended disruptions by pedestrians and golfers by fencing the perimeter of
32 the forested open space areas if pedestrian traffic could affect such areas. Temporary
33 protective fencing will be particularly important during large golf tournaments and during
34 the species' blooming and fruiting period if pedestrian traffic could affect such areas. The
35 fencing (temporary or permanent) must be tall enough to deter golfers from entering the
36 forested area but designed to allow wildlife movement.
- 37 ● Remove nonnative invasive species within preservation areas. Focus on species that
38 currently pose a high threat to Yadon's piperia.
- 39 ● Restrict maintenance activities in areas that support Yadon's piperia. This would include
40 modifying road maintenance activities (including mowing) to avoid the flowering and
41 fruiting season for Yadon's piperia.
- 42 ● Maintain, sign, and direct use of designated trails to reduce the potential for informal access
43 through areas known to support Yadon's piperia. Any new trail alignments will avoid

- 1 occupied piperia habitat to the greatest extent possible. PBC will install and maintain vehicle
 2 barriers at key locations to reduce the potential for off-road vehicle/BMX/mountain bike
 3 access (U.S. Fish and Wildlife Service–Pebble Beach Company 2007). PBC will close and
 4 restore all informal trails within existing piperia habitat.
- 5 ● Manage stormwater run-off from roads, building areas trails, and other impervious surfaces
 6 to reduce effects on known piperia habitat areas. PBC will repair erosion gullies on trails
 7 and in other areas as determined necessary through periodic site inspections (U.S. Fish and
 8 Wildlife Service–Pebble Beach Company 2007).
 - 9 ● Implement a program of landowner, utility worker, and golf course personnel education to
 10 inform those parties about the sensitivities of living and working in areas adjacent to piperia
 11 habitat (U.S. Fish and Wildlife Service–Pebble Beach Company 2007).
 - 12 ● The applicant will continue to support research directed toward increased understanding of
 13 beneficial piperia habitat management and enhancement methods (U.S. Fish and Wildlife
 14 Service–Pebble Beach Company 2007). PBC will fund research into Yadon’s piperia plant
 15 dynamics if monitoring of preservation areas indicates substantial diminishment of existing
 16 plant populations in preservation areas. If populations are shown through monitoring to be
 17 stable over time, then enhancement activities beyond the activities described above are not
 18 required. If populations are shown through monitoring to be substantially declining over
 19 time, then enhancement activities beyond the activities described above, will be required
 20 which may include protection against herbivory, increased invasives management,
 21 vegetation management, or other adaptive management actions.

22 **Significance Determination after Mitigation.** Implementation of Mitigation Measures BIO-A1,
 23 BIO-A2, and BIO-D1 would reduce impacts on Yadon's piperia to a less-than-significant level.

24 **Impact BIO-D2. Project development would result in potential loss or disturbance of up to 16**
 25 **Gowen cypress trees due to residential development while preserving 3.5 acres of Gowen**
 26 **cypress/Bishop pine pygmy forest. (Less than significant with mitigation)**

27 Residential Lot Subdivision Area F-2 contains 16 native individual Gowen cypress, which is federally
 28 listed as threatened. These trees are part of the larger population (CNDDDB Occurrence #1) found in
 29 HHNHA⁷ and adjacent areas, which is the primary population of Gowen cypress.

30 **Impacts Related to Development Activities.** Construction activities associated with developing 5
 31 of the 10 residential lots within Area F-2 (Lots 7, 8, 9, 12 and 14) would result in removal of up to 16
 32 scattered Gowen cypress trees. Gowen cypress are adjacent to, but not within the construction
 33 footprint of the Congress Road improvements, and thus are not expected to be affected by that
 34 project element.

35 Additional impacts on the species could result from:

- 36 ● Disturbance of the root zone and soil compaction from adjacent grading and trenching activities.
- 37 ● Changes in soil and hydrologic conditions from increased irrigation and run-off.
- 38 ● Increased exposure to fertilizers and herbicides from adjacent developed areas.

⁷ HHNHA, which contains the most significant occurrence of Gowen cypress/Bishop pine in the Del Monte Forest, was previously dedicated by the Applicant as required by the existing LCP.

1 **Proposed Preservation.** The proposed project would preserve 3.5 acres of Gowen cypress/Bishop
 2 pine forest in Area F-3, which is a designated ESHA. Another small group of Gowen cypress trees
 3 would be preserved in Area F-1. All of these areas would be managed for the long-term health and
 4 sustainability of the Gowen cypress/Bishop pine forest.

5 **Significance Determination before Mitigation.** While applicant-proposed preservation would
 6 reduce the level of project-related impacts on Gowen cypress, the project, as proposed, could still
 7 result in a substantial adverse effect on Gowen cypress for the following reasons:

- 8 ● The proposed project could reduce the population in Areas F-2 by about 16 trees. Species listed
 9 as threatened are likely to become endangered in the near future.
- 10 ● Removal and disturbance of Gowen cypress trees conflicts with USFWS's recommendations for
 11 habitat and population recovery. The draft recovery plan states that "further losses of existing
 12 trees and its habitat should be prevented" (U.S. Fish and Wildlife Service 2002a).
- 13 ● Although the applicant has proposed to dedicate substantial preservation areas containing large
 14 occupied Gowen cypress habitat, preservation alone might not offset the losses to existing
 15 populations.

16 Based on these factors, the impacts on Gowen cypress from the proposed project are considered
 17 significant. Implementing Mitigation Measures BIO-A1 and BIO-A2 discussed above and BIO-D2
 18 discussed below would require the applicant to restore habitat at the HHNHA to offset the losses of
 19 Gowen cypress due to the project and to manage preservation areas effectively for the benefit of this
 20 species in order to preserve the Gowen cypress population.

21 **Mitigation Measure BIO-D2: Restore 1.6 acres of Gowen cypress/Bishop pine habitat at**
 22 **the Huckleberry Hill Natural Habitat Area and implement resource management**
 23 **measures to maintain and enhance Gowen cypress habitat.**

24 **Restoration.** Restoration of 1.6 acres of Gowen cypress/Bishop pine habitat at the HHNHA shall
 25 include the following:

- 26 ● The first step will be elimination of existing nonnative vegetation and native species that do
 27 not occur within the adjacent undisturbed native forest through slashing, uprooting or
 28 targeted herbicide application.
- 29 ● Restoration may need to be phased in order to control non-native invasive species
 30 colonization.
- 31 ● Gowen cypress and Bishop pine seedlings grown from Huckleberry Hill stock will be
 32 outplanted in the fall with the objective of having sapling densities of at least 400 per acre.
- 33 ● Initial planting densities will be 10 to 30% higher than target density (exact percentage to
 34 be determined in the RMP for HHNHA).
- 35 ● Replacement plantings and contingent actions carried out in accordance with monitoring of
 36 success criteria.

37 **Resource Management:** The following resource management measures will be implemented:

- 38 ● Landscaping in residential development areas adjacent to the HHNHA (Corporation Yard
 39 and Areas F-2 and I-2) will be prohibited from using cultivated horticultural Gowen cypress

1 trees to avoid genetic contamination of the native Gowen cypress trees in the nearby
2 HHNHA and SFB Morse Botanical Preserve (Webster 2002).

- 3 • Identify management issues unique to Gowen cypress/Bishop pine forest and develop
4 specific management measures necessary to maintain this habitat type in Area F-1, F-3, and
5 the HHNHA. Incorporate these measures into the site-specific RMPs required by Mitigation
6 Measure BIO-A1.

7 **Significance Determination after Mitigation.** Implementation of Mitigation Measures BIO-A1,
8 BIO-A2, and BIO-D2 would reduce this impact to a less-than-significant level.

9 **Impact BIO-D3. Project development would result in loss of one occurrence (0.2 acre) of**
10 **Pacific Grove clover and indirect effects to a second occurrence. (Less than significant with**
11 **mitigation)**

12 A small population of Pacific Grove clover at the west end of Collins Field would be removed by
13 relocation of the Pebble Beach Driving Range from Area V to that location. Habitat for Pacific Grove
14 clover would be replaced by managed turfgrass. This impact is considered significant because it
15 could result in the reduction of the number and range of a rare species. This species has persisted at
16 this location (and a number of other locations) in disturbed settings. However without appropriate
17 management, occurrences within such disturbed locations could be extirpated.

18 A second population of Pacific Grove clover, at the Indian village site, could be affected by increased
19 trail and recreational use due to the new residences at Area J, K and L.

20 **Impacts Related to Development Activities.** A small population of Pacific Grove clover, consisting
21 of several hundred plants in a 0.2-acre stand within a managed turf area, was discovered at the west
22 end of Collins Field in 2008 (Zander Associates 2010) and confirmed to be present in 2011.
23 Relocation of the Driving Range to Collins Field would include planting and managing turfgrass at
24 that location, which would replace the habitat and extirpate this occurrence of Pacific Grove clover.
25 New residences at Areas J, K, and L would likely increase recreational use of the Indian Village site,
26 where a second occurrence of Pacific Grove clover is present.

27 **Significance Determination before Mitigation.** The proposed project could eliminate one of only
28 twelve occurrences of Pacific Grove clover, a state-listed rare species, and indirectly affect a second
29 occurrence. Most of these occurrences are small and face various threats, and the species has a CNPS
30 Rare Plant Rank of 1B.1, indicating that it could be considered endangered. Implementation of
31 Mitigation Measure BIO-D3 (either avoid the occurrence at Collins Field by redesigning the driving
32 range or create a new occurrence in a preservation area) and Mitigation Measure BIO-D4 (manage
33 the occurrence at Indian Village to ensure its survival) would reduce project impacts on Pacific
34 Grove clover to a less-than-significant level. Mitigation Measure BIO-D3-A would mitigate impacts
35 on Pacific Grove clover at Collins Field by redesigning the driving range to avoid the occurrence, and
36 Mitigation Measures BIO-D3-B would mitigate impacts on Pacific Grove clover at Collins Field by
37 creating a new occurrence of Pacific Grove clover within one of the preservation areas. Either of
38 these options would mitigate the project's impact on Pacific Grove clover at Collins Field to a less-
39 than-significant level.

40 **Mitigation Measure BIO-D3: Redesign the proposed driving range to avoid Pacific Grove**
41 **clover, or create or enhance a 0.2-acre compensation area for this species within another**
42 **preservation area in the Monterey Peninsula.**

1 Two options for mitigation (avoidance or restoration) are provided below. Either of these
2 options would mitigate the project's impact on this species to a less-than-significant level.

3 **Avoidance Option:** With this option, development of the relocated Driving Range would avoid
4 the identified 0.20 acre habitat area for Pacific Grove clover. The following resource
5 management measures would be implemented:

- 6 ● Conduct a preconstruction survey to identify the location and extent of the occurrence at
7 Collins Field.
- 8 ● Avoid the Pacific Grove clover occurrence by installing protective fencing prior to
9 construction. A 4-foot-tall, brightly colored (usually yellow or orange), synthetic-mesh fence
10 (or an equivalent approved by the County) will be installed before construction equipment
11 is allowed to be moved onto the site and before construction activities take place. No
12 construction activities, including grading, will be allowed until this condition is satisfied. No
13 grading, clearing, or storage of equipment or machinery, or similar activity, may occur until
14 a representative of the County has inspected and approved all temporary construction
15 fencing. The temporary fencing will be maintained until all construction activities are
16 complete. No grading, trenching, or movement of construction equipment will be allowed
17 within fenced areas. All construction activities will be restricted from this fenced area. The
18 contractor may remove the fencing only after all construction activities have been
19 completed.
- 20 ● Define specific management and enhancement methods for the Pacific Grove clover
21 population and incorporate these methods into a site-specific RMP, annual workplan, and
22 monitoring report.
- 23 ● Monitoring of Pacific Grove clover and its habitat will be conducted to assess the existing
24 population.

25 **Restoration Option:** With this option, the applicant would hire a qualified biologist to identify a
26 suitable location on the Monterey Peninsula (preferably in Del Monte Forest) to recreate a new
27 population of Pacific Grove clover and/or enhance an existing population (such as the
28 population at Indian Village) to expand the occupied habitat area by a minimum of 0.20 acre
29 over existing conditions as follows.

- 30 ● Plans for such creation or enhancement will be submitted for review and approval by
31 Monterey County and by DFG prior to the issuance of a building or grading permit for the
32 relocated Driving Range. The selected site must either be already permanently preserved
33 (by ownership in fee by an approved preservation organization like the Del Monte Forest
34 Foundation or control of a conservation easement) or will be preserved through a new
35 conservation easement.
- 36 ● The applicant will create and/or enhance existing populations to increase the occupied
37 habitat area by a minimum of 0.20 acre compared to existing conditions. The applicant will
38 demonstrate success at expanding Pacific Grove clover occupied habitat prior to any
39 disturbance of the existing population at Collins Field.
- 40 ● Annual monitoring of the new site will be provided for a minimum of 5 years and may be
41 extended for a longer period, as necessary based on the County's determination, after
42 consultation with DFG, to demonstrate that the population is self-sustaining. The applicant
43 will be responsible for management of the new or expanded population in perpetuity.

- 1 ● Define specific management and enhancement methods for the Pacific Grove clover
2 population and incorporate these methods into a site-specific RMP, annual workplan, and
3 monitoring report.

4 Monitoring of Pacific Grove clover and its habitat will be conducted to assess the existing
5 population.

6 **Mitigation Measure BIO-D4. Manage the Indian Village occurrence of Pacific Grove clover
7 to ensure its continued survival.**

8 The applicant will implement the following:

- 9 ● With the approval of the Del Monte Forest Foundation (property owner), the applicant will
10 manage the existing Pacific Grove clover population at Indian Village to ensure its survival.
11 The site population will be monitored periodically to examine potential changes over time.
12 Alterations to current disturbance regimes should be cautiously attempted. Disturbance
13 regimes should be gradually transitioned toward controlled disturbance management.
14 Fencing of the population will not be required if monitoring shows the population to be
15 stable over time.
- 16 ● A resource management plan, describing management measures for this population that has
17 been approved by the Del Monte Forest Foundation will be provided to Monterey County for
18 review and approval prior to issuance of the first building or grading permit for residential
19 development at Areas J, K and L. Monterey County will circulate and consider comment from
20 DFG prior to approval of the plan. The RMP will follow the same requirements as indicated
21 in Mitigation Measure BIO-A1 above. The applicant will be responsible to implement the
22 plan in perpetuity.

23 **Significance Determination after Mitigation.** Mitigation Measure BIO-D3 would prevent the net
24 loss of occupied Pacific Grove clover habitat and require actions to preserve and manage habitat for
25 this species in perpetuity. Mitigation Measure BIO-D4 would offset potential impacts of increased
26 recreational use by managing the Indian Village occurrence. Project impacts on Pacific Grove clover
27 would be reduced to a less-than-significant level with the implementation of this measure.

28 **Impact BIO-D4. Project development would result in direct loss and indirect impacts on
29 Hooker's manzanita habitat while preserving larger areas of habitat. (Less than significant)**

30 Two project development elements (Residential Lot Subdivisions in Areas F-2 and I-2) contain
31 occupied habitat for Hooker's manzanita. Hooker's manzanita has a CNPS Rare Plant Rank of 1B.2,
32 indicating that it is considered a rare species and threatened in parts of its range. The proposed
33 project would result in the loss of approximately 11.7 acres and indirect effects on 22 acres of
34 habitat (see Table 3.3-8). This impact is not considered significant because the species is not
35 currently threatened or endangered, this project would not restrict the range of this species and
36 because the proposed preservation would offset the impact by decreasing the likelihood that the
37 species would become endangered in the near future.

38 **Impacts Related to Development Activities.** Two project elements would result in direct impacts
39 on Hooker's manzanita:

- 40 ● Construction, landscaping, and other alterations associated with proposed residential lots
41 within Area F-2. Lots 1, 2, 15 and 16 support high-density Hooker's manzanita, and the rest of

1 the site supports low-density Hooker's manzanita. Development of Area F-2 would result in the
2 loss of up to 7.0 acres of occupied habitat.

- 3 • Construction, landscaping, and other alterations at most of the 16 residential lots (Lots 4 to 16)
4 in Area I-2. Hooker's manzanita occurs in high density on these lots. Development of the
5 residential lots on I-2 could result in the loss of up to 4.7 acres of occupied habitat.

6 Hooker's manzanita would be indirectly affected by:

- 7 • Construction of residences in Areas F-2 and I-2, disturbing Hooker's manzanita through
8 disturbance of the root zone and soil compaction from adjacent grading and trenching activities.
- 9 • Changes in soil and hydrologic conditions from increased irrigation and run-off.
- 10 • Increased exposure to fertilizers and herbicides from adjacent developed areas.

11 **Proposed Preservation.** The proposed project would preserve 117 acres of Hooker's manzanita
12 habitat in Areas F-1, F-3, G, H, I-1, I-2, O, PQR, and the Corporation Yard.

13 **Significance Determination before Mitigation.** Preservation of large areas of Hooker's manzanita
14 in Del Monte Forest and other locations in the Monterey Peninsula area greatly increases the
15 stability of this species and decreases the likelihood that the species would become endangered.
16 Project impacts, either by direct removal of plants or through habitat modification, would not result
17 in a significant impact on Hooker's manzanita for the following reasons:

- 18 • The proposed project would preserve and manage 117 acres of occupied habitat for Hooker's
19 manzanita. These preservation areas would substantially add to the portions of the Del Monte
20 Forest Hooker's manzanita population already preserved and protected in perpetuity within the
21 HHHHA.
- 22 • Two of the largest, unfragmented occurrences of Hooker's manzanita are already protected on
23 public lands. These include a 5,217-acre occurrence at the former Fort Ord, mostly on U.S.
24 Bureau of Land Management (BLM) lands, and a 154-acre occurrence in the Huckleberry Hill
25 Nature Preserve at the Presidio of Monterey, and the project would add substantially to these
26 preserves.
- 27 • The occurrences of Hooker's manzanita on Areas F-2 and I-2 that would be affected by the
28 proposed project occur along the edge of Poppy Hill Golf Course and are already fragmented by
29 development.

30 Therefore, potential impacts on Hooker's manzanita would be considered less than significant.

31 **Impact BIO-D5. Project development could result in potential loss or disturbance of pine rose**
32 **and habitat for pine rose while preserving larger areas of development. (Less than significant**
33 **with mitigation)**

34 Three project elements (Residential Lot Subdivision in Areas F-2, I-2, and L) contain occupied
35 habitat for pine rose. This species may also be found in development areas in Area U and V and at
36 roadway improvement locations. Pine rose has a CNPS Rare Plant Rank of 1B.2, indicating it is
37 considered a rare species and threatened in parts of its range. Although pine rose has been
38 identified in the Project area, it has not been adequately mapped or censused. Therefore, although
39 the proposed project would result in the loss of pine rose and its habitat, the impact cannot be
40 quantified. This impact is considered significant because it would result in the reduction of the
41 number and range of a rare species.

1 **Impacts Related to Development Activities.** Pine rose would be directly affected by Residential
2 Lot Subdivisions in Areas F-2 and I-2.

3 **Proposed Preservation.** Pine rose would be preserved in five proposed Preservation Areas: F-3, G,
4 H, I-1, and L. Because the species has not been adequately mapped in these areas, the amount of
5 preservation cannot be quantified.

6 **Significance Determination before Mitigation.** The small number of reported occurrences (11)
7 and current level of threats indicate that this species may warrant listing as endangered within the
8 foreseeable future. The proposed project could result in a significant impact on pine rose for the
9 following reasons:

- 10 • The proposed project would reduce the number and area of one of only 11 occurrences of pine
11 rose. Most of these occurrences are small and face various threats, and one population has
12 already been extirpated.
- 13 • Although the applicant has proposed to dedicate preservation areas containing occupied pine
14 rose habitat, neither the impact nor the preservation benefit can be quantified, and preservation
15 alone cannot offset the losses to existing populations.

16 Based on these factors, the impacts on pine rose from the proposed project would be considered
17 potentially significant. Implementing Mitigation Measure BIO-D5 would reduce this impact to a less-
18 than-significant level.

19 **Mitigation Measure BIO-D5. Conduct preconstruction surveys for pine rose, implement**
20 **avoidance and protection measures, if found, and conduct construction monitoring.**

21 The applicant will hire a qualified biologist and ensure the following measures will be
22 incorporated into construction specifications and implemented to protect pine rose:

- 23 • Prior to construction, a qualified biologist will conduct preconstruction surveys at proposed
24 development sites in Areas F-2, I-2, L, U, and V and roadway improvement locations to
25 identify the location and extent of the occurrences of pine rose. This will be documented and
26 mapped for use by the construction contractor.
- 27 • During construction, the construction contractor will avoid and protect identified
28 occurrences of pine rose by installing protective fencing prior to construction. A 4-foot-tall,
29 brightly colored (usually yellow or orange), synthetic-mesh fence (or an equivalent
30 approved by the County) will be installed before allowing any construction equipment to be
31 moved onto the site and before any construction activities take place. No construction
32 activities, including grading, will be allowed until this condition is satisfied. No grading,
33 clearing, or storage of equipment or machinery, or similar activity, may occur until a
34 representative of the County has inspected and approved all temporary construction
35 fencing. This restriction applies to both on-site and off-site improvements. The temporary
36 fencing will be maintained until all construction activities are complete. No grading,
37 trenching, or movement of construction equipment will be allowed within fenced areas. All
38 construction activities will be restricted from this fenced area. If necessary for project
39 development, the County must first approve any encroachment within the fenced area. The
40 contractor may remove the fencing only after all construction activities have been
41 completed and equipment removed from the site.

- 1 ● A qualified biologist will be present for monitoring during all ground-disturbing
- 2 construction activities.
- 3 ● If avoidance and protection is not possible, a qualified biologist will remove and transplant
- 4 pine rose to suitable areas located in Preservation Area G, H, I-1, and/or L.

5 **Significance Determination after Mitigation.** Implementation of Mitigation Measures BIO-A1,

6 BIO-A2, and BIO-D5 would reduce impacts on pine rose to a less-than-significant level.

7 **Impact BIO-D6. Project development could result in indirect effects on one occurrence of**

8 **Hickman's potentilla. (Less than significant with mitigation)**

9 This species is currently known to exist only at the Indian Village location in Del Monte Forest and at

10 a second location in the hills above Martini Creek (near Devil's Slide) in San Mateo County. The

11 Indian Village population occurs on approximately 0.25 acre of habitat, has ranged between 5 and

12 35 plants and is presently (as of 2008) limited to only 11 plants. The population is within a fenced

13 enclosure with no vegetation management. Efforts to augment this population through the

14 introduction of outplanted individuals carried out in the 1990s were not successful. Despite these

15 efforts and several management activities undertaken to improve habitat conditions, the population

16 does not appear to be increasing in abundance (U.S. Fish and Wildlife Service 2009).

17 The Indian village site is a degraded meadow in an opening within a Monterey pine forest just north

18 of the proposed subdivision at Area L. At its closest, the access road for the subdivision is about 150

19 feet from the nearest part of the meadow. The meadow once supported a larger cover of the native

20 California oatgrass. However, it now supports a larger cover of nonnative species, including brome

21 (*Bromus hordeaceus*, *B. mollis*, *B. diandrus*), wild oat (*Avena barbata*), vulpia (*Vulpia myuros*),

22 ryegrass (*Lolium multiflorum*), foxtail barley (*Hordeum leporinum [jubatum]*), velvet grass (*Holcus*

23 *lanatus*), and tall fescue (*Festuca arundinaceae*). The thicker cover provided by the nonnative

24 grasses may be shading out Hickman's potentilla (U.S. Fish and Wildlife Service 2009).

25 USFWS has noted alterations in hydrology occurred due to prior reconstruction of the Spyglass Hill

26 Golf Course, and continue to the present. Water flow now reportedly occurs throughout the year as a

27 result of irrigating the golf course, whereas the original prairie habitat that supports this species

28 may have been moist during the spring months, but would have been dry over the course of the

29 year. An effort has been made to divert this flow, but may be only partially effective, according to

30 USFWS. Year-round water flow has allowed the spread of invasive species, such as tall fescue

31 (*Festuca arundinacea*), velvet grass (*Holcus lanatus*), and reed (*Juncus sp.*), that are competing with

32 Hickman's potentilla. Pebble Beach Company has undertaken various management activities,

33 including mowing, selectively spraying nonnative species, and hand-weeding directly around

34 Hickman's potentilla individuals in efforts to maintain suitable habitat for the species (U.S. Fish and

35 Wildlife Service 2009).

36 Predation by mule deer on the Indian Village population of Hickman's potentilla in Monterey County

37 has been observed. Herbivory by voles, snails, slugs, gophers and mice may also be affecting the

38 population. With so few individuals comprising this population (11 individuals as of 2008),

39 predation exacerbates the threat of extirpation of this population.

40 **Impacts Related to Development Activities.** Project construction would not directly affect the

41 Indian Village population. However, the new residential subdivision at Areas J, K and L could have

42 the following indirect effects:

- 1 ● Changes in hydrology. In Area L, proposed Lots 6 through 10 and the easternmost part of the
2 access road and the cul-de-sac are located south of Indian Village; and drainage could be
3 directed toward the occurrence of Hickman's potentilla due to new pavement as well as new
4 irrigation for residential landscaping. The proposed drainage plan is that each individual lot
5 would include a closed detention facility to have a metered release of pre-construction 10-year
6 design run-off rate and overflow. Individual lot drainage would enter the storm drain along the
7 access road and discharge into the stream flowing through the west end of the subdivision,
8 which is well west of Indian Village. While the drainage design would capture storm-related flow
9 and direct it away from Indian Village, it is unclear whether sub-10 year flow and routine
10 irrigation would be fully captured or not by the proposed facilities.
- 11 ● Introduction of non-native species. New residential development could increase the presence of
12 non-native species for landscaping that could escape and affect the Indian Village site.
- 13 ● Increased recreational access to Indian Village. With 10 new residences in Area L immediately
14 adjacent to Indian Village, there would likely be increased use of the site by residents, their
15 guests, and their pets. Access could degrade the existing conditions of the meadow and the
16 Hickman's potentilla population. The new residences at Areas J and K are also close to Indian
17 Village and could also contribute to recreational effects.

18 **Proposed Preservation.** The proposed project would preserve portions of Area L to the east of
19 proposed subdivision, including areas upgradient of the Indian Village population adjacent to the
20 Spyglass Hill golf course. However, this would not benefit the Hickman's potentilla population as it
21 would not change existing conditions.

22 **Significance Determination before Mitigation.** Given the precarious nature of the Hickman's
23 potentilla population at Indian Village and the fact that this population is only one of two known
24 occurrences, any adverse impact on this population is considered significant. This impact would be
25 reduced to a less-than-significant level by implementing Mitigation Measure BIO-D6, because it
26 would require the applicant to ensure that no increase of run-off from the new residential
27 development would affect the Indian Village site and would require the applicant to continue and
28 expand management of the Hickman's potentilla population to offset any potential indirect effects of
29 increased recreational access.

30 **Mitigation Measure BIO-D6. Avoid hydrological effects to the Indian Village Hickman's**
31 **potentilla population and expand existing protection and management.**

32 Prior to construction, the applicant will implement the following:

- 33 ● Demonstrate that the drainage design for Residential Area L will not increase flows to the
34 Indian Village due to new impervious surfaces and new residential irrigation. The final
35 design will be reviewed and approved by Monterey County prior to issuance of the first
36 building or grading permit for Area L.
- 37 ● With the approval of the Del Monte Forest Foundation (property owner), the applicant will
38 improve management of the existing population as follows:
 - 39 ○ Move and/or consolidate all active recreation activities (picnicking, events, outdoor
40 education etc.) to one area. If recreation can be better controlled, grassland on the site
41 could recover and Hickman's potentilla would have a better chance to establish. All
42 designated habitat will be fenced off from pedestrian and equestrian traffic. Signage will
43 be used to inform site users to avoid sensitive habitat areas.

- 1 ○ The site will be managed to keep grasses from outcompeting Hickman's potentilla and
2 to prevent Monterey pines from creating excessive shade. An adaptive management
3 program should be applied that would test light, mowing, and grazing as possible
4 vegetation management techniques.
- 5 ○ Herbivory will be managed by fencing of the population to prevent deer and large
6 animal access. The site and adjacent areas will also be managed for slugs, snails, voles,
7 gophers, and mice (as feasible) to reduce predation.
- 8 ○ The applicant will continue and expand efforts to reduce hydrologic effects of year-
9 round flows from the Spyglass Hill golf course. One possible approach may be to
10 intercept flows from the golf course and redirect them to enter the new storm drain
11 along the new access road for new residences in Area L. This may require a resizing of
12 the storm drain to handle the additional drainage.
- 13 ● A resource management plan, describing these measures, that has been approved by the Del
14 Monte Forest Foundation will be provided to Monterey County for review and approval
15 prior to issuance of the first building or grading permit for residential development at Areas
16 J, K and L. Monterey County will circulate and consider comment from both USFWS and DFG
17 prior to approval of the plan. The RMP will follow the same requirements as indicated in
18 Mitigation Measure BIO-A1 above. The applicant will be responsible to implement the plan
19 in perpetuity.

20 **Impact BIO-D7. Trail development could result in small amounts of lost habitat for special-**
21 **status plant species. (Less than significant with mitigation)**

22 **Impacts Related to Development Activities.** The project includes new trails in Area PQR and along
23 the Haul Road in the HHNHA on existing fire roads, and thus removal of sensitive biological
24 resources is not expected for these trails. The relocated trails in Area J and K and one short 0.25 mile
25 trail in Area PQR would not be on existing fire roads and thus would require a limited amount of
26 vegetation clearance (perhaps 3–5 feet) to establish the new trails. Tree removal would not be
27 necessary for these trails, but it is possible that a small amount of habitat for special-status plant
28 species may be removed for trail establishment. The new trails in Area J and K could cross areas of
29 Yadon's piperia habitat, and the new trail at Area PQR would cross an area of Yadon's piperia and
30 Hickman's onion habitat. It is also possible that the trail areas could contain pine rose, although this
31 is unknown at present. It is unlikely that the trail areas contain Gowen cypress, Monterey cypress,
32 Hickman's potentilla, Pacific Grove clover or dune plants given the habitats at these new trail
33 locations do not contain suitable habitat for these species.

34 **Proposed Preservation.** The proposed project would preserve large areas of habitat for special-
35 status plant species, including extensive areas of Yadon's piperia and Hickman's onion habitat.

36 **Significance Determination before Mitigation.** Preservation of large areas of special-status
37 species habitat substantially offsets this impact. However, inadvertent loss of special-status species,
38 including Yadon's piperia, Hickman's onion, or pine rose, if present, is considered a significant
39 impact than can be reduced to a less-than-significant level with implementation of the following
40 mitigation measure.

1 **Mitigation Measure BIO-D7. Minimize special-status species habitat disturbance during**
2 **trail construction.**

3 The applicant will hire a qualified biologist to ensure trail design and construction minimizes
4 special-status species habitat, avoids tree removal, and avoids removal of special-status plant
5 species, other than Hooker's manzanita, wherever feasible.

6 **E. Listed Federal Wildlife Species**

7 **California Red-Legged Frog**

8 **Impact BIO-E1. Project construction could result in direct mortality to California red-legged**
9 **frog, degradation of aquatic habitat, and loss of and degradation of upland habitats, which**
10 **would be partially offset by preservation of existing known occupied and suitable habitat.**
11 **(Less than significant with mitigation)**

12 Wetland Research Associates (Wetlands Research Associates 2002a, 2002b, and 2003) conducted
13 surveys in 2002 and 2003 within the Del Monte Forest watersheds of areas containing suitable
14 aquatic habitat for CRLF. ICF reviewed the results of these surveys. CRLF has been found at the
15 following locations in Del Monte Forest:

- 16 • In a plunge pool in a drainage ditch along Drake Road and in a seasonal pond in Drainage I in
17 Preservation Area N.
- 18 • Along the lower portion of Seal Rock Creek below Forest Lake Road to the mouth of the creek
19 and along the margins of several water hazards on the Spyglass Hill Golf Course near tributaries
20 of Seal Rock Creek (see biological resource figures in Appendix F).

21 In addition, other suitable aquatic habitat was identified in the following areas, but surveys in 2002
22 and 2003 did not identify any observed CRLF in these areas:

- 23 • Portions of the tributaries of Seal Rock Creek that cross through proposed preservation areas in
24 Area I-1.
- 25 • Portions of the riparian drainage on the east side of proposed preservation area in Area B.
- 26 • Portions of Sawmill Gulch tributaries within SFB Morse Botanical Preserve/HHNHA near
27 Congress Road.
- 28 • Portions of the tributaries of Pescadero Creek in Area PQR.
- 29 • Two quarry detention ponds on the Corporation Yard site. One has since been filled in
30 connection with the closing and reclamation of the granite rock quarry; the other is in a
31 proposed preservation area.
- 32 • Several water hazards on the Spanish Bay and Poppy Hills golf courses.
- 33 • Several freshwater marsh wetlands within the Area C preservation area.
- 34 • Wetlands within Areas M, N, O, and U, the HHNHA, Area H, and Areas PQR.

35 Based on information to date, the lower portion of Seal Rock Creek is occupied breeding habitat. No
36 other occupied breeding habitat has been identified in Del Monte Forest. The lower portion of Seal
37 Rock Creek appears to be the center of the known Del Monte Forest population of CRLF.

1 The wetlands and drainage in Areas M, N,O, U, and V provide foraging and dispersal habitat for
2 CRLF. The wetlands and drainage in this area are not considered breeding habitat due to their high
3 salinity and seasonal character. The deep (3.5 feet) natural pool in Area N is a semi-permanent
4 water source; however, long-term year-round monitoring has identified that salinity levels in this
5 pool are too high (+7.0%) to support either red-legged frog eggs or larvae. It is likely that the CRLF
6 individuals found in this area dispersed from lower Seal Rock Creek.

7 Other suitable aquatic habitat within Del Monte Forest may also provide foraging and dispersal
8 habitat (and breeding habitat where conditions are appropriate), although no documented CRLF use
9 of these areas (outside of lower Seal Rock Creek) has been identified.

10 **Impacts Related to Development Areas.** Direct and indirect effects on CRLF frog would occur as a
11 result of the development activities described below.

- 12 • Construction and grading for the development areas will impact 0.06-acre of wetland in Areas L
13 and U. CRLF could be killed or injured during construction activities.

14 Indirect impacts on CRLF within open space and preservation parcels located adjacent to the project
15 elements include:

- 16 • Recreational open space management activities, including brush clearing, and mowing.
- 17 • Increased run-off of pesticides and fertilizers from the proposed driving range and equestrian
18 center maintenance activities.
- 19 • Habitat conversion from forest to development would decrease the cover in areas through
20 which CRLF must move between sites, thereby increasing exposure to mortality factors such as
21 predation and human disturbances (e.g., road mortality).
- 22 • Increased disturbance by pedestrian and equestrian traffic in and near riparian areas or other
23 suitable habitat adjacent to development.
- 24 • Deleterious effects to hydrology and water quality of aquatic habitat for CRLF from project
25 related disturbance. The effects of the proposed project on the long-term water quality and
26 hydrology (e.g. drainage) of wetlands is described in Section 3.7, Hydrology and Water Quality.
27 The water quality and hydrology analysis concluded that the potential long-term water quality
28 and hydrologic impacts could be reduced to a less-than-significant level with implementation of
29 the mitigation in Section 3.7, Hydrology and Water Quality.

30 **Proposed Preservation.** The proposed project includes the following measures that would enhance
31 habitat for CRLF and suitable habitat in the area.

- 32 • As part of the proposed project, 0.79-acre of wetlands and approximately 1,659 linear feet of
33 riparian habitat would be preserved under conservation easements within adjacent upland
34 habitat in Areas J, K, and L, which are within the center of the Seal Rock population. In addition,
35 Preservation Area I-1 is immediately upstream and would preserve approximately 2,309 linear
36 feet of riparian habitat. All of these areas provide suitable CRLF habitat. Establishment of
37 proposed preservation areas within Areas J, K, and L provide additional protection to the
38 documented CRLF occurrence in Seal Rock Creek and in adjacent Indian Village.
- 39 • As part of the proposed project, an additional 8.68 acres of other wetlands and approximately
40 6,447 linear feet of riparian habitat would be dedicated within Del Monte Forest, much of which
41 contains suitable aquatic habitat that may be used by CRLF in the future.

1 **Significance Determination before Mitigation.** While applicant-proposed preservation would
2 reduce the level of project-related impact on CRLF, the project, as proposed, would still result in a
3 significant effect, either directly or through habitat modifications, on CRLF for the following reasons:

- 4 • The proposed project would encroach into upland areas adjacent to aquatic habitat for CRLF
5 reducing the upland migration habitat.
- 6 • Although the applicant has proposed to dedicate substantial preservation areas containing large
7 areas of habitat, preservation alone cannot offset the potential indirect effects to CRLF.

8 Species listed as threatened are likely to be endangered (i.e. close to extinction) in the immediate or
9 near future, and even small increments of loss would be considered substantial. CRLF is rare locally
10 and was only recently (Wetlands Research Associates 2002a, 2002b, 2003) found on the peninsula.
11 There are only a few known occurrences in the project vicinity (the Drake Pool/Drainage I pond,
12 lower Seal Rock Creek, and nearby Spyglass Hill Golf Course water hazards). Therefore, impacts on
13 CRLF from the proposed project are considered significant, taking into account both the adverse
14 effects of proposed development and the effects of the proposed preservation. Implementing
15 Mitigation Measures BIO-A1 and BIO-A2 discussed above and BIO-E1 and BIO-E2 discussed below
16 would ensure that the proposed preservation areas are effectively managed to preserve the
17 populations of CRLF and that new breeding habitat is created to enhance the viability of the lower
18 Seal Rock population.

19 **Mitigation Measure BIO-E1. Conduct preconstruction surveys for California red-legged**
20 **frog, implement protection measures if found, and conduct construction monitoring.**

21 The applicant will hire a qualified biologist and ensure the following measures will be
22 incorporated into construction specifications and implemented to protect CRLF:

- 23 • Conduct preconstruction surveys in all upland areas within 300 feet of aquatic habitat in
24 areas proposed for temporary or permanent disturbance in Areas J, K, L, U and V. The
25 Equestrian Center and the Corporation Yard residential area do not need to be surveyed, but
26 exclusion fencing will be placed to prevent ingress by CRLF during construction.
- 27 • If CRLF are found, capture and relocate to nearby suitable habitat within a preservation area
28 to encourage perpetuation of the individual and species. It may be necessary to construct
29 temporary exclusion fencing to prohibit CRLF from entering construction areas.
- 30 • Use signs and fencing as necessary during construction to maintain a suitable buffer around
31 all wetlands.
- 32 • Have a qualified biologist present for monitoring during ground-disturbing construction
33 activities at Areas J, K, L, U, and V within 300 feet of aquatic habitat.

34 **Mitigation Measure BIO-E2. Design new California red-legged frog breeding habitat along**
35 **Seal Rock Creek in accordance with criteria to establish California red-legged frog habitat**
36 **characteristics.**

37 The applicant will hire a qualified restoration ecologist and biologist to design three new CRLF
38 breeding ponds along Seal Rock Creek in Areas J, K, L and/or Indian Village. The restoration
39 ecologist and biologist will determine the most suitable locations to create CRLF breeding ponds
40 based on the size and natural characteristics of each preservation area, as well as the number of

1 feasible breeding ponds to most benefit CRLF breeding requirements. The following CRLF
2 habitat characteristics will be incorporated into the designs for the new breeding ponds:

- 3 ● Water depth: ponded water depth should be at least 3 feet with water present through
4 July, drying down completely every other year in August–October.
- 5 ● Planting locations: a fringe of native species should be planted around the ponds’
6 perimeter, with a mix of native bullrush and spikerush.
- 7 ● Monitoring: vegetation monitoring should be incorporated with the overall revegetation
8 monitoring plan to ensure that plantings survive. Replanting should occur if success
9 criteria are not met for planting survival. Sediment removal should be conducted, if
10 required to maintain ponded water depth. The minimum monitoring period should be 5
11 years after planting. A survival rate of 75% after 5 years should be attained before
12 monitoring ceases.
- 13 ● These standards should be reviewed during federal biological opinion development to
14 verify that they are adequate.

15 **Significance Determination after Mitigation.** Implementing Mitigation Measures BIO-E1 and BIO-
16 E2 would reduce impacts on CRLF to a less-than-significant level.

17 **Smith’s Blue Butterfly**

18 **Impact BIO-E2. Development in Areas L and M could result in loss of Smith’s blue butterfly**
19 **host plants, while preservation of Area M dunes will preserve host plant and habitat. (Less**
20 **than significant)**

21 The Smith’s blue butterfly forage plant, seacliff buckwheat, occurs in the remnant dunes in Areas M
22 and L. The remnant dune area on Area L has been previously preserved.

23 Seacliff buckwheat (*Eriogonum parviflorum*) is considered to be ESHA by the existing Del Monte
24 Forest LUP in shoreline areas within Smith’s blue butterfly habitat. Specifically, the LUP lists Pt.
25 Lobos buckwheat (*Eriogonum parviflorum ssp lucidem*), which is an older synonym for seacliff
26 buckwheat, as ESHA when it occurs within “shoreline areas within Smith’s blue butterfly habitat.”

27 Smith’s blue butterfly has not been observed within the areas of seacliff buckwheat in Areas M and
28 L; therefore, these areas are not currently considered to be ESHA for this reason (but are ESHA as
29 coastal dunes for other reasons, as noted above).

30 During the past 31 years, Dr. Richard Arnold, a recognized expert in this species, has conducted
31 several presence-absence surveys for the Smith’s blue in various portions of Pebble Beach without
32 ever finding the butterfly. In 2000, Dr. Arnold conducted an extensive survey at the Signal Hill Dune
33 and various locations along the 17-Mile Drive throughout the butterfly’s entire flight season and did
34 not find the butterfly. In 2008, Dr. Arnold checked for the Smith’s blue butterfly at 12 locations along
35 17-Mile Drive where Seacliff buckwheat grows naturally or has been planted in recent years.
36 However, no life stages of the Smith’s blue butterfly were observed at these nearby, off-site
37 locations. According to Dr. Arnold, the negative survey findings at these nearby locations during
38 2008 and in prior years indicate that the butterfly does not occur in the Pebble Beach portion of the
39 Monterey coast, even when good-quality habitat is present (Arnold, 2011).

1 Since the Smith's blue butterfly occurs both north and south of the Pebble Beach area on the
2 Monterey Coast, its absence at Pebble Beach is curious. The nearest known populations are at the
3 Naval Postgraduate School to the north and at Pt. Lobos to the south. While there is no definitive
4 explanation as to why the butterfly is absent from Pebble Beach, it is suspected that the extensive
5 conversion of sand dune habitat to urbanization along the coastal portions of the cities of Monterey,
6 Pacific Grove, and Carmel has created a habitat gap that is a greater distance than butterflies from
7 the nearest known locations can normally travel. In addition, substantial portions of these coastal
8 areas are at least partially forested and subject to persistent, dense coastal fog throughout the
9 summer months, which poses another obstacle for this species (Arnold, 2011).

10 Based on these findings, it is considered unlikely that the Smith's blue butterfly is present in the
11 Area L or Area M dunes or adjacent areas. Although the project may affect the host plant for this
12 species due to increased trail use through dune areas, given the absence of the species, this is
13 unlikely to affect the species itself. The proposed project includes preservation of approximately 34
14 acres of coastal dunes habitat in Area M and the Area L dunes were previously preserved. Thus, the
15 project is expected to have less-than-significant impacts on Smith's blue butterfly.

16 **Marine and Shoreline Resources**

17 **Impact BIO-E3. Stormwater run-off from project developments during construction and** 18 **operation could degrade nearshore water quality and result in indirect impacts on the** 19 **southern sea otter, western snowy plover, California brown pelican, and other marine** 20 **resources, including the Carmel Bay Area of Special Biological Significance. (Less than** 21 **significant with mitigation)**

22 As described above, there is no marine habitat within the project area, which is inland from the
23 coast. Marine habitat along the shoreline and in the nearby offshore waters might be indirectly
24 affected by run-off from proposed development during construction or operation and any related
25 water quality effects. Water quality effects are described in Section 3.7, Hydrology and Water
26 Quality, including construction erosion, stormwater run-off, golf course stormwater and pest
27 management activities, reclaimed wastewater use, and Equestrian Center waste management
28 activities.

29 **Impacts Related to Development Areas.** Indirect effects on marine and shoreline species
30 (southern sea otter, western snowy plover, California brown pelican, and other marine resources,
31 including the Carmel Bay ASBS) could occur as a result of project development and grading
32 activities, associated run-off, and pesticide and pollutant run-off.

33 **Significance Determination before Mitigation.** The proposed project could result in a significant
34 indirect impact on marine and shoreline resources for the following reasons:

- 35 ● Grading and construction activities as part of the proposed project would expose areas of open
36 soil and could lead to erosion, sedimentation, and nutrient addition to aquatic and marine
37 resources.
- 38 ● Pesticide and pollutant run-off from maintenance activities would negatively affect shoreline
39 and marine resources.

40 Hydrology and water quality Mitigation Measures HYD-A1, HYD-A2, HYD-C1, HYD-C2 and HYD-C3 as
41 discussed under Impact BIO-C1 in addition to geology and soils Mitigation measures GSS-C1
42 (erosion and sediment control plan) and GSS-C2 (dewatering controls) would reduce indirect

1 hydrology and water quality impacts on waters and wetlands to a less-than-significant level. These
2 measures are discussed in greater detail in Section 3.7, Hydrology and Water Quality and Section
3 3.6, Geology and Soils.

4 **Significance Determination after Mitigation.** Mitigation Measures identified above would
5 mitigate the proposed project's water quality indirect effects on marine and shoreline resources.

6 **Rare Wildlife Species (Non-Listed)**

7 **Impact BIO-E4. Project construction and development would result in potential loss or** 8 **disturbance to habitat occupied by certain non-listed special-status wildlife species while** 9 **preserving areas of habitat for these species. (Less than significant with mitigation)**

10 This impact discussion covers potential project effects on rare wildlife species, with the exception of
11 several special-status raptor species, which are discussed separately in Impact BIO-I1.

12 **Black or silvery legless lizards.** Areas of potential habitat for legless lizards occur in dune habitat
13 on Areas M and in Area L. The project would not include direct disturbance of dune habitat.
14 However, indirect effects to legless lizard within open space and preservation parcels located
15 adjacent to the project elements would include:

- 16 • Recreational open space management activities, including brush clearing, and mowing.
- 17 • Increased run-off from landscaped areas.
- 18 • Increased run-off of pesticides and fertilizers from the proposed landscaped areas' maintenance
19 activities.
- 20 • Increased disturbance by pedestrian and equestrian traffic in and near riparian areas or other
21 suitable habitat adjacent to development.

22 **Proposed Preservation.** The proposed project includes preservation of 34 acres of coastal dune
23 habitat in Area M. The dunes at Area L were previously conserved.

24 **Significance Determination before Mitigation.** While applicant-proposed preservation would
25 reduce the level of project-related impact on legless lizard and habitat, the project, as proposed,
26 could still result in a substantial adverse indirect effect. Species listed as species of special concern
27 are biologically rare, very restricted in distribution, declining throughout their range, or have a
28 critical, vulnerable stage in their lifecycle. Even small increments of loss to this species would be
29 considered substantial. Legless lizards are rare within dune habitat and habitats with sandy soils,
30 but the species ranges are relatively widespread. Dune habitat within the project area is limited to
31 Area M and the western portion of Area L. Therefore, the impacts on silvery and black legless lizards
32 from the proposed project are considered significant, taking into account both the adverse effects of
33 proposed development and the effects of the proposed preservation Implementing Mitigation
34 Measure BIO-E5 in combination with Mitigation Measures BIO-A1 and BIO-B2 both discussed above,
35 will ensure that the construction impacts on these species are minimized and proposed preservation
36 areas are effectively managed to preserve the populations of silvery and black legless lizards.

1 **Mitigation Measure BIO-E5. Conduct pre-construction surveys for legless lizard,**
2 **implement protection measures if found, and conduct construction monitoring for**
3 **ground-disturbing construction activities.**

4 The applicant will hire a qualified biologist to conduct pre-construction surveys and
5 construction monitoring to protect legless lizard. Prior to construction or restoration activities
6 in or near remnant dune areas in Areas L and M, the biologist will conduct a pre-construction
7 survey for legless lizards where there is potential for project impacts from construction and
8 restoration activities. The survey will be done within 48 hours before ground disturbing
9 activities.

10 This survey will include the following steps:

- 11 ● Systematic subsurface searching (legless lizards are fossorial [burrowing]).
- 12 ● Staking the limits of the survey areas and fencing them with small-mesh construction
13 fencing, buried to a minimum depth of 6 to 10 inches below grade to reduce the likelihood of
14 lizards reentering the construction zone.
- 15 ● Capture and release of found legless lizards into nearby remnant dune areas designated by
16 the project biologist.

17 During ground-disturbing activities during construction, a qualified biologist will be present and
18 will have the authority to temporarily stop construction activities if legless lizards are found,
19 and until such legless lizards can be successfully relocated.

20 **Significance Determination after Mitigation.** Implementation of Mitigation Measure BIO-E5 will
21 require the applicant to conduct pre-construction surveys of suitable habitat in Areas M and L to
22 avoid impacts during construction activities, and Mitigation Measures BIO-A1 and BIO-B2 will
23 require dune preservation areas to be managed for the benefit of this species. Potential impacts on
24 silver and black legless lizards due to loss or disturbance of habitat would be reduced to a less-than-
25 significant level.

26 **California Horned Lizard**

27 Areas of potential habitat for California horned lizards occur in dune habitat on Areas M and L.

28 **Impacts Related to Development Areas.** Only small, isolated areas of marginally suitable habitat
29 for the species would be affected by the proposed project. Indirect effects on California horned
30 lizard could occur as a result of increased trail use and encroachment.

31 **Proposed Preservation.** The proposed project includes preservation of 34 acres of coastal dune
32 habitat in Area M. The dunes at Area L were previously conserved.

33 **Significance Determination.** The project would preserve remnant dune habitat in Area M, and
34 dune habitat in Area L was previously conserved. This species is common throughout chaparral
35 habitats across an extensive geographic range and is not known from the project area. Because the
36 statewide status of the California horned lizard is relatively robust, and because the species is
37 unlikely to occur in significant numbers in the small areas of marginal habitat found in the project
38 area, this impact is considered less than significant.

1 **Western Pond Turtle**

2 Potential habitat for western pond turtle occurs in riparian habitat and ponds in the preservation
3 areas of Areas B and L, and in a pond in the preservation area of the Corporation Yard.

4 **Impacts Related to Development Areas.** Western pond turtles have not been previously reported
5 in the area of the proposed project. Direct and/or indirect effects on western pond turtle would not
6 be expected.

7 **Proposed Preservation.** The proposed project would preserve the riparian habitat and ponds in
8 Areas B and L, and the detention pond in the preservation area of the Corporation Yard.

9 **Significance Determination.** Because riparian habitat and ponds in the preservation areas in Areas
10 B and L, and the detention pond in the preservation area of the Corporation Yard, will be preserved,
11 and lack of reports of this species within the area, impacts are considered less than significant.

12 **Monterey Dusky-Footed Woodrat**

13 Area PQR contains occupied habitat (and nests) for Monterey dusky-footed woodrat along a
14 drainage that would be preserved as natural open space. Although not found in other areas to date,
15 this species may also occur in other wooded areas near riparian areas in Del Monte Forest.

16 **Impacts Related to Development Areas.** New trails in Preservation Area PQR near riparian areas
17 are all on existing fire roads and thus no construction disturbance would occur to riparian areas for
18 the new trails. It is possible that construction in other wooded areas near riparian areas in Areas J,
19 K, or L may encounter woodrats.

20 **Proposed Preservation.** The proposed project includes the preservation of Area PQR, which
21 contains occupied Monterey dusky-footed woodrat habitat.

22 **Significance Determination before Mitigation.** While applicant-proposed preservation would
23 reduce the level of project-related impact on woodrat, the project, as proposed, could still result in a
24 substantial adverse effect, either directly or through habitat modifications, on this species for the
25 following reasons:

- 26 • Grading and construction activities associated with residential construction in Areas J, K and L
27 near riparian areas could result in woodrat mortality or injury and nest disturbance, if present

28 Indirect effects to Monterey dusky-footed woodrat include:

- 29 • Increased disturbance by pedestrian and equestrian traffic in and near forested areas.

30 Although the applicant has proposed to dedicate substantial preservation areas containing large
31 areas of habitat, preservation alone cannot offset the potential direct effects to woodrats and nests.

32 Species listed as species of special concern are biologically rare, very restricted in distribution,
33 declining throughout their range, or have a critical, vulnerable stage in their lifecycle. Even small
34 increments of loss of this species would be considered substantial. Monterey dusky-footed woodrat
35 is rare within densely forested habitat, but the species is known to occur in the general area.
36 Potential impacts on this species would occur if the species were present in areas of forest removal
37 in Areas J, K, and L near riparian areas. Therefore, the impacts on Monterey dusky-footed woodrat
38 from the proposed project are considered significant, taking into account both the adverse effects of
39 proposed development and the effects of the proposed preservation. Impacts on this species would
40 be reduced to a less-than-significant level with implementation of Mitigation Measure BIO-E6.

1 **Mitigation Measure BIO-E6. Conduct a preconstruction survey for woodrats and woodrat**
2 **nests, and implement protection measures if found for ground-disturbing construction**
3 **activities.**

4 The applicant will hire a qualified biologist to implement the following measures to protect
5 woodrats.

- 6 ● Prior to any construction or restoration activities in wooded terrain in Areas J, K and L
7 conduct a preconstruction survey for woodrats and woodrat nests where there is potential
8 for project effects from construction and restoration activities. This survey will be
9 conducted by a qualified third-party consultant under contract to the County and will
10 include the following steps:
 - 11 ○ The survey will be conducted during the winter prior to construction when visibility is
12 improved due to dormancy of poison oak.
 - 13 ○ The biologist will identify and flag all woodrat nests. If nests are determined to be
14 occupied, each woodrat will be relocated to suitable habitat in consultation with DFG. If
15 young are observed in a nest, nesting material will be replaced until the young have
16 been weaned. Following weaning, the nest will be dismantled and relocated to suitable
17 habitat.
- 18 ● During ground-disturbing construction activities, all woodrat nests will be avoided. A
19 qualified biologist will be present and will have the authority to temporarily stop
20 construction activities if woodrats or woodrat nests are found, and until such woodrats or
21 woodrat nests can be successfully relocated, as described above.

22 **Significance Determination after Mitigation.** Implementation of Mitigation Measure BIO-E6
23 would reduce impacts on woodrat to a less-than-significant level.

24 **Pallid Bat**

25 The Inn at Spanish Bay Employee Parking area (in Area B), and Residential Areas K, U, and V contain
26 suitable habitat for pallid bats.

27 **Impacts Related to Development Areas.** Removal of tree roosting sites could directly affect this
28 species and eliminate potential habitat, resulting in an adverse effect on population levels. Clearing
29 of forest habitat may remove foraging and roosting habitat, but the increase of edge habitat could
30 balance this effect by increasing foraging habitat and in the long term. Construction within these
31 areas could result in direct or indirect mortality to pallid bat or this species roosts.

32 **Proposed Preservation.** The proposed project includes the preservation of extensive areas of
33 Monterey pine forest containing suitable habitat for bats.

34 **Significance Determination before Mitigation.** While applicant-proposed preservation would
35 reduce the level of project-related impact on pallid bat, the project, as proposed, would still result in
36 a substantial adverse effect, either directly or through habitat modifications, on this species for the
37 following reasons:

- 38 ● Grading and construction activities associated with the Spanish Bay Employee Parking and
39 residential development in Area K, U, and V could directly result in pallid bat mortality or injury
40 and roost disturbance.

1 Indirect effects to pallid bat within foraging habitat located within the proposed project include:

- 2 • Decrease of forested foraging habitat near The Inn at Spanish Bay Employee Parking Area and
- 3 Areas K, U, and V resulting in reduced individual fitness and potential bat mortality.
- 4 • Recreational open space management activities, including brush clearing, and mowing.
- 5 • Increased disturbance by pedestrian and equestrian traffic in and near forested areas.

6 Although the applicant has proposed to dedicate substantial preservation areas containing large
7 areas of habitat, preservation alone cannot offset the potential direct and indirect effects to pallid
8 bat.

9 Species listed as species of special concern are biologically rare, very restricted in distribution,
10 declining throughout their range, or have a critical, vulnerable stage in their lifecycle. Even small
11 increments of loss of this species would be considered substantial. Potential impacts on this species
12 would occur in The Inn at Spanish Bay Employee Parking and Areas K, U, and V. Therefore, the
13 impacts on pallid bat from the proposed project are considered significant, taking into account both
14 the adverse effects of proposed development and the effects of the proposed preservation.
15 Disturbance of tree roosting sites of this species are considered a potentially significant impact that
16 would be reduced to a less-than-significant level with implementation of Mitigation Measure BIO-E7.

17 **Mitigation Measure BIO-E7. Retain dead trees or snags wherever feasible in development**
18 **and preservation areas to provide roosting habitat for pallid bats.**

19 In all development and preservation areas, dead trees or snags will be left in place wherever
20 feasible to provide roosting habitat for pallid bats. While roosting habitat will be lost due to tree
21 removals, this mitigation will require retention of sufficient roosting habitat for pallid bats in
22 preservation areas to avoid significant adverse effect on pallid bat population levels.

23 **Significance Determination after Mitigation.** Implementation of Mitigation Measure BIO-E7
24 would reduce impacts on pallid bat relating to loss or disturbance of habitat to a less-than-
25 significant level.

26 **Ringtails and Monterey Ornate Shrew**

27 There is potential habitat for ringtails and Monterey ornate shrew in riparian and adjacent forest
28 habitat within the project area.

29 **Impacts Related to Development Areas.** No riparian habitat will be removed by the project;
30 however, some potential habitat for ringtails and Monterey ornate shrews exists in adjacent forest
31 habitats that will be removed within development sites by the proposed project.

32 **Proposed Preservation.** The proposed project includes the preservation of all riparian habitat and
33 the majority of adjacent forested habitat within preservation areas, which contains suitable habitat
34 for ringtails and Monterey ornate shrew.

35 **Significance Determination.** Although proposed preservation will substantially offset impacts on
36 ringtail and Monterey ornate shrew habitat, directed resource management of Monterey pine forest
37 (per Mitigation Measures BIO-A1 and BIO-A2) is required to reduce the level of project-related
38 impacts on ringtail and Monterey ornate shrew to a less-than-significant level.

1 **F. Common Wildlife Habitat/Populations/Plant Communities**

2 **Impact BIO-F1. The project would remove habitat of common wildlife species and plant**
3 **communities within Del Monte Forest while preserving far larger areas of habitat for**
4 **common species. (Less than significant with mitigation)**

5 **Impacts Related to Development Areas.** In addition to the impacts on sensitive biological
6 communities and special-status species discussed above, project development would also affect
7 common wildlife and plant species that currently reside within forested areas that would be
8 removed at the project development sites throughout the project area. No dune or riparian areas
9 would be removed by the project.

10 **Proposed Preservation.** The proposed preservation dedications would provide for retention of
11 extensive forested areas, containing wetlands and riparian areas throughout Del Monte Forest for
12 common wildlife and plant species. Preservation areas also include extensive areas of dunes habitat.

13 **Significance Determination.** Overall forest impacts were previously assessed for Monterey pine
14 forest, which is a sensitive community, and it was determined that these impacts can be reduced to a
15 less-than-significant level with the implementation of Mitigation Measures BIO-A1 and BIO-A2.

16 **G. Indirect Impacts on Habitat Resulting from Human Use**

17 **Impact BIO-G1. The project would increase trail use by pedestrians and equestrians, which**
18 **could adversely affect common and rare wildlife and plant species within existing and**
19 **proposed preservation areas. (Less than significant with mitigation)**

20 **Impacts Related to Development Areas.** In addition to the impacts on sensitive biological
21 communities and special-status species discussed above, project development would also affect
22 other common wildlife and plant species that currently reside within forested and dune areas where
23 the proposed project would result in increased pedestrian and equestrian trail use.

24 The impacts of new trails at the New Employee Parking (connecting the parking lot to The Inn at
25 Spanish Bay), Area F-2, and Area I-2 are addressed in the description of direct and indirect
26 development impacts above. The impacts of increased trail use in dune areas in Areas L and M were
27 previously addressed in analysis of impacts on dunes under Impact BIO-B2 above. The impacts of
28 increased trail use in the HHNHA due to new residences at the Corporation Yard were previously
29 addressed in analysis under Impact BIO-B3 above. The potential for indirect impacts on Pacific
30 Grove clover and Hickman's potentilla due to increased residents in Areas J, K, and L was also
31 discussed above under Impacts BIO-D4 and BIO-D6, respectively.

32 The project also includes new trails in Area PQR and relocated trails in Area J and K. Use of these
33 new trails (both those on fire roads and especially the smaller new trails not on fire roads) could
34 result in indirect disturbance by pedestrians and horses to common and rare plant and wildlife
35 species and their habitats in adjacent areas.

36 **Proposed Preservation.** The proposed project includes the preservation of approximately 598
37 acres of Monterey pine forest containing extensive areas of wetlands, riparian areas, and special-
38 status species. The project also includes preservation of approximately 34 acres of dune habitat.

39 **Significance Determination.** Disturbance of special-status plant and wildlife species habitat due to
40 trail use would be a significant impact.

1 Mitigation Measure BIO-B2, discussed above, would address impacts on dunes from increased trail
 2 use. Mitigation Measure BIO-B3, discussed above, would address impacts on sensitive habitats in
 3 HHNHA due to increased trail use. Mitigation Measures BIO-D4 and BIO-D6, discussed above, would
 4 address indirect impacts on the Pacific Grove clover and Hickman's potentilla occurrences in the
 5 Indian Village Area due to increased trail use and access.

6 Similarly, there could be indirect effects to sensitive resources in areas of new trails in Areas J, K and
 7 PQR. With implementation of Mitigation Measure BIO-G1, impacts due to new trail use in Areas J, K,
 8 and PQR would be reduced to a less-than-significant level.

9 **Mitigation Measure BIO-G1. Include additional measures in the resource management**
 10 **plan for Preservation Areas J, K, L and PQR to avoid indirect trail use impacts on sensitive**
 11 **resources.**

12 The applicant will incorporate the following measures into the site-specific RMPs and Annual
 13 Work Plan and Monitoring Plan required by Mitigation Measure BIO-A1 to control trail use
 14 impacts in Areas J, K and PQR:

- 15 ● Implement an annual program of erosion control and trail maintenance.
- 16 ● Permanently close and revegetate all informal "social" trails.
- 17 ● Provide environmental education about the sensitive resources for new residents of Areas J
 18 and K including measures that individuals can implement to lower their impact such as
 19 staying on marked trails, crossing drainages only at marked crossings, and avoiding the
 20 introduction of invasive species.
- 21 ● Monitor trails and trail crossings of drainages during the wet season, temporarily close
 22 single-track trails and other trails when monitoring identifies that a substantial erosion
 23 potential exists, and conduct periodic maintenance as necessary to prevent soil erosion and
 24 sedimentation from subsequent storm events. The applicant will develop a protocol for
 25 implementing monitoring, temporary trail closures, and periodic maintenance that will be
 26 incorporated into the SSRMPs for these areas.
- 27 ● Conduct at least annual (and more frequent if necessary) weed control surveys (both along
 28 trails and off trails) and use manual, mechanical, and appropriate chemical or other means
 29 of control where infestation of noxious weeds is identified.

30 **H. Wildlife Movement**

31 **Impact BIO-H1. The project would fragment certain existing forested habitats and could**
 32 **interfere with wildlife movement while preserving larger areas of habitat providing wildlife**
 33 **movement opportunities. (Less than significant with mitigation)**

34 **Impacts Related to Development Areas.** Proposed project development would partially fragment
 35 existing forested habitats in Areas J, K and L, and has the potential to interfere with wildlife
 36 movement. Areas F-2 and I-2 are already fragmented areas and thus the level of additional
 37 fragmentation is relatively less than Areas J, K and L, which are less fragmented at present.

38 **Proposed Preservation.** The proposed project would retain 598 acres of forested areas in the
 39 proposed preservation areas that would provide for wildlife movement. Specifically, the project
 40 would preserve riparian corridors along Seal Rock Creek and tributaries to Pescadero Creek as well

1 as in Area B that would function as movement corridors. The project would also preserve wildlife
2 movement through extensive wooded areas in Areas L, G, H, M, N, O, U, V, and PQR.

3 **Significance Determination.** Fragmentation of Monterey pine forest and fragmentation of habitat
4 for CRLF and other special-status wildlife species was previously analyzed above, and it was
5 determined that impacts on the forest and special-status species could be reduced to a less-than-
6 significant level by implementing associated mitigation measures. Thus, with Mitigation Measures
7 BIO-A1 and BIO-A2 identified previously, the project is not expected to substantially disrupt wildlife
8 movements or migration.

9 I. Wildlife Breeding and Nesting

10 **Impact BIO-I1. Project construction, including tree removal and grading, could result in** 11 **potential disturbance to nesting raptors, including several special-status raptor species, if** 12 **present during construction. (Less than significant with mitigation)**

13 This impact discussion focuses on raptor nesting. As discussed in the detailed setting in Appendix F,
14 the project area provides potential nesting habitat for several common hawk species (such as red-
15 shouldered hawk and American kestrel) and several special-status species of hawks (such as sharp-
16 shinned hawk, Cooper's hawk, and white-tailed kite) as well as common owl species. In prior avian
17 surveys (Tenney 2001, 2003), certain raptors have been documented nesting in or adjacent to some
18 of the project development and preservation areas.

19 **Impacts Related to Development Areas.** The proposed project could result in potential
20 disturbance to raptors nesting within forested habitats throughout the development areas.

21 **Proposed Preservation.** The proposed project would dedicate preservation areas that contain
22 suitable nesting habitat for certain raptors.

23 **Significance Determination before Mitigation.** Raptors are protected against take, including
24 destruction of nests, pursuant to Section 3503 and 3503.5 of the California Fish and Game Code and
25 the MBTA. Disturbance from construction activities or destruction of any active raptor nest would
26 violate these statutes and would be considered a significant impact.

27 In the coastal region, raptors typically begin nesting activity in March. Hawks might be present at
28 the nest site through June 30 and possibly later. Therefore, tree removal that occurs from July 1
29 through February 28 would not be likely to result in harm to nesting raptors and no mitigation
30 would be required. If tree removal occurs at any time between March 1 and June 30, and nesting
31 raptors are present, this impact would be considered significant. Implementing Mitigation Measure
32 BIO-I1 would reduce this impact to a less-than-significant level.

33 **Mitigation Measure BIO-I1. Conduct pre-construction and breeding-season raptor** 34 **surveys and implement protection measures.**

35 The applicant will hire a qualified biologist to implement the following measures to protect
36 raptors:

- 37 • Prior to construction activities, conduct pre-construction raptor surveys during the
38 breeding season (typically February 1 through July 31) no more than 30 days prior to
39 construction. The survey will include all accessible suitable habitat within 250 feet of areas
40 where ground clearing, tree removal, residential development, or infrastructure

- 1 improvements will occur, or where other construction activities could result in disturbance
2 of nesting raptors.
- 3 ● Conduct a breeding-season survey (typically February 1 through July 31) prior to tree
4 removal or construction activities in all areas (including a 100-foot buffer) where trees will
5 be removed for construction, resource management, residential development, and
6 infrastructure improvements, or where other construction activities could result in
7 disturbance of nesting raptors.
 - 8 ○ The breeding-season survey will be conducted during the season when trees are to be
9 removed and will be valid only for that season. Subsequent surveys will be required if
10 tree removal is delayed into the next breeding season.
 - 11 ○ If an active raptor nest is found in any tree to be removed or within the 100-foot buffer,
12 the project biologist will establish a site-specific, non-disturbance buffer zone around
13 the nest site. Tree and vegetation removal may begin when the biologist determines that
14 the nest is no longer being used for that season (typically around July 31) or if it can be
15 demonstrated that the nesting birds are not being affected by construction activities.
 - 16 ○ If no active raptor nests are found in any of the trees to be removed or within a 100-foot
17 buffer from construction activities, no further mitigation will be required. In addition,
18 trees may be removed without any mitigation during the non-breeding season (typically
19 August 1 through January 31).

20 **Significance Determination after Mitigation.** Implementing Mitigation Measure BIO-I1 would
21 reduce impacts on nesting raptors to a less-than-significant level.

22 J. Tree Removal

23 **Impact BIO-J1. Project construction and development could result in removal or disturbance** 24 **of native Monterey pine trees and coast live oak trees while preserving larger areas and** 25 **numbers of trees in Del Monte Forest. (Less than significant with mitigation)**

26 As described in Table 2-3 in Chapter 2, Project Description, the proposed project would result in the
27 removal of the following trees:

- 28 ● Under Area M Spyglass Hill Option 1, 2,808 Monterey pine trees (≥ 12 inches in diameter) and
29 2,878 Monterey pine trees (< 12 inches in diameter).
- 30 ● Under Area M Spyglass Hill Option 2, 2,686 Monterey pine trees (≥ 12 inches in diameter) and
31 2,846 Monterey pine trees (< 12 inches in diameter).
- 32 ● 199 coast live oak trees (≥ 12 inches in diameter) and 756 coast live oak trees < 12 inches in
33 diameter (under either Spyglass Hill option).

34 Table 3.3-9 summarizes the types and sizes of native trees that would be removed from each of the
35 project sites. This table also identifies whether the trees are natural occurrences or planted.
36 Although the native tree species at The Inn at Spanish Bay, The Lodge at Pebble Beach, and the SR
37 1/SR 68/17-Mile Drive intersection are not indigenous to the sites (they were planted as part of the
38 landscaping [Webster 2002]), they are included in this analysis.

1 **Table 3.3-9. Summary of Project Tree Removal**

Project Location/Element	Monterey Pine				Coast Live Oak			
	Removed (< 12")	Removed (> 12")	Retained (< 12")	Retained (> 12")	Removed (< 12")	Removed (> 12")	Retained (< 12")	Retained (> 12")
The Lodge at Pebble Beach*	4	15	0	0	49	51	0	0
The Inn at Spanish Bay								
Conference Center Expansion	0	0	0	0	0	0	0	0
New Guest Cottages	177	128	0	0	14	3	0	0
New Employee Parking	68	105	0	0	44	25	0	0
Collins Field–Equestrian Center–Special Events Area								
Driving Range Relocation from Area V to Collins Field	44	88	0	0	0	0	0	0
Equestrian Center Reconstruction*	44	68	0	0	5	10	0	0
Special Events Staging Area Grading & Expansion*	122	123	0	0	15	2	0	0
Area M Spyglass Hill								
New Resort Hotel (Option 1)	90	299	47	137	0	0	0	0
New Residential Lots (Option 2)	58	177	79	259	0	0	0	0
Residential Lot Subdivisions								
Area F-2	764	462	0	0	0	0	0	0
Area I-2	201	287	10	14	0	0	0	0
Area J	54	190	182	635	127	9	424	30
Area K	421	302	774	555	191	32	351	58
Area L	594	426	1,226	879	269	45	555	93
Area U	169	170	1,203	1,212	21	2	148	17
Area V	82	83	880	887	10	1	108	13
Collins Residence	0	2	0	0	9	16	0	0
Corporation Yard	2	6	191	166	1	0	38	0
Preservation Areas								
Area B	0	0	543	839	0	0	345	197
Area C	0	0	747	2,396	0	0	149	149
Area F-1	0	0	563	307	0	0	0	0

Project Location/Element	Monterey Pine				Coast Live Oak			
	Removed (< 12")	Removed (> 12")	Retained (< 12")	Retained (> 12")	Removed (< 12")	Removed (> 12")	Retained (< 12")	Retained (> 12")
Area F-3	0	0	1,584	642	0	0	0	0
Area G	0	0	10,290	3,632	0	0	0	0
Area H	0	0	4,020	4,224	0	0	51	0
Area I-1	0	0	4,969	3,416	0	0	1,747	0
Area N	0	0	3,372	3,396	0	0	415	49
Area O	0	0	1,379	1,389	0	0	170	20
Area PQR	0	0	24,589	19,179	0	0	4,426	1,967
Roadway Improvements								
Internal Road Improvements	16	26	0	0	1	0	0	0
SR 1/SR 68/17-Mile Drive Intersection Reconfiguration	25	28	0	0	0	0	0	0
Total With Area M Option 1	2,878	2,808	56,568	43,905	756	199	8,928	2,594
Total With Area M Option 2	2,846	2,686	56,600	44,027	756	199	8,928	2,594

Sources:

Zander Associates 2001, LSA 2001, Webster 2002, WWD Corporation (2010, 2011)

Note:

Totals may not add due to rounding (as some tree estimates were based on density calculations).

* In addition, 6 planted Monterey cypress will be removed at the Lodge at Pebble Beach, 21 planted Monterey cypress will be removed at the Equestrian Center, and 8 planted Monterey cypress will be removed at the Special Events Area.

1 **Impacts Related to Development Areas.** Individual native trees would be directly removed during
2 construction activities and future maintenance and management activities in development and open
3 space areas. Additional short-term and long-term impacts on native trees could result from:

- 4 • Disturbance of the root zone and soil compaction from adjacent grading and trenching activities.
- 5 • Changes in soil and hydrologic conditions from increased irrigation and run-off.
- 6 • Increased exposure to fertilizers and herbicides from adjacent developed areas.
- 7 • Increased susceptibility to insects and diseases, including pitch canker for Monterey pine and
8 potentially sudden oak death for coast live oaks (sudden oak death has not been reported on the
9 Monterey Peninsula but has been reported in coast live oak in Big Sur and Prunedale).

10 **Proposed Preservation.** Direct and indirect impacts may be offset as a result of the following three
11 elements that are part of the proposed project.

- 12 • Approximately 44,000 individual Monterey pine trees (>12 inches) and larger numbers of
13 smaller trees would be retained within preservation and development areas, with the bulk of
14 these trees located within preservation areas.
- 15 • Approximately 2,600 coast live oak trees (>12 inches) and larger numbers of smaller trees
16 would be retained within preservation and development areas, with the bulk of these trees
17 located within preservation areas.

18 **Determination of Significance Before Mitigation.** Mitigation Measure BIO-J1 would require
19 appropriate controls for tree diseases during tree removal and replanting and require use of locally-
20 derived tree stock when planting new trees. Implementing Mitigation Measure BIO-J2 would protect
21 native trees during construction activities. These mitigation measures, as well as Mitigation
22 Measures BIO-A1 and BIO-A2 described above, would reduce this impact to a less-than-significant
23 level.

24 **Mitigation Measure BIO-J1. Incorporate specific tree removal and replanting guidelines**
25 **into the site-specific RMPs.**

26 The applicant will hire a qualified arborist to develop tree removal and replanting guidelines
27 that include the following stipulations.

- 28 • Utilize removal and disposal techniques for Monterey pine trees infected with pitch canker,
29 following principles delineated by the Pitch Canker Task Force.
- 30 • Evaluate oak trees for symptoms of sudden oak death and the presence of the pathogen
31 Phytophthora ramorum. If infection is identified within development areas, the maximum
32 number of uninfected coast live oaks will be retained and incorporated into the preservation
33 area. If any infected oaks are identified within areas of oak removal, removal and disposal
34 activity and techniques will incorporate current best management and control
35 recommendations for pathogen control from the California Oak Mortality Task Force.
- 36 • For tree replacement planting, tree stock must be derived from healthy, mature local trees,
37 preferably growing more than 500 feet from known non-local plantings. A qualified forester
38 or arborist will make selection of suitable trees for planting stock.
- 39 • Seed sources will be from stands that exhibit characteristics similar to those in the target
40 planting areas.

- 1 ● Monterey pine forest planting stock will include pitch canker-resistant individuals from a
2 diverse genetic background. Coast live oak planting stock selection will follow current
3 recommendations of the California Oak Mortality Task Force in the event that sudden oak
4 death is identified in any oaks assessed within Del Monte Forest.
- 5 ● The understory, duff, and/or soil at replanting locations will be treated as necessary to
6 maximize the vigor and long-term success of mitigation plantings.
- 7 ● A qualified County-approved forester or arborist will monitor replacement plantings
8 annually during the first 5 years, and every 5 years thereafter up to 20 years, as part of the
9 overall monitoring plan.

10 **Mitigation Measure BIO-J2. Protect retained trees from construction disturbance.**

11 During construction, the applicant will ensure that construction specifications include measures
12 to protect retained trees from disturbance. The following tree protection measures will be
13 implemented:

- 14 ● Around each tree or group of trees to be preserved adjacent to construction sites, a
15 boundary of orange fencing supported by wood or metal stakes (or functional equivalent)
16 will be erected along the approximate drip lines of such protected trees or closer where
17 specifically approved by a qualified forester, arborist, or the County of Monterey. Where
18 guidance of a tree professional is used, encroachment into the drip line of retained trees
19 may occur in order to minimize tree removals.
- 20 ● No excavation, storage of excavated fill, equipment, or construction materials, nor parking of
21 vehicles will be permitted within the drip lines of these fence-protected trees.
- 22 ● No soil may be removed from within the drip line of any tree and no fill of additional soil will
23 exceed two inches within the drip lines of trees, unless it is part of approved construction, is
24 reviewed by a qualified forester or certified arborist, and is approved by architectural
25 review staff.
- 26 ● Bark injury to any tree from equipment or materials will be prevented by faithfully
27 respecting the tree protection fencing required above.
- 28 ● Roots exposed by excavation will be pruned to promote callusing, closure, and regrowth,
29 and will be re-covered as soon as possible if tree health is to be reasonably maintained.
- 30 ● All tree work will be monitored by a qualified forester or certified arborist and completed by
31 qualified tree service personnel.
- 32 ● Site-specific and individual tree recommendations per individual residential lot will be
33 addressed on each individual lot as specific site plans for construction are developed.
- 34 ● Diseased trees (especially pitch canker-infected trees) from which disease might spread to
35 nearby forested areas (as verified in writing by a qualified professional forester selected
36 from the County's list of consulting foresters) will be removed.

37 **Determination of Significance after Mitigation.** In principle, the proposed dedication of
38 substantial areas of undeveloped forest would substantially offset the proposed project's direct and
39 indirect effects. However, without defined resource management, tree removal is considered a
40 potentially significant impact. This impact would be reduced to a less-than-significant level with
41 implementation of Mitigation Measures BIO-A1, BIO-A2, BIO-J1, and BIO-J2.

1 Cumulative Impacts and Mitigation Measures

2 The impact zone for cumulative impact on biological resources was determined to be as follows:

- 3 • **Del Monte Forest.** The Del Monte Forest impact zone was chosen for the cumulative analysis
4 where identified project impacts are of a nature that would not contribute to a cumulative
5 impact on the range and distribution of the sensitive biological resource. Resources assessed
6 using the Del Monte Forest impact zone included: ESHA within Del Monte Forest; wetlands;
7 black and silvery legless lizard; California horned lizard; Monterey dusky-footed woodrat;
8 southwestern pond turtle; pallid bat; ringtail; Monterey ornate shrew; and native trees.
- 9 • **Central Coast Recovery Unit.** This impact zone for discussing cumulative impacts for the
10 federally listed CRLF is the Central Coast Recovery unit (including the Central Coast ranges from
11 San Mateo and Santa Clara counties to Ventura and Los Angeles counties) identified in the
12 USFWS Recovery Plan. The proposed project is within the Central Coast recovery unit for CRLF,
13 but not within the designated core area of the unit, which is the Carmel River watershed.
- 14 • **Monterey Peninsula and beyond.** A regional impact zone was chosen for the cumulative
15 analysis of sensitive biological resources that occur in the project area, would be affected by the
16 proposed project, have distributions outside the Monterey Peninsula, and where the identified
17 project impacts are of a nature that they may contribute to a cumulative impact on the range
18 and distribution of a sensitive biological resource. The Monterey Peninsula and beyond zone
19 represents the probable area in which project effects on biological resources could interact with
20 other cumulative development and have a significant effect on a sensitive biological resource.
21 The effects of other developments beyond Del Monte Forest are addressed generically for this
22 impact analysis due to the wide area of assessment. Resources assessed on a regional basis
23 include Monterey pine forest, Monterey pygmy forest, Yadon's piperia, Gowen cypress, Pacific
24 Grove clover, Hooker's manzanita, sandmat manzanita, pine rose, CRLF, Smith's blue butterfly,
25 and nesting raptors.

26 The methodology for determining cumulative impacts is described in Analysis of Cumulative
27 Impacts at the beginning of Chapter 3. This analysis used specific projections of development within
28 Del Monte Forest (as discussed below) and a general assessment of cumulative impacts occurring in
29 the Monterey region and beyond.

- 30 • **Potential Future Single-Family Dwellings in Del Monte Forest (96 potential dwelling
31 units).** As described above, there are 96 undeveloped vacant lots in Del Monte Forest as of
32 September, 2011. These lots are available for residential development and this analysis
33 presumes that they may be developed in the future. These lots are scattered throughout Del
34 Monte Forest. Many of them contain Monterey pine forest including maritime chaparral. Where
35 Monterey pine forest is intact, unfragmented, and connected to larger areas of forest, it may
36 meet the definition of ESHA. Where sites contain Monterey pygmy forest, natural wetlands,
37 riparian areas, coastal dunes, habitat for Yadon's piperia or CLRF, or habitat for certain special-
38 status plants, these areas would also be considered ESHA similar to the ESHA findings for the
39 proposed project. Despite the presence of ESHA, due to constitutional limitations on takings, it is
40 a normal practice to allow one dwelling unit per legal lot, even if there are impacts on ESHA, to
41 avoid extinguishing all economic value of private property. Apart from biological resources, the
42 primary constraint on future development in Del Monte Forest is water supply. However, as
43 described in Section 3.12, Water Supply and Demand, the applicant is allowed to sell a portion of
44 their water entitlement to residential users. As such, this analysis assumes that single-family

1 development in Del Monte Forest can feasibly obtain water pursuant to purchase of a portion of
2 the applicant's water entitlement.

- 3 • **Potential Development in Area X and Y (9 potential dwelling units; of which two are**
4 **included in the 96 noted above).** These two areas presently have a resource constraint
5 overlay in the existing Del Monte Forest LUP for traffic, sewer, and water limitations for
6 development. These areas are not owned by the applicant. The proposed LCP Amendment
7 describes that existing sewer capacities are adequate for allowable development in Del Monte
8 Forest and that traffic solutions have been adopted to address traffic issues. Water availability
9 remains restrictive, but the applicant is allowed to sell part of its water entitlement to
10 residential users; as such there is a viable water supply for these potential dwelling units.

11 Area X (23 acres, 8 potential dwelling units based on County issued certificates of compliance) is
12 located just north of Pescadero Point and north of 17-Mile Drive. The nearest proposed project
13 site is the Lodge at Pebble Beach. The southern half of Area X is within an ESHA containing
14 native Monterey cypress according to Figure 2 of the Del Monte Forest LUP (County of Monterey
15 1984) and thus could not be developed for housing, except for one single family dwelling unit
16 (to avoid constitutional takings). Other sensitive biological resources may also be present.

17 Area Y (20 acres, 1 potential dwelling unit) is located southwest and adjacent to Area R, which is
18 included within proposed project Preservation Area PQR. The area is north of Del Ciervo Road.
19 Based on the aerial photography and biological resource mapping for Area PQR (see Appendix
20 F), this area is covered by Monterey pine forest, and is directly adjacent to an area containing
21 Yadon's piperia, Hooker's manzanita, and a significant occurrence of sandmat manzanita. These
22 sensitive plants are likely to be present on the site. As such, it is presumed that most if not all of
23 this site is ESHA using the Coastal Act definition, and that future development would be limited
24 to a single lot/dwelling unit.

25 Based on the information presented in this section, the proposed project would not contribute to
26 cumulative impacts on the following sensitive biological resources, that are not found within project
27 development sites, and thus would not be adversely affected by the project:

- 28 • Monterey clover.
- 29 • Monterey cypress (native).

30 **A. Environmentally Sensitive Habitat Areas**

31 **Impact BIO-A1(C). Cumulative development could result in direct removal and indirect** 32 **disturbance to ESHA; the project would contribute to loss of ESHA areas but would preserve** 33 **far larger ESHA. (Less than significant with mitigation)**

34 The impact zone for the cumulative analysis of ESHA is Del Monte Forest because the ESHA context
35 is localized to the area of jurisdiction for the Del Monte Forest LUP (impacts on resources beyond
36 their ESHA context is provided below). Cumulative ESHA impacts, as discussed below for each
37 resource, can be summarized as follows.

- 38 • **Monterey Pine Forest, including Maritime Chaparral.** As discussed below, cumulative
39 development inside Del Monte Forest could result in loss of Monterey pine forest and maritime
40 chaparral. The proposed project would contribute to this cumulative impact through removal of
41 up to 41 acres of Monterey pine forest (most of which is ESHA) including at least 12 acres of
42 maritime chaparral understory. The project will preserve 598 acres of Monterey pine forest (all

1 of which is ESHA), including 117 acres of maritime chaparral understory. In concept, the
2 proposed preservation of such areas would substantially offset the direct and indirect effects of
3 the project. However, mitigation measures BIO-A1 and BIO-A2, as discussed above, formalize
4 dedication of these areas and require preparation and implementation of site-specific resource
5 management plans for preservation areas for the benefit of Monterey pine forest, including
6 maritime chaparral. Considering the balancing provisions of the Coastal Act and the balance
7 struck in the proposed LCP Amendment and the identified mitigation, the project would not
8 contribute considerably to significant impacts on Monterey pine forest or maritime chaparral
9 ESHA.

- 10 • **Coastal Dunes Habitat, including ESHA Dune Plants Habitat.** As discussed below, cumulative
11 development within Del Monte Forest could increase trail use within coastal dune habitat. The
12 proposed project will not result in the removal of any coastal dunes habitat, but could result in
13 indirect effects at Area L or Area M dunes due to intrusion by new residents, hotel users,
14 escaped invasive landscaping, or pesticide drift. The proposed project will result in the
15 preservation of 34 acres of coastal dunes at Area M and 0.74 acres at Area L. In concept, the
16 proposed preservation of this area would substantially offset the direct and indirect effects of
17 the project. However, mitigation measures BIO-A1, BIO-A2, and BIO-B2, as discussed above, are
18 required to formalize dedication of these areas, implement resource management plans for
19 preservation areas for the benefit of coastal dunes habitat and ESHA dune plants and include
20 specific measures to avoid indirect effects at Areas L and M. Considering the balancing
21 provisions of the Coastal Act and the balance struck in the proposed LCP Amendment and the
22 identified mitigation, the project would not contribute considerably to significant impacts on
23 coastal dune ESHA.
- 24 • **Monterey Pygmy Forest/Sensitive Habitat in the HHNHA.** As discussed below, cumulative
25 development within Del Monte Forest could result in indirect effects on the sensitive habitats in
26 the HHNHA due to increased trail use. The proposed project will not result in the removal of any
27 Monterey pygmy forest or any sensitive habitat in the HHNHA. The project may result in indirect
28 effects to Monterey pygmy forest/other sensitive habitats in the HHNHA due to increased trail
29 use. Mitigation measure BIO-B3, as discussed below, is required to manage indirect effects due
30 to increased trail use. Considering the balancing provisions of the Coastal Act and the balance
31 struck in the proposed LCP and the identified mitigation, the project would not contribute
32 considerably to significant impacts on Monterey pygmy forest ESHA or ESHA within HHNHA.
- 33 • **Riparian Habitat.** As discussed below, cumulative development within Del Monte Forest could
34 result in effects to riparian habitat. The proposed project will not result in removal of any
35 riparian habitat. All riparian habitat is protected by setback areas. The project will result in
36 preservation of approximately 10,415 linear feet of riparian habitat. The project would not
37 contribute to significant impacts on riparian ESHA.
- 38 • **Natural Wetlands/Seasonal Ponds.** As discussed below, cumulative development within Del
39 Monte Forest could result in direct and indirect effects to natural wetlands and seasonal ponds.
40 The proposed project will result in the removal or fill of up to 0.06 acres of wetlands/drainages
41 at Area L and Area U. The proposed project could also result in indirect effects to wetlands due
42 to run-off at the Equestrian Center and Areas J, K, L, U, and V. The project will result in
43 preservation of 9.5 acres of wetlands. In concept, the proposed preservation of such areas would
44 substantially offset the direct and indirect effects of the project. However, mitigation measures
45 BIO-A1, BIO-A2, and BIO-C1, as discussed above, are required to formalize dedication of these
46 areas and implement resource management plans for preservation areas for the benefit of

1 natural wetlands and seasonal ponds, and to avoid or compensate for wetland losses. Mitigation
2 measures HYD-A1, A2, C1, C2, and C-3 are also required to address potential hydrological and
3 water quality impacts on wetlands and waters. Considering the balancing provisions of the
4 Coastal Act and the balance struck in the proposed LCP and the identified mitigation, the project
5 would not contribute considerably to significant impacts on wetland/seasonal pond ESHA.

- 6 • **Yadon's Piperia.** As discussed below, cumulative development within Del Monte Forest could
7 result in loss of Yadon's piperia, if present. The proposed project will result in the removal of up
8 to 6 acres of Yadon's piperia habitat and indirect impacts on 3 acres of habitat. The proposed
9 project will result in the preservation of 125 acres of Yadon's piperia habitat in Del Monte Forest
10 and a substantial part of the plant's overall known population.⁸ In concept, the proposed
11 preservation of such areas substantially offsets the direct and indirect effects of the project.
12 However, mitigation measures BIO-A1, BIO-A2, and BIO-D1, as discussed above, are required to
13 formalize dedication of these areas and implement resource management plans for preservation
14 areas for the benefit of Yadon's piperia. Considering the balancing provisions of the Coastal Act
15 and the balance struck in the proposed LCP and the identified mitigation, the project would not
16 contribute considerably to significant impacts on Yadon's piperia ESHA.
- 17 • **Gowen Cypress.** As discussed below, cumulative development within Del Monte Forest could
18 result in loss of Gowen cypress. The project could result in removal of individual Gowen cypress
19 in Area F-2. The project will result in the preservation of Gowen cypress in Areas F-1 and F-3.⁹
20 In concept, the proposed preservation of such areas would substantially offset the direct and
21 indirect effects of the project. However, mitigation measures BIO-A1, BIO-A2, and BIO-D2, as
22 discussed above, are required to formalize dedication of these areas, implement resource
23 management plans for preservation areas for the benefit of ESHA, and either avoid removal of
24 all Gowen cypress or restore off-site areas of Gowen cypress. Considering the balancing
25 provisions of the Coastal Act and the balance struck in the proposed LCP and the identified
26 mitigation, the project would not contribute considerably to significant impacts on Gowen
27 cypress ESHA.
- 28 • **California Red-Legged Frog Habitat.** As discussed below, cumulative development within Del
29 Monte Forest could result in loss of CRLF. The proposed project would not result in the removal
30 of any aquatic habitat for the CRLF, but may result in mortality of individuals during
31 construction, would remove upland habitat, and could indirectly degrade CRLF habitat due to
32 project run-off. The project will also result in the preservation of CRLF habitat in Areas J, K, L
33 and N. In concept, the proposed preservation of such areas substantially offsets the direct and
34 indirect effects of the project. However, mitigation measures BIO-A1, BIO-A2, and BIO-E1 and
35 E2, as discussed above, are required to formalize dedication of these areas, implement resource
36 management plans for preservation areas for the benefit of CRLF, limit construction period
37 impacts, and provide compensatory frog breeding habitat. Considering the balancing provisions

⁸ As noted above, the applicant previously dedicated the HHNHA, which contains another 38 acres of occupied Yadon's piperia habitat. The applicant also entered into a memorandum of understanding (MOU) with USFWS to preserve another 99 acres of Monterey pine forest/Yadon's piperia habitat (83 acres at the Aguajito site in the County of Monterey and 16 acres at the Old Capitol site in the City of Monterey). The prior dedication of HHNHA is part of the existing baseline. The preservation of additional piperia habitat outside Del Monte Forest pursuant to the MOU with USFWS is not required as mitigation to address significant impacts identified in this EIR that are addressed through the preservation and resource management of extensive piperia habitat in Del Monte Forest.

⁹ The applicant's prior dedication of the HHNHA included the most significant occurrences of Gowen Cypress in Del Monte Forest.

1 of the Coastal Act and the balance struck in the proposed LCP and the identified mitigation, the
2 project would not contribute considerably to significant impacts on CRLF ESHA.

3 **B. Sensitive Habitats**

4 **Impact BIO-B1 (C). Cumulative development would result in significant loss of Monterey pine** 5 **forest (including maritime chaparral) to which the project would contribute. (Less than** 6 **significant with mitigation)**

7 The impact zone for the cumulative analysis of Monterey pine forest is the full extent of native
8 Monterey pine forest, but the focus of the analysis is on the Monterey region of native Monterey pine
9 forest, as this is the population to which the project can contribute effects.

10 Prior to Europeans entering California and Baja California, indigenous Monterey pine forest is
11 estimated to have covered about 24,000 acres at three locations in California and two islands off the
12 coast of Baja, Mexico (Jones & Stokes 1996b). The present extent of Monterey pine forest with
13 undeveloped understory is less than 13,600 acres (Jones & Stokes 1996b). The forest at Monterey
14 was the largest historically, larger than the combined areas of all other indigenous forest
15 occurrences.

16 The Monterey pine forest at Monterey is still the largest occurrence but has also undergone the
17 greatest transformation as a result of human activities including logging, urban, suburban,
18 institutional, and recreational development. As of 1994, approximately 9,400 acres of Monterey pine
19 forest with undeveloped understory remained on public and private lands; approximately 1,554
20 acres remained of Monterey pine forest with mostly closed canopy but with cleared or closely
21 managed understory vegetation in large-lot developed areas; and approximately 2,811 acres
22 remained in suburban neighborhoods with much of the pine canopy removed, but usually greater
23 than 20% canopy cover remaining, and understory in unnatural landscaped vegetation, paved
24 surfaces, and structures (Jones & Stokes 1994a).

25 As described above under Impact BIO-B1, the proposed project would result in removal/conversion
26 of less than 1% of the remaining Monterey pine forest with undeveloped understory in the
27 Monterey region that would also represent less than 1% of all known remaining undeveloped
28 Monterey pine forest in California and Mexico. The project would contribute to the impacts on
29 Monterey pine forest that are occurring as a result of ongoing development elsewhere and other
30 locations in the region, existing lot development in Del Monte Forest, and potential future
31 development in the existing lots in Area X and Y in Del Monte Forest.

32 As described above under discussion of significance criteria, for cumulative effects to Monterey pine
33 forest on a regional basis, a *substantial adverse effect* is defined in this document as “the loss,
34 conversion, and/or fragmentation of Monterey pine forest such that the future conservation of
35 Monterey pine forest, in absence of an adopted regional conservation plan, would be uncertain;”
36 uncertainty is defined as the loss of more than 5% of existing undeveloped Monterey pine forest on
37 a regional basis.

38 To examine cumulative effects on a quantitative basis, potential regional development was assessed
39 by:

- 40 • Identifying the undeveloped forested areas within Monterey County (from the prior 2005 Final
41 EIR, Monterey County 2005).

- 1 • Identifying the undeveloped forested areas presently protected by means of state or local
2 government ownership (like Pt. Lobos State Park), conservation organization ownership (such
3 as the Big Sur Land Trust or the Del Monte Forest Foundation), and conservation easements (see
4 table in Appendix F of the 2005 EIR, [Monterey County 2005]).
- 5 • Identifying the amount of forest retention “normally” occurring under current County
6 permitting practices by reviewing prior environmental impact reports and permit conditions for
7 projects (such as Canada Woods/86%, Monterra Ranch/75%, and Del Mesa Carmel/88%).
8 Based on these examples and to take account that some of the retained forest near development
9 may be subject to indirect effects over time, a presumption was made that “normal” County
10 permitting practice was requiring retention of approximately 75% of undeveloped forest
11 through environmental review and conditions of approval for projects that propose substantial
12 removal of undeveloped Monterey pine forest. This retention is the equivalent of adoption of a
13 3:1 preservation-to-forest loss mitigation ratio.
- 14 • Identifying the amount of likely forest removal in non-protected areas, presuming 75% of forest
15 is retained as condition of approval.
- 16 • Adding the project’s contribution to net forest loss to the other cumulative loss.

17 Based on these assumptions, cumulative development (including the project) could result in a loss of
18 1,451 acres or about 16% of the extant undeveloped forest in Monterey County (Table 3.3-10).

19 **Table 3.3-10. Summary of Cumulative Impact Analysis for Monterey Pine Forest**

Element	Acres	Notes
Project Contribution		
Project Removal	41	Direct removal of forest, represents 0.4 % loss in Monterey Region
Cumulative Impact		
Undeveloped Monterey Pine Forest in Monterey Region in 2002	9,289	Prior Draft EIR
“Unprotected” Areas of Forest in Monterey Region in 2002	5,640	All areas not identified as protected
Area of forest expected to be retained > 2002	4,233	Based on review of environmental impact reports and project conditions, 75% of forest is “normally” being retained as condition of development
Forest areas presumed lost due to cumulative development > 2002	1,410	Unprotected areas not retained (excludes project area)
Cumulative impact including project contribution	1,451	Represents 16% loss in Monterey Region
Additionally-Required Mitigation for Cumulative Contribution		
Retention to Meet 75% goal		
Proposed Project Retention	642	94% of project area of 684 acres
Required Additional Retention to meet 95% goal	7	

Element	Acres	Notes
Additionally Required Preservation Areas		
Portion of Area D, Old Capitol or Aguajito Sites	7	Mitigation only requires a portion of these areas to be dedicated. Areas at Old Capitol or Aguajito to be dedicated as part of MOU between USFWS and PBC may be used for this mitigation.

1

2 **Significance Conclusion.** The project’s contribution to a cumulative impact on Monterey pine forest
 3 would be reduced with the applicant’s proposed preservation as well as Mitigation Measures BIO-A1
 4 and BIO-A2 described above. The project would retain nearly 94% of the extant forest within the
 5 project area. While the proposed preservation and the mitigation identified would help to reduce
 6 cumulative impacts, absent an adopted regional forest conservation plan, the project would still
 7 result in the net loss of up to 41 acres of forest (see Table 3.3-10). Loss of up to 41 acres of forest in
 8 the context of the potential overall cumulative loss of 16% of the extant forest in the Monterey
 9 Region would be a considerable contribution to a significant cumulative impact, even with
 10 mitigation.

11 Mitigation Measure BIO-B1(C) is recommended in order to avoid considerable contributions of this
 12 project to significant cumulative impacts on Monterey pine forest.

13 **Mitigation Measure BIO-B1(C). Dedicate additional area of undeveloped Monterey pine**
 14 **forest.**

15 The applicant will dedicate additional areas (minimum of 7 acres) of undeveloped pine forest to
 16 offset the contribution of the proposed project to a substantial cumulative loss of Monterey pine
 17 forest. This amount was calculated by identifying the additional amount of preservation needed
 18 to provide 95% retention of Monterey pine forest in the project area. The applicant owns
 19 several different areas, any one of which could be used for this mitigation:

- 20 ● Area D, which is west of Highway 1, mostly north of the Sawmill Gulch site, and adjacent to
 21 the HHNHA. If this site is selected, 7 acres would be preserved contiguous to forested areas
 22 within Del Monte Forest (although located outside the jurisdictional coastal zone) adjacent
 23 to the HHNHA. The portion of Area D to be preserved would include 1) the entire area
 24 between Congress Road and SFB Morse Drive (Parcel G, approximately four acres); and 2)
 25 approximately three acres to the east of SFB Morse Drive (part of Parcel F).
- 26 ● The Old Capitol site is east of Highway 1 in the City of Monterey and south of Del Monte
 27 Shopping Center and contains Monterey pine forest, Yadon’s piperia, and possibly other
 28 sensitive biological resources. The applicant has entered into a MOU with USFWS to
 29 preserve 16 acres of Monterey pine forest at this site containing Yadon’s piperia (USFWS-
 30 PBC 2007). The 7 acres required by this measure could be fulfilled within 16 acres required
 31 by the MOU.
- 32 ● The Aguajito site is east of Highway 1, south of Highway 68, and north of Jack’s Peak County
 33 Park and contains Monterey pine forest, Yadon’s piperia and possibly other sensitive
 34 biological resources. The applicant has entered into a MOU with USFWS to preserve 83 acres
 35 of Monterey pine forest at this site containing Yadon’s piperia (U.S. Fish and Wildlife Service
 36 –Pebble Beach Company 2007). The 7 acres required by this measure could be fulfilled
 37 within 83 acres required by the MOU.

1 Resource management of the 7-acre dedicated area will be conducted in accordance with
2 Mitigation Measures BIO-A1. The dedications will be in accordance with the requirements of
3 Mitigation Measure BIO-A2.

4 **Impact BIO-B2(C). Cumulative development could result in potential disturbance of coastal**
5 **dune habitat to which the project could contribute indirect effects. (Less than significant with**
6 **mitigation)**

7 The impact zone for the cumulative analysis of coastal dunes is Del Monte Forest because this is the
8 only location wherein the project could contribute effects to coastal dunes.

9 Project development will result in potential indirect disturbance of coastal dune habitat and
10 associated special-status plant species, which will be substantially offset by preservation of the Area
11 M dunes. Cumulative development within Del Monte Forest could contribute resident and visitor
12 recreational use in remnant dune areas. With identified mitigation for direct impacts (BIO-A1, A2,
13 and B2), which will require restoration and management of the dune areas for the benefit of
14 biological resources found in the dunes, the project's contribution to a cumulative impact is
15 mitigated to a less-than-significant level.

16 **Impact BIO-B3(C). Cumulative development could indirectly disturb Monterey pygmy forest**
17 **and other sensitive habitat areas in the HHNHA due to trail use to which the project could**
18 **contribute. (Less than significant with mitigation)**

19 The impact zone for the cumulative analysis of Monterey pygmy forest is the Monterey Peninsula
20 and beyond as this community is found in areas beyond Del Monte forest.

21 The Monterey pygmy forest found at the HHNHA is the largest stand of this natural community
22 known to occur in California. The only other occurrence is found inland of the Point Lobos
23 Peninsula. As discussed above, increased use of the trails in the HHNHA and SFB Morse Botanical
24 Preserve would occur due to the new residential housing at the Corporation Yard. Cumulative
25 development in Del Monte Forest might also contribute additional recreational use of the HHNHA.

26 The applicant's proposed preservation and Mitigation Measures BIO-A1, BIO-A2, and BIO-B3
27 present a comprehensive set of preservation, resource management, and trail use management
28 measures that would be expected to reduce the proposed project's contribution to a cumulative
29 impact on the Monterey pygmy forest in HHNHA to a less-than-significant level.

30 **C. Wetlands/Waters**

31 **Impact BIO-C1(C). Cumulative development could result in direct and indirect effects to**
32 **wetlands/waters to which the project would contribute. (Less than significant with**
33 **mitigation)**

34 The cumulative impact zone is limited to waters and wetlands in Del Monte Forest as this is the only
35 area in which the project could contribute effects.

36 Cumulative residential development could also affect wetland/waters or riparian areas within Del
37 Monte Forest directly or indirectly.

38 Proposed project impacts on riparian areas were discussed above and found to be less than
39 significant as the project would not disturb any riparian areas. The project also includes

1 preservation of extensive riparian areas. The project does not contribute considerably to a
2 significant cumulative impact on riparian areas.

3 Proposed project impacts on wetlands/waters were discussed above. Mitigation is required to avoid
4 and reduce impacts on these resources to a less-than-significant level. The project also includes
5 preservation of extensive areas containing wetlands areas and streams in Del Monte Forest. With
6 identified mitigation, the project's contribution to a significant cumulative impact would be reduced
7 to a less-than-significant level.

8 **D. Special-Status Plant Species**

9 **Impact BIO-D1(C). Cumulative development could result in the direct loss of individual** 10 **Yadon's piperia plants and habitat and indirect impacts on adjacent occupied piperia habitat** 11 **to which the project will contribute (Less than significant with mitigation)**

12 The impact zone for the cumulative analysis of Yadon's piperia is the full extent of the plant's
13 population which is located on Monterey Peninsula and beyond.

14 The distribution of Yadon's piperia is centered in the Monterey Peninsula, where plants are found
15 throughout large undeveloped tracts of Del Monte Forest. The species' range extends north to Las
16 Lomas near Santa Cruz County and south to near Palo Colorado Canyon along the Big Sur Coast.
17 Currently, there are an estimated 25,758 plants that are protected within the Del Monte Forest
18 project area, Monterey Peninsula (outside the project area), Point Lobos, and Prunedale, which
19 constitutes about 15% of the known total population. There are several other small occurrences
20 within Del Monte Forest and beyond (including the Marina and Palo Colorado Canyon occurrences
21 outside the Monterey Peninsula), however, they are not currently protected and could be affected by
22 future development activities (U.S. Fish and Wildlife Service 2002b).

23 Cumulative impacts on Yadon's piperia that would occur as a result of other projects include:

- 24 • Potential future residential development on existing vacant lots in Del Monte Forest (unknown
25 extent of Yadon's piperia due to lack of surveys).
- 26 • Other development in the Monterey Peninsula, and beyond.

27 Based on the impact analysis conducted for Yadon's piperia, the proposed project would result in
28 the estimated loss of 6 acres of occupied habitat and up to 4,507 individual plants. This impact
29 would result in the loss of approximately 3% of the known population in Del Monte Forest, on the
30 Monterey Peninsula, and the total known population. As part of the project, the applicant has
31 proposed to offset impacts on the species by dedicating new conservation easements for an
32 estimated 125 acres of occupied habitat and an estimated 122,570 plants.¹⁰ This preservation
33 component would represent approximately 89% of the known Del Monte Forest population, 83% of
34 the known Monterey Peninsula population, and 71% of the known total population. In combination

¹⁰ The applicant previously dedicated the HHHHA, which contains another 38 acres of occupied Yadon's piperia habitat. The applicant has also entered into an MOU with USFWS to preserve another 99 acres of Monterey pine forest/Yadon's piperia habitat (83 acres at the Aguajito site in the County of Monterey and 16 acres at the Old Capitol site in the City of Monterey). The prior dedication of the HHHHA is part of the existing baseline. Additional dedication of piperia habitat outside Del Monte Forest pursuant to the MOU would be in excess of that required to address significant impacts identified in this EIR that would be mitigated through preservation and resource management of lands within Del Monte Forest.

1 with prior preservation, which protects approximately 15% of the total known population,
2 approximately 86% of the total known population would be preserved.

3 As noted above, other potential projects may also result in loss of Yadon's piperia, both in terms of
4 acreage and numbers. Mitigation will be required to address the project's direct and indirect
5 impacts as described above and is considered adequate to reduce the direct and indirect impacts on
6 a less-than-significant level. Thus, with the proposed preservation and with implementation of
7 Mitigation Measures BIO-A1, BIO-A2, and BIO-D1, the project's contribution to this cumulative
8 impact would be less-than-significant.

9 **Impact BIO-D2(C). Cumulative development could result in potential loss or disturbance of**
10 **Gowen cypress trees due to residential development to which the project would contribute**
11 **loss of individual Gowen cypress trees. (Less than significant with mitigation)**

12 The impact zone for the cumulative analysis of Gowen cypress is the Monterey Peninsula and
13 beyond as this species is found in areas beyond Del Monte Forest.

14 There are only two known stands of Gowen cypress and they are located in and adjacent to the
15 HHNHA in Del Monte Forest and the Point Lobos State Reserve. As described above under Impact
16 BIO-D2, the proposed project could result in the loss of approximately 16 native Gowen cypress
17 within portions of Areas F-2. As part of the proposed project, 3.5 acres of Bishop pine/Gowen
18 cypress forest within Area F-3 and additional area in F-1 containing Gowen cypress would be
19 preserved both of which are connected to the HHNHA occurrence.¹¹

20 It is possible, but unknown if, other residential development in Del Monte Forest may affect Gowen
21 cypress. Regardless, the proposed preservation and the implementation of Mitigation Measures BIO-
22 A1, BIO-A2, and BIO-D2 would reduce the project's contribution to a significant cumulative impact
23 to a less-than-significant level.

24 **Impact BIO-D3(C). Cumulative development could result in loss of Pacific Grove clover and**
25 **the project would contribute to that loss (Less than significant with mitigation)**

26 The impact zone for the cumulative analysis of Pacific Grover Clover is the Monterey Peninsula and
27 beyond as this community is found in areas beyond Del Monte Forest.

28 Pacific Grove clover is limited to Monterey County and is known to exist on 12 sites, including
29 Asilomar State Beach, Point Lobos State Reserve, Lobos Ranch, Spanish Bay, 17-Mile Drive, Indian
30 Village, the existing Equestrian Center, Monterra Ranch, September Ranch, and an inland occurrence
31 just south of Highway 68 and Laguna Seca Ranger Station. Eight of these occurrences are on private
32 property and the remaining four occurrences are protected by the state and Big Sur Land Trust.

33 Impacts on this species from future development activities in areas that support unprotected
34 populations of Pacific Grove clover could result in a significant cumulative impact on the species. As
35 described above, the Pacific Grove clover occurrence within the proposed Driving Range Relocation
36 site could be directly affected by the project and the occurrence at Indian Village could be affected
37 indirectly. Thus, the proposed project could contribute considerably to a significant cumulative
38 impact. However, implementation of Mitigation Measures BIO-D3 and BIO-D4 would reduce the
39 proposed project's contribution to this cumulative impact to a less-than-significant level.

¹¹ The prior dedication of the HHNHA contains the most substantial occurrences of Gowen cypress in the Del Monte Forest.

1 **Impact BIO-D4(C). Cumulative development could result in direct loss and indirect impacts**
2 **on Hooker's manzanita habitat to which the project could contribute. (Less than significant)**

3 The impact zone for the cumulative analysis of Hooker's manzanita is the Monterey Peninsula and
4 beyond as this species is found in areas beyond Del Monte Forest.

5 The species' range extends from southern Santa Cruz County south to Monterey County. The
6 primary populations occur in Larkin Valley, Prunedale Hills, old Fort Ord, Monterey Peninsula, and
7 the northern end of the Santa Lucia Range (see figure in Appendix F showing distribution). The
8 largest population is located at old Fort Ord and managed by BLM. Hooker's manzanita is found
9 throughout Del Monte Forest. A substantial population of Hooker's manzanita (the most abundant
10 occurrence of the species within Del Monte Forest) is found in the HHNHA.

11 Cumulative impacts on Hooker's manzanita that would occur as a result of other projects include:

- 12 ● Potential future residential development in Del Monte Forest.
- 13 ● Other development in Del Monte Forest, on the Monterey Peninsula, and beyond.

14 The proposed project would result in the loss of approximately 12 acres of habitat. The project
15 would preserve 117 acres of Hooker's manzanita habitat.

16 Taking into account the nature of the populations affected by the proposed project, the level of
17 impact, the proposed preservation, and resource management, the project's contribution to
18 cumulative impacts is considered less than significant.

19 **Impact BIO-D5(C). Cumulative development could result in potential loss or disturbance of**
20 **pine rose and habitat for pine rose. (Less than significant with mitigation)**

21 The impact zone for the cumulative analysis of pine rose is the Monterey Peninsula and beyond as
22 this species is found in areas beyond Del Monte Forest.

23 Pine rose is endemic to California and occurs in the San Francisco Bay Area, central coast, and
24 Southern Coast Ranges. According to the CNDDB (2002), there are four extant occurrences
25 documented in Monterey County; one of these occurrences is on private property (Del Monte Forest
26 lands) and the remaining three are on public lands (Veterans Memorial Park, Point Lobos State
27 Reserve, and Manzanita County Park).

28 Development in Del Monte Forest, on the Monterey Peninsula, and beyond may result in losses of
29 this species.

30 As described above, the proposed project would potentially disturb several occurrences of pine rose
31 in the project area and would preserve or conserve other areas where this species has been
32 reported. Because the project would disturb several occurrences and the documented extant
33 occurrences are somewhat limited, the proposed project could contribute considerably to significant
34 cumulative impact. Implementation of Mitigation Measures BIO-A1, BIO-A2, and BIO-D-5 would
35 reduce the project's contribution to a significant cumulative impact to a less-than-significant level.

36 **Impact BIO-D6(C). Cumulative development could result in potential loss or disturbance of**
37 **Hickman's potentilla or its habitat. (Less than significant with mitigation)**

38 The impact zone for the cumulative analysis of Hickman's potentilla is the Monterey Peninsula and
39 beyond as this species is found in one area near Montara in San Mateo County.

1 The Montara occurrence has been preserved and is being managed or will be managed by the
2 California State Parks and the Golden Gate National Recreation Area (U.S. Fish and Wildlife Service
3 2009). Threats to this population include non-native species, possible effects of grazing
4 management, hydrologic change, and shading by encroaching Monterey pine due to fire regime
5 alteration (U.S. Fish and Wildlife Service 2009).

6 As described above, the proposed project could indirectly effect the Hickman's potentilla population
7 in Indian Village. Because the project would disturb one occurrence and there are identified threats
8 to the only other documented occurrence, the proposed project could contribute considerably to
9 significant cumulative impact. Implementation of Mitigation Measures BIO-D6 would reduce the
10 project's contribution to a significant cumulative impact to a less-than-significant level.

11 **E. Special-Status Wildlife Species**

12 **Impact BIO-E1(C). Cumulative development could result in direct mortality to California red-** 13 **legged frog, degradation of aquatic habitat, loss of and degradation of upland habitats to** 14 **which the project could contribute. (Less than significant with mitigation)**

15 The impact zone for the cumulative analysis of CRLF is the Central Coast Recovery Unit.

16 Historically, CRLF was known from 46 counties in California, but the taxon is now extirpated from
17 24 of these counties (U.S. Fish and Wildlife Service 2002c). CRLF occurs in isolated localities in the
18 Sierra Nevada, Northern Coast, and northern Transverse Ranges, but is still relatively common in
19 the San Francisco Bay area (including Marin County) and along the central coast (U.S. Fish and
20 Wildlife Service 2002a).

21 This taxon is widespread in Monterey County and nearly all coastal drainages from Garrapata Creek
22 south to Salmon Creek, including the Little and Big Sur River drainages and the vicinity of Pfeiffer
23 State Beach, support CRLF. CRLFs occur in the Carmel River watershed and most of its tributaries.
24 More than 350 adults have been observed on Rancho San Carlos, a private ranch on the upper
25 portion of the Carmel River Valley (U.S. Fish and Wildlife Service 2002a).

26 The CNDDDB lists multiple occurrences of CRLF in Monterey County not including the recent
27 documented occurrences found on the Monterey Peninsula. CRLF is rare locally and was only
28 recently (2002) found on the Monterey Peninsula within or near the project site. CRLFs have been
29 found at several locations in Seal Rock Creek (in Area L and Indian Village) and nearby water
30 hazards on the Spyglass Hill golf course; and in the Drake Pool and a seasonal pond near Drake Road
31 at the proposed Area N preservation area.

32 As described above, the proposed project would disturb wetlands at Area L and U that may be
33 utilized by CRLF and will have a range of indirect effects due to development. The proposed project
34 would preserve portions of other areas where either this species occurs or there is suitable, but
35 presently unoccupied habitat (based on surveys to date).

36 Cumulative development elsewhere in Del Monte Forest, on the Monterey Peninsula, and beyond
37 may also result in losses of this species or its habitat.

38 Cumulative losses of occupied CRLF habitat in Del Monte Forest (and elsewhere) would be
39 considered a significant cumulative impact. Because the project would contribute to the loss of
40 occupied foraging and dispersal habitat, the project's contribution is considerable. Implementation

1 of Mitigation Measures BIO-A1, BIO-A2, BIO-E1 and BIO-E2 would reduce the contribution of the
2 proposed project to a less-than-significant level.

3 **Impact BIO-E2(C). Cumulative development could result in indirect effects to Smith's blue**
4 **butterfly host plants and Smith's blue butterflies to which the project could contribute (Less**
5 **than significant)**

6 The impact zone for the cumulative analysis of Smith's blue butterfly is the Monterey Peninsula and
7 beyond as this species is found in areas beyond Del Monte Forest.

8 Smith's blue butterfly is found in coastal sand dunes along the central California coast in San Luis
9 Obispo, Monterey, Santa Cruz, and San Mateo Counties (Arnold pers. comm.). Although Smith's blue
10 butterfly is known to occur in the general Monterey vicinity, there are no historical records from
11 Pebble Beach or Pacific Grove (Entomological Consulting Services 2000; Arnold 2011).

12 As discussed above, Smith's blue butterfly is not considered likely to be present on the project sites
13 containing dunes. Although the project could result in indirect disturbance of its host plants, due to
14 the unlikely presence of this species, the project is not expected to have any actual impact on this
15 species.

16 Cumulative development outside Del Monte Forest could result in direct disturbance or increased
17 recreational use of trails through remnant dune habitat that may contain host plants and Smith's
18 blue butterflies. The potential loss of Smith's blue butterflies or its host plants would be a
19 considerable contribution to a cumulative impact. However, given that this species is unlikely to
20 occur within the project sites, the project would not contribute to any cumulative impacts.

21 **Impact BIO-E3(C). Cumulative stormwater run-off could degrade nearshore water quality**
22 **and result in indirect impacts on the southern sea otter, western snowy plover, California**
23 **brown pelican and other marine resources, including the Carmel Bay Area of Special**
24 **Biological Significance to which the project would contribute. (Less than significant with**
25 **mitigation)**

26 The impact zone for the cumulative analysis of marine resources is the marine areas offshore of Del
27 Monte Forest and Carmel Bay and the watersheds leading to these marine areas.

28 As described above, there is no marine habitat within the project area, which is inland from the
29 coast. Water quality effects were assessed in Section 3.7, Hydrology and Water Quality, including
30 construction erosion, storm water run-off, golf course stormwater and pest management activities,
31 reclaimed wastewater use, and Equestrian Center waste management activities. The conclusion of
32 the water quality analysis in Section 3.7 is that the proposed project's operational effects on water
33 quality would be less than significant and that its construction impacts on water quality could be
34 mitigated to a less-than-significant level. The project's construction contribution to cumulative
35 water quality impacts can be mitigated by the mitigation identified for construction run-off and thus
36 the project's contribution to any cumulative impact on marine habitats, marine resources, and
37 marine special-status species is considered less than significant.

1 **Impact BIO-E4(C). Cumulative development could result in potential loss or disturbance to**
2 **habitat occupied by certain non-listed special-status wildlife species. (Less than significant**
3 **with mitigation)**

4 The impact zone for the cumulative analysis of non-listed special-status wildlife species is Del Monte
5 Forest as the project's effects on these species is limited in scale and extent and could contribute
6 only to population level effects in the localized area.

7 **Black or silvery legless lizards.** These species are rare locally and have a restricted distribution on
8 the Monterey Peninsula. Project development would result in indirect effects to suitable, but
9 marginal habitat. Cumulative development in Del Monte Forest might increase recreational use of
10 trails in areas of suitable habitat, like dunes. With the implementation of the applicant's proposed
11 preservation and the mitigation measures identified for direct impacts (BIO-A1, A2, B2, and E5), the
12 project's contribution would not be considerable.

13 **California horned lizard.** This species is common throughout chaparral habitats across an
14 extensive geographic range and is not known from the project area. Because the statewide status of
15 the California horned lizard is relatively robust, and because the species is unlikely to occur in
16 significant numbers in the small areas of marginal habitat found in the project area, the project's
17 potential contribution to a cumulative impact would not be considerable.

18 **Southwestern pond turtle.** The project would not remove any habitat for the southwestern pond
19 turtle. The project would result in preservation of a number of areas in Del Monte Forest that
20 contain suitable habitat and may contain southwestern pond turtle. Although cumulative
21 development may affect southwestern pond turtle, the project's contribution is not considerable.

22 **Monterey Dusky-footed woodrats.** Area PQR contains occupied habitat (and nests) for Monterey
23 dusky-footed woodrat along a drainage that would be preserved as natural open space. The project
24 includes new trails in PQR but the trails that cross drainage areas are all along existing fire roads, so
25 there will be no new disturbance of riparian areas associated with trail construction. This is the only
26 known woodrat location in Del Monte Forest and no other projects would affect this location. Forest
27 clearing in Areas J, K, or L near riparian areas may disturb woodrat nests, if this species is present
28 there. The potentially significant direct impact can be reduced to a less-than-significant level with
29 implementation of the mitigation (BIO-E6) described above. Although cumulative development may
30 affect this species in other locations, the project's contribution is not considerable, with mitigation.

31 **Pallid bats.** Cumulative projects that could also affect pallid bat habitat within Del Monte Forest
32 include potential future residential developments in Del Monte Forest.

33 The proposed project could remove tree roosting sites and thus directly affect this species and
34 eliminate potential habitat, resulting in an adverse effect on population levels. Clearing of forest
35 habitat may remove foraging and roosting habitat, but the increase of edge habitat and moister,
36 irrigated environment in development areas could balance this effect by increasing foraging habitat
37 and insect availability in the long term. The proposed project would also dedicate conservation
38 easements for approximately 598 acres of Monterey pine forest. The project's contribution to a
39 cumulative impact would be mitigated to a less-than-significant level with implementation of the
40 mitigation identified above for direct impacts (BIO-E7).

41 **Ringtails and Monterey Ornate Shrew.** Cumulative projects that could also affect habitat for these
42 species within Del Monte Forest include potential future residential development.

1 Some potential habitat for ringtails and ornate shrews in forest habitats adjacent or near to riparian
2 areas will be removed by the proposed project. The preservation of all riparian habitat within
3 preservation areas, along with directed resource management as required by mitigation measures
4 identified for direct impacts (BIO-A1 and BIO-A2) would reduce the project's contribution to a
5 cumulative impact to a less-than-significant level.

6 **F. Common Wildlife Habitat/Populations/Plant Communities**

7 **Impact BIO-F1(C). Cumulative development would remove habitat of common wildlife** 8 **species and plant communities within Del Monte Forest to which the project would** 9 **contribute. (Less than significant with mitigation)**

10 The impact zone for the cumulative analysis of common plants and wildlife habitat is Del Monte
11 Forest because the project's impact on common plants and wildlife is limited to Del Monte Forest.

12 Cumulative residential development in Del Monte Forest could affect habitat for common species
13 including Monterey pine forest and wetlands (other sensitive communities addressed separately
14 above). Under cumulative plus project conditions, the proposed project could contribute to the
15 reduction of the habitat of common wildlife species and plant communities within Del Monte Forest.
16 This impact is offset by the applicant's proposed preservation and the mitigation recommended
17 above for Monterey pine forest and wetlands (BIO-A1 and BIO-A2). With identified mitigation for
18 direct impacts, the project's contribution to a cumulative impact is mitigated to a less-than-
19 significant level.

20 **G. Indirect Impacts on Habitat Resulting from Human Use**

21 **Impact BIO-G1(C). Cumulative development would increase trail use by pedestrians and** 22 **equestrians in Del Monte Forest, which could affect common and rare wildlife and plant** 23 **species along trails and the project would contribute to this effect. (Less than significant with** 24 **mitigation)**

25 The impact zone for the cumulative analysis of trail use is Del Monte Forest because the project's
26 trail use impacts are limited to the trails in Del Monte Forest.

27 Cumulative residential development in Del Monte Forest could contribute additional trail users that
28 may affect biological resources found along trails. Under cumulative plus project conditions, the
29 proposed project could contribute to increased trail use by pedestrians and equestrians. This impact
30 is offset by the applicant's proposed preservation dedications and the mitigation recommended for
31 impacts related to trail use (BIO-B2, BIO-B3, BIO-D4, BIO-D6, and BIO-G1). With identified
32 mitigation for direct impacts, the project's contribution to a cumulative impact is mitigated to a less-
33 than-significant level.

1 H. Wildlife Movement

2 **Impact BIO-H1(C). Cumulative development would fragment certain existing forested** 3 **habitats and could interfere with wildlife movement to which the project would contribute.** 4 **(Less than significant with mitigation)**

5 The impact zone for the cumulative analysis of wildlife movement is Del Monte Forest because the
6 project's impact on wildlife movement is limited to the animals moving in and through Del Monte
7 Forest.

8 Cumulative residential development in Del Monte Forest could also affect wildlife movement areas,
9 although single-family development's effect on wildlife movement will be limited as most of the
10 vacant lots (with the exception of Areas X and Y) are in areas surrounded by existing development.

11 Under cumulative plus project conditions, the proposed project could contribute to interference
12 with wildlife movement. This impact is offset by the applicant's proposed preservation and the
13 mitigation recommended above for Monterey pine forest and wetlands (BIO-A1 and BIO-A2). With
14 identified mitigation for direct impacts, the project's contribution to a cumulative impact is
15 mitigated to a less-than-significant level.

16 I. Wildlife Breeding and Nesting

17 **Impact BIO-I1(C). Cumulative development, including tree removal and grading, could result** 18 **in potential disturbance to nesting raptors, including several special-status raptor species, if** 19 **present during construction to which the project would contribute. (Less than significant with** 20 **mitigation)**

21 The impact zone for the cumulative analysis of nesting raptors is the Monterey Peninsula and
22 beyond as raptors range far beyond Del Monte Forest.

23 The project area provides potential nesting habitat for several species of hawks and owls (raptors).
24 Raptors are protected against take, including destruction of nests, pursuant to Section 3503.5 of the
25 California Fish and Game Code and the federal MBTA.

26 Cumulative projects that would also remove trees that may be used by nesting raptors include other
27 development in Del Monte Forest and in the region and could also affect nesting raptors.

28 The proposed project includes removal of trees that may contain nesting raptors. The proposed
29 project also contains preservation of suitable nesting raptor habitat in forested areas.
30 Preconstruction raptor surveys and buffers are required as mitigation (BIO-I1) for direct impacts.
31 Mitigation is also required for impact on Monterey pine forest for project impacts (BIO-A1 and BIO-
32 A2). Collectively, the applicant's proposal and mitigation for direct impacts on nesting raptors and
33 for impacts on Monterey pine forests would reduce the project's contribution to a cumulative impact
34 to a less-than-significant level.

1 **J. Tree Removal**

2 **Impact BIO-J1(C). Cumulative development would result in removal or disturbance of native**
3 **Monterey pine trees and coast live oak trees to which the project would contribute. (Less**
4 **than significant with mitigation)**

5 The impact zone for the cumulative analysis of tree removal is Del Monte Forest as individual tree
6 removal impacts are localized to Del Monte Forest.

7 Cumulative projects that would also remove more than a few native trees include residential
8 development in Del Monte Forest, which could also result in removal of native trees.

9 Proposed project impact on Monterey pine forest, Monterey pygmy forest, and Gowen cypress was
10 discussed above. The proposed project would also include removal of substantial numbers of coast
11 live oaks.

12 The project includes preservation of extensive areas containing native trees within Del Monte
13 Forest. As noted above, mitigation measure BIO-J1 and BIO-J2 require incorporation of tree removal
14 and replanting guidelines in site-specific RMPs and protection of retained trees during construction.

15 With the proposed preservation and resource management, and the identified mitigation measures
16 for impact on Monterey pine forest and native trees for project impacts, the project's contribution to
17 a cumulative impact on native trees would be less than significant.
18

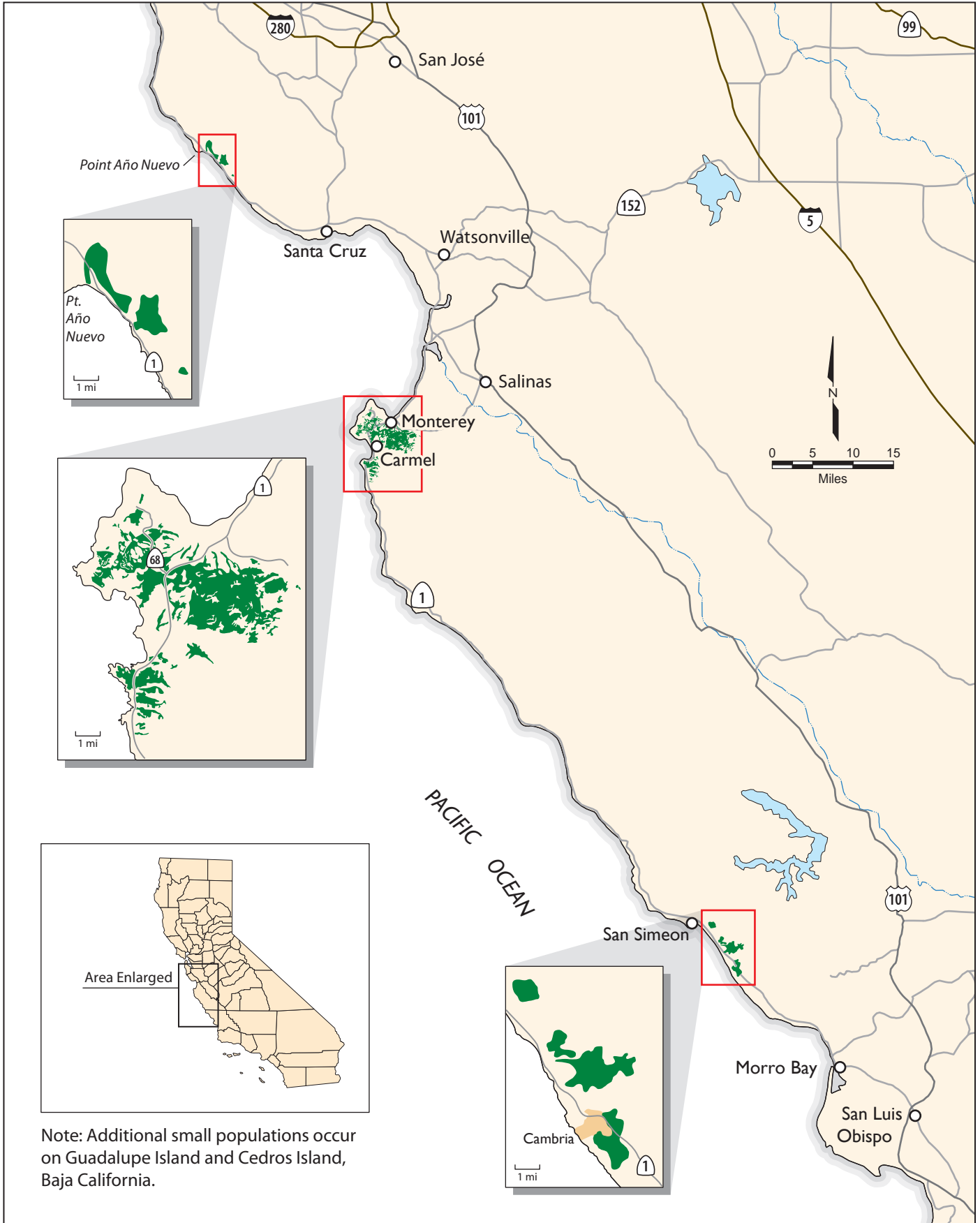


Figure 3.3-1
Distribution of Native Monterey Pine Forest
in California

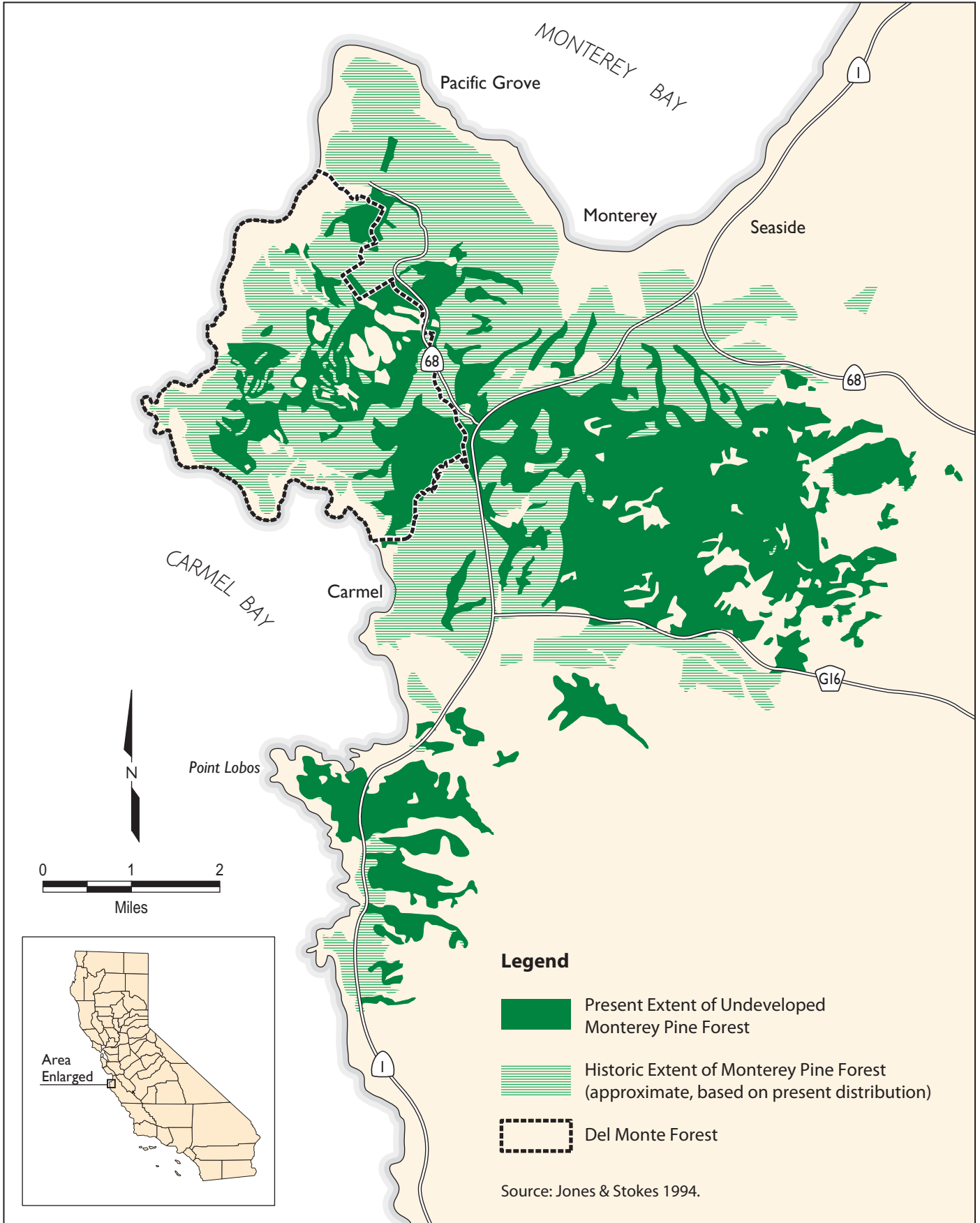


Figure 3.3-2
Distribution of Native Monterey Pine Forest
in the Monterey Region

Section 3.4
Climate Change

Section 3.4 Climate Change

1
2
3 This section discusses the proposed project’s potential impacts relating to climate change, an
4 evaluation of the significance of potential impacts, and feasible mitigation for significant impacts
5 where appropriate. A summary of impacts and mitigation measures for impacts relating to climate
6 change is presented in Table 3.4-1.

7 It is important to note that the concern about increasing greenhouse gas (GHG) emissions is, by its
8 nature, a cumulative impact concern. There are literally billions of sources of individual
9 anthropogenic (i.e., human created or caused) GHG emissions that are presently contributing to
10 increased concentrations of GHGs in the atmosphere. This cumulative increase in atmospheric
11 concentrations of CO₂ and other GHGs due to human-made emissions has been found by the
12 majority of scientific research to be currently resulting in increasing temperatures globally and
13 associated climate change.

14 Given the scale of the planet’s atmosphere, an individual project’s GHG emissions cannot change the
15 atmospheric concentrations of GHGs in any meaningful way, when considered in complete isolation
16 from all other existing and future GHG emissions. However, the aggregation of cumulative existing
17 and future sources of emissions, including a project’s emissions, is significant based on the
18 projections of current climate change research. As such, the focus of this section is to evaluate
19 whether the proposed project’s GHG emissions would contribute considerably to the significant
20 cumulative impact of climate change.

21 This section also analyzes whether there are expected impacts on the proposed project due to
22 localized effects of future climate change, such as sea level rise.

1 **Table 3.4-1. Summary of Project Impacts on Climate Change**

Project Impacts	Project Elements									
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	Cumulative
				MH	MR					
A. Contribute to Climate Change Impacts										
CC-A1. The proposed project would result in project-related greenhouse gas emissions, during construction and from operation that could considerably contribute to climate change impacts and be inconsistent with the goals of Assembly Bill 32.	◎ (Applies to proposed project as a whole)									
Mitigation Measures:	CC-A1. Implement best management practices for GHG emissions during construction. CC-A2-A. Reduce annual greenhouse gas emission by 26% relative to business as usual using a combination of design features, replanting, and/or offset purchases. OR CC-A2-B. Validate the greenhouse gas emission offset value of preserving Monterey Pine Forest designated for development using the Climate Action Registry Forest Project Protocol and preserve the lands in perpetuity.									
B. Effects of Climate Change										
CC-B1: The project would not result in significant exposure of persons or property to reasonably foreseeable impacts of climate change.	○ (Applies to proposed project as a whole)									
Notes: ● = Significant unavoidable impact. ◎ = Significant impact that can be reduced to less than significant. ○ = Less-than-significant impact. — = No impact or not applicable to the development site. PBL – The Lodge at Pebble Beach; SBI – The Inn at Spanish Bay; COL-EQC – Collins Field–Equestrian Center–Special Events Area; MH – Area M Spyglass Hill—New Resort Hotel (Option 1); MR – Area M Spyglass Hill—New Residential Lots (Option 2); RES SUB – Residential Lot Subdivisions; RD – Roadway Improvements; TRA – Trail Improvements; INF – Infrastructure Improvements; Cumulative – Proposed Project’s Contribution to Cumulative Impacts										

2

1 **Regulatory Setting**

2 This section describes the regulatory and environmental setting for climate change and GHGs, the
3 effects on climate change that would result from the proposed project, and the mitigation measures
4 that would reduce these effects.

5 Climate change has been recognized as an imminent threat to the global climate, economy, and
6 population. Thus, the climate change regulatory setting—nationally, statewide, and locally—is
7 complex and evolving. This section identifies key legislation, executive orders, and seminal court
8 cases relevant to the environmental evaluation of project GHG emissions.

9 The key sources of data and information used in the preparation of this section are:

- 10 • 2005 Draft Unincorporated Monterey County Greenhouse Gas Emissions Inventory (AMBAG
11 2010).
- 12 • 2010 Monterey County General Plan Final EIR (Monterey County 2010).
- 13 • CEQA Air Quality Guidelines (Monterey Bay Unified Air Pollution Control District 2008a).
- 14 • Climate Change Scenarios and Sea Level Rise Estimates for California 2008 Climate Change
15 Scenario Assessment (California Energy Commission 2009).
- 16 • Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental
17 Panel on Climate Change (Intergovernmental Panel on Climate Change 2007).
- 18 • CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects
19 Subject to the California Environmental Quality Act (California Air Pollution Control Officers
20 Association 2008).

21 **Federal**

22 To date, there are no federal standards regulating GHG emissions or climate change but regulations
23 are currently in development by EPA that may be adopted pursuant to EPA's authority under the
24 CAA in the next two years.

25 **Massachusetts et al v. Environmental Protection Agency (2007)**

26 In *Massachusetts et al. v. Environmental Protection Agency* 549 U.S. 497 (2007), the U.S. Supreme
27 Court decision held that GHG emissions are pollutants within the meaning of the CAA. In issuing the
28 opinion, the court also acknowledged that climate change results, in part, from anthropogenic
29 causes. The Supreme Court's opinion in this case compelled EPA to regulate GHG emissions.

30 **U.S. Environmental Protection Agency Endangerment Finding and Cause or 31 Contribute Finding (2009)**

32 On December 7, 2009, EPA signed the Endangerment and Cause or Contribute Findings for
33 Greenhouse Gases under Section 202(a) of the CAA.

- 34 • Under the Endangerment Finding, EPA finds that the current and projected concentrations of
35 the six key well-mixed GHGs, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O),
36 perfluorinated carbons (PFCs), sulfur hexafluoride (SF₆), and hydrofluorocarbons (HFCs) in the
37 atmosphere threaten the public health and welfare of current and future generations.

- 1 • Under the Cause or Contribute Findings, EPA finds that the combined emissions of these well-
2 mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG
3 pollution that threatens public health and welfare.

4 Although EPA has yet to issue specific regulations regulating GHG emissions, the Administrator's
5 findings were the first step toward future regulations that are currently under development.

6 **Council on Environmental Quality Draft NEPA Guidance (2010)**

7 On February 19, 2010, the Council on Environmental Quality (CEQ) issued draft NEPA guidance on
8 the consideration of the effects of climate change and GHG emissions. This guidance advises federal
9 agencies that they should consider opportunities to reduce GHG emissions caused by federal actions,
10 adapt their actions to climate change impacts throughout the NEPA process, and address these
11 issues in their agency NEPA procedures. Where applicable, the scope of the NEPA analysis should
12 include identifying the GHG emissions from the proposed action (and alternatives being
13 considered), environmental effects from the emissions, and the effect of climate change to the
14 proposed action (and alternatives being considered).

15 **Corporate Average Fuel Economy Standards (2010/2011)**

16 The current Corporate Average Fuel Economy (CAFE) standards, which went into effect in 2010 for
17 vehicles, incorporate stricter fuel economy standards equivalent to those previously promulgated by
18 the State of California (see the discussion of Assembly Bill 1493, below) into one uniform federal
19 standard. The changes are expected to reduce GHG emissions in new vehicles by roughly 25% by
20 2016 relative to business as usual (BAU).

21 EPA and ARB are currently working together on a joint rulemaking to establish GHG emissions
22 standards for 2017 to 2025 model-year passenger vehicles. The Interim Joint Technical Assessment
23 Report for the standards evaluated four potential future standards ranging from 47 to 62 miles per
24 gallon in 2025 (U.S. Environmental Protection Agency et al. 2010). The official proposal was
25 expected to be released in late 2011 but has not been released to date.

26 **State**

27 The following state policies, regulations, and agency action have occurred relative to climate change.

28 **Executive Order S-3-05 (2005)**

29 Signed by Governor Arnold Schwarzenegger on June 1, 2005, Executive Order S-3-05 asserts that
30 California is vulnerable to the effects of climate change. To combat this concern, Executive Order S-
31 3-05 established the following GHG emissions reduction targets for state agencies:

- 32 • By 2010, reduce GHG emissions to 2000 levels.
33 • By 2020, reduce GHG emissions to 1990 levels.
34 • By 2050, reduce GHG emissions to 80% below 1990 levels.

35 It is important to note that, as an executive order, S-03-05 is not mandatory for local governments or
36 private development.

1 **Assembly Bill 32, California Climate Solutions Act of 2006 (2006)**

2 In September 2006, the California State Legislature adopted the California Global Warming Solutions
3 Act of 2006 (Assembly Bill 32). Assembly Bill 32 establishes a cap on statewide GHG emissions and
4 sets forth the regulatory framework to achieve the corresponding reduction in statewide emission
5 levels. Under Assembly Bill 32, ARB is required to take the following actions:

- 6 • Adopt early action measures to reduce GHG.
- 7 • Establish a statewide GHG emissions cap for 2020 based on 1990 emissions.
- 8 • Adopt mandatory report rules for significant GHG sources.
- 9 • Adopt a scoping plan indicating how emission reductions would be achieved through
10 regulations, market mechanisms, and other actions.
- 11 • Adopt regulations needed to achieve the maximum technologically feasible and cost-effective
12 reductions in GHGs.

13 California needs to reduce GHG emissions by approximately 29% of BAU projection (based on
14 compliance with requirements in effect under applicable federal and state law) of year 2020 GHG
15 emissions to achieve Assembly Bill 32's reduction goal.

16 **Senate Bill 97 (2007)**

17 Senate Bill 97 of 2007 requires that the State's Office of Planning and Research (OPR) prepare
18 guidelines to submit to the California Natural Resources Agency regarding feasible mitigation of
19 GHG emissions or the effects of GHG emissions as required by CEQA. The California Natural
20 Resources Agency adopted amendments to the State CEQA Guidelines for GHG emissions on
21 December 30, 2009. On February 16, 2010, the State's Office of Administrative Law approved the
22 amendments and filed them with the Secretary of State for inclusion in the California Code of
23 Regulations. The amendments became effective March 18, 2010. The two new CEQA guideline
24 questions on GHG emissions added pursuant to the 2010 amendments are included in the
25 significance criteria for evaluating the proposed project as discussed below.

26 **Assembly Bill 32 Scoping Plan (2008)**

27 On December 11, 2008, pursuant to Assembly Bill 32, ARB adopted the Climate Change Scoping Plan.
28 This plan outlines how emissions reductions from significant sources of GHGs will be achieved via
29 regulations, market mechanisms, and other actions. Six key elements, outlined in the scoping plan,
30 are identified to achieve emissions reduction targets:

- 31 • Expanding and strengthening existing energy efficiency programs as well as building and
32 appliance standards.
- 33 • Achieving a statewide renewable energy mix of 33%.
- 34 • Developing a California cap-and-trade program that links with other Western Climate Initiative
35 partner programs to create a regional market system.
- 36 • Establishing targets for transportation-related GHG emissions for regions throughout California,
37 and pursuing policies and incentives to achieve those targets.

- 1 • Adopting and implementing measures pursuant to existing state laws and policies, including
2 California’s clean car standards, goods movement measures, and the low carbon fuel standard
3 (LCFS).
- 4 • Creating targeted fees, including a public goods charge on water use, fees on high global
5 warming potential gasses, and a fee to fund the administrative costs of the state’s long-term
6 commitment to Assembly Bill 32 implementation.

7 The Assembly Bill 32 Scoping Plan also describes recommended measures that were developed to
8 reduce GHG emissions from key sources and activities while improving public health, promoting a
9 cleaner environment, preserving our natural resources, and ensuring that the impacts of the
10 reductions are equitable and do not disproportionately affect low-income and minority
11 communities. The measures in the approved Climate Change Scoping Plan will be in place by January
12 1, 2012; some of these measures are discussed below.

13 **California Energy Efficiency Standards for Residential and Non-Residential** 14 **Buildings—Title 24 (2008)**

15 On July 17, 2008, the California Building Standards Commission adopted the nation’s first green
16 building standards. The California Green Building Standards Code (proposed Part 11, Title 24) was
17 adopted as part of the California Building Standards Code (24 CCR). Part 11 establishes voluntary
18 standards that became mandatory in the 2010 edition of the code, including planning and design for
19 sustainable site development, energy efficiency (in excess of the California Energy Code
20 requirements), water conservation, material conservation, and internal air contaminants. Effective
21 January 1, 2011, all new buildings must comply with the 2010 California Green Building Standards
22 Code.

23 **Executive Order S-01-07 (2010)**

24 Executive Order S-01-07, Low Carbon Fuel Standard, mandated: (1) that a statewide goal be
25 established to reduce the carbon intensity of California’s transportation fuels by at least 10% by
26 2020; and (2) that an LCFS for transportation fuels be established in California. The 2008 Assembly
27 Bill 32 Scoping Plan similarly called for a LCFS. ARB approved the LCFS on April 23, 2009 and the
28 regulation became effective on January 12, 2010.

29 **Landfill Methane Rule (2010)**

30 In June 2010 the landfill methane control measure, an ARB regulation became effective. This
31 regulation requires owners and operators of certain uncontrolled landfills to install methane gas
32 capture technology and for owners and operators of landfills with existing control technology to
33 upgrade and operate at specified performance level.

34 **Renewable Energy Standard/Renewable Portfolio Standard (2002, 2006, 2011)**

35 Senate Bill 1075 (2002) and Senate Bill 107 (2006) created the Renewable Energy Standard (RES)
36 program, which required electric corporations to increase procurement from eligible renewable
37 energy resources by at least 1% of their retail sales annually, until they reach 20% by 2010. Senate
38 Bill 2X 1 (2011) requires a Renewable Portfolio Standard (RPS, functionally the same thing as the
39 RES) of 33% by 2020.

1 **Assembly Bill 1493—Pavley Rules (2002, amendments 2009)/Advanced Clean** 2 **Cars (2011)**

3 Known as “Pavley I,” Assembly Bill 1493 standards were the nation’s first GHG standards for
4 automobiles. Assembly Bill 1493 requires ARB to adopt vehicle standards that will lower GHG
5 emissions from new light duty autos to the maximum extent feasible beginning in 2009. Additional
6 strengthening of the Pavley standards (previously referenced as “Pavley II,” currently referenced as
7 the “Advanced Clean Cars” measure) has been proposed for vehicle model years 2017–2020.
8 Together, the two standards are expected to increase average fuel economy to roughly 43 miles per
9 gallon by 2020 and reduce GHG emissions from the transportation sector in California by
10 approximately 14%. In June 2009, the EPA granted California’s waiver request enabling the state to
11 enforce its GHG emissions standards for new motor vehicles beginning with the current model year.
12 As noted above, EPA and ARB are currently working together on joint rulemaking to establish GHG
13 emissions standards for 2017 to 2025 model-year passenger vehicles.

14 **Other Vehicle Efficiency Measures from ARB**

15 ARB has adopted or is pursuing additional measures to promote vehicle efficiency to reduce GHG
16 emissions. In 2008, ARB adopted a measure concerning heavy duty vehicle aerodynamics. In 2009,
17 ARB adopted regulations for tire pressure. ARB is also evaluating hybridization of medium-heavy
18 vehicles and cool car design.

19 **Cap and Trade (Forthcoming)**

20 ARB is presently engaging in regulatory rule-making to adopt a cap and trade emissions trading
21 system for California. ARB expects to first apply the system to large stationary sources of emissions
22 (like power plants) in 2013 and then follow with requirements for transportation fuels in several
23 years.

24 **Local**

25 **Monterey Bay Unified Air Pollution Control District**

26 The MBUAPCD currently has no guidance concerning CEQA evaluation of GHG emissions and no
27 regulatory requirements.

28 **Monterey County General Plan**

29 A new General Plan for the inland areas of Monterey County was adopted in October 2010. The
30 General Plan includes Policy OS-10.11, which adopted a GHG emissions reduction target of 15%
31 below 2005 levels by 2020 and required development of a GHG reduction plan for the county by
32 2013. Although the 2010 General Plan was limited in legal effect to the inland area, it is expected
33 that the County may choose to include the entirety of the County (both inland and coastal areas) in
34 the forthcoming GHG Reduction Plan.

35 **Monterey County Local Coastal Program**

36 There are no policies in the existing LCP concerning GHG emissions or adaptation to climate change.
37 However, the proposed LUP acknowledges in the section on Hazards that coastal erosion will be

1 accelerated due to sea level rise resultant from global climate change over time and includes
2 requirements to avoid placement of structures along the coast where they would be subject to bluff
3 top erosion and/or would require structural coastal protective structures.

4 **Environmental Setting**

5 The following considerations are relevant to climate change in the project area.

6 **Background Information on Climate Change**

7 The phenomenon known as the greenhouse effect keeps the atmosphere near the earth's surface
8 warm enough for successful habitation by humans and other forms of life. GHGs present in the
9 earth's lower atmosphere play a critical role in maintaining the earth's temperature because they
10 trap some of the long wave infrared radiation emitted from the earth's surface which otherwise
11 would have escaped to space.

12 The accelerated increase of fossil fuel combustion and deforestation since the industrial revolution
13 of the nineteenth century has exponentially increased concentrations of GHGs in the atmosphere.
14 Increases in the atmospheric concentrations of GHGs in excess of natural ambient concentrations
15 contribute to the enhancement of the natural greenhouse effect.

16 This enhanced greenhouse effect has contributed to global warming, which is an increased rate of
17 warming of the earth's surface temperature. Specifically, increases in GHGs lead to increased
18 absorption of long wave infrared radiation by the earth's atmosphere and further warm the lower
19 atmosphere, thereby increasing evaporation rates and temperatures near the surface. Warming of
20 the earth's lower atmosphere induces large-scale changes in ocean circulation patterns,
21 precipitation patterns, global ice cover, biological distributions, and other changes to the earth
22 system that are collectively referred to as climate change.

23 The Intergovernmental Panel on Climate Change (IPCC) has been established by the World
24 Meteorological Organization and United Nations Environment Programme to assess scientific,
25 technical, and socioeconomic information relevant to the understanding of climate change, its
26 potential impacts, and options for adaptation and mitigation. The IPCC estimates that the average
27 global temperature rise between the years 2000 and 2100 could range from 1.1° C (2° F), with no
28 increase in GHG emissions above year 2000 levels, to 6.4° C (11.5° F), with substantial increase in
29 GHG emissions (Intergovernmental Panel on Climate Change 2007a). Large increases in global
30 temperatures could have massive deleterious impacts on the natural and human (built)
31 environments.

32 **Principal Greenhouse Gases**

33 GHGs are gases that trap heat in the atmosphere. GHGs are both naturally occurring and artificial.
34 Examples of GHGs that are produced both by natural processes and industry include carbon dioxide
35 (CO₂), methane (CH₄), and nitrous oxide (N₂O). Examples of GHGs created and emitted primarily
36 through human activities include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur
37 hexafluoride (SF₆). The primary GHGs generated by the proposed project—carbon dioxide, methane,
38 and nitrous oxide are discussed below.

1 The IPCC estimates that carbon dioxide accounts for more than 75% of all anthropogenic GHG
 2 emissions. Three quarters of anthropogenic carbon dioxide emissions are the result of fossil fuel
 3 burning, and approximately one quarter result from land use change (Intergovernmental Panel on
 4 Climate Change 2007a). Methane is the second largest contributor of anthropogenic GHG emissions
 5 and is primarily the result of growing rice, raising cattle, combustion, and mining coal (National
 6 Oceanic and Atmospheric Administration 2005). Nitrous oxide while not as abundant as carbon
 7 dioxide or methane is a powerful GHG. Sources of nitrous oxide include agricultural processes, nylon
 8 production, fuel-fired power plants, nitric acid production, and vehicle emissions.

9 To simplify reporting and analysis, methods have been set forth to describe emissions of GHGs in
 10 terms of a single metric. All GHGs do not have the same radiative (warming) potential or persistence
 11 in the atmosphere. In order to account for GHGs through a single total, the different GHGs are
 12 normalized by comparing their global warming potential (GWP). The most commonly accepted
 13 method to compare GHG emissions is the GWP methodology defined in the IPCC reference
 14 documents (Intergovernmental Panel on Climate Change 1996; 2001). The IPCC defines the GWP of
 15 various GHG emissions on a normalized scale over 100 years that recasts all GHG emissions in terms
 16 of CO₂ equivalent (CO₂e). GWP is a measure of a gas’s heat-absorbing capacity and lifespan relative
 17 to a reference gas, CO₂ (CO₂ has a GWP of 1 by definition). For example, 21 metric tons of CO₂ would
 18 have the same GWP as one metric ton of methane over a 100-year period. Table 3.4-2 lists the GWP
 19 of CO₂, CH₄, and N₂O over a 100-year period.

20 **Table 3.4-2. Lifetimes and Global Warming Potentials**

GHG	Comparative Global Warming Potential (100 years)
Carbon Dioxide	1
Methane	21
Nitrous oxide	310

Source:

Intergovernmental Panel on Climate Change 2007a, 2007b.

Note:

The factors for methane and nitrous oxide are used in the CalEEMod emissions model (version 2011.11), which estimates construction-related GHG emissions.

21

22 Greenhouse Gas Emissions Inventories

23 A GHG inventory is a quantification of GHG emissions and sinks¹ within a selected physical and/or
 24 economic boundary over a specified time. GHG inventories can be performed on a large scale (i.e.,
 25 for global and national entities) or on a small scale (i.e., for a particular building or person).

¹ A carbon sink is a land cover that removes carbon dioxide from the atmosphere through natural processes. Examples of sinks include forests, peat bogs, and ocean sediments, all of which sequester carbon from the atmosphere.

1 Many GHG emission and sink specifications are complicated to evaluate because natural processes
 2 may dominate the carbon cycle. Though some emission sources and processes are easily
 3 characterized and well understood, some components of the GHG budget (i.e., the balance of GHG
 4 sources and sinks) are not known with accuracy. Because protocols for quantifying GHG emissions
 5 from many sources are currently under development by international, national, State, and local
 6 agencies, ad-hoc tools have been developed to quantify emissions from certain sources and sinks in
 7 the interim.

8 To help contextualize the magnitude of potential project-related emissions, Table 3.4-3 and 3.4-4
 9 outline the most recently available global, national, statewide, and local GHG inventories.

10 **Table 3.4-3. Global, National, State, and Local GHG Emissions Inventories**

Emissions Inventory	CO₂e (metric tons)
2004 IPCC Global GHG Emissions Inventory	49,000,000,000
2009 EPA National GHG Emissions Inventory	6,633,200,000
2008 ARB State (CA) GHG Emissions Inventory	477,700,000
2005 Monterey County GHG Emissions Inventory	1,713,227
Sources: Intergovernmental Panel on Climate Change 2007a; U.S. Environmental Protection Agency 2010; California Air Resources Board 2009; Association of Monterey Bay Area Governments 2010.	

11

12 **Table 3.4-4. Monterey County GHG Emission Inventory by Sector**

Sector	CO₂e (metric tons)
Residential	143,707
Commercial/Industrial	771,945
Transportation	711,808
Wastewater	8,850
Waste	50,973
2005 Monterey County GHG Emissions Inventory	1,713,227
Source: Association of Monterey Bay Area Governments 2010.	

13

14 **Potential Effects of Climate Change in California**

15 Climate change is a complex phenomenon that has the potential to alter local climatic patterns and
 16 meteorology. Although modeling indicates that climate change will result in sea level rise and
 17 changes in regional climate and rainfall, among other things, mean that a high degree of scientific
 18 uncertainty still exists with regard to characterizing future climate characteristics and predicting
 19 how various ecological and social systems will react to any changes in the existing climate at the
 20 local level. Regardless of this uncertainty, it is widely understood that some form of climate change
 21 is expected to occur in the future.

1 Several recent studies have attempted to characterize future climatic scenarios for the state. While
2 specific estimates and statistics on the severity of changes vary, sources agree that the California
3 coastline will witness higher sea levels, higher average annual temperatures, increased risk of
4 coastal erosion, changes in rainfall and coastal fog patterns, and changes in wave height.

5 Climate change could affect the natural environment in California in the following ways, among
6 others:

- 7 • Rising sea levels along the California coastline, particularly in San Francisco and the San Joaquin
8 Delta due to ocean expansion.
- 9 • Extreme heat conditions, such as heat waves and very high temperatures, which could last
10 longer and become more frequent.
- 11 • An increase in heat-related human deaths, infectious diseases and a higher risk of respiratory
12 problems caused by deteriorating air quality.
- 13 • Reduced snow pack and stream flow in the Sierra Nevada mountains, affecting winter recreation
14 and water supplies.
- 15 • Potential increase in the severity of winter storms, affecting peak stream flows and flooding.
- 16 • Changes in growing season conditions that could affect California agriculture, causing variations
17 in crop quality and yield.
- 18 • Changes in distribution of plant and wildlife species due to changes in temperature, competition
19 from colonizing species, changes in hydrologic cycles, changes in sea level, and other climate-
20 related effects.

21 These changes in California's climate and ecosystems are occurring at a time when California's
22 population is expected to increase from 34 million to 59 million by the year 2040 (California Energy
23 Commission 2005). As such, the number of people potentially affected by climate change, as well as
24 the amount of anthropogenic GHG emissions is expected to significantly increase. Changes similar to
25 those noted for California also would occur in other parts of the world, with regional variations in
26 resources affected and vulnerability to adverse effects.

27 **Baseline Emissions for the Proposed Project**

28 It is assumed that, other than existing tree stock and carbon sequestration,² operational baseline
29 emissions are zero; analysis of project operational emissions is based on the net increase in
30 development associated with the proposed project and trip generation data provided by the project
31 traffic engineers in the traffic report (Fehr & Peers 2011).

32 Because the proposed project would change land use coverage and tree stock, which can serve as a
33 sink for carbon, Table 3.4-5 presents GHG emissions associated with existing tree stock and carbon
34 sequestration based on current land use coverage.

² Carbon emissions are sequestered by biological, chemical, or physical processes that embed the carbon in structures that hold the emissions and keep them out of the atmosphere.

1 **Table 3.4-5. Existing Tree Stock and Carbon Sequestration in Current Land Cover Change**

Development Site	Existing Stock (MT CO₂e)	Carbon Sequestration (MT CO₂e/year)
The Lodge at Pebble Beach ^a	0	4
The Inn at Spanish Bay ^b	849	18
Collins Field–Equestrian Center– Special Events Area ^c	548	17
Area M Spyglass Hill (either Option)	722	18
Residential Lot Subdivisions ^d	7,313	365
Residential Lot Subdivision (Corporation Yard)	0	0
Roadway Improvements ^e	81	3
Proposed Preservation Areas ^f	66,359	3,622
Total (either option)	75,872	4,047

Sources:

Tree Data and Forested Acres: WWD Corp., Biological Impact Calculations, September 21, 2011.

Carbon Stock and Sequestration Factors: ICF Calculations using CalEEMod (Appendix E).

Notes:

^a Development sites are Meeting Facility Expansion, Fairway One Reconstruction, New Colton Building, and Parking and Circulation Reconstruction.

^b Development sites are Conference Center Expansion, New Guest Cottages, and New Employee Parking.

^c Development sites are Pebble Beach Driving Range Relocation from Area V to Collins Field, Equestrian Center Reconstruction, and Special Events Area Grading and Expansion.

^d Areas F-2, I-2, J, K, L, U, V and Collins Residence, excluding proposed preservation areas.

^e Development sites are SR 1/SR 68/17-Mile Drive Intersection Reconfiguration and four internal intersection improvements at Congress Road/Lopez Road, Congress Road/17-Mile Drive, Portola Road/Stevenson Drive, and Lopez Road/Sunridge Road.

^f Part or all of Areas B, C, F-1, F-3, G, H, I-1, I-2, J, K, L, M, N, O, PQR, U, and V, and Corporation Yard.

2

3 **Impact Analysis**

4 **Methodology**

5 **Approach**

6 This evaluation of climate change is based on professional standards and information cited
 7 throughout the section. The key effects were identified and evaluated based on the environmental
 8 characteristics of the project area and the magnitude, intensity, and duration of activities related to
 9 the construction and operation of the proposed project.

10 **Construction-Related Emissions**

11 Construction of the proposed project would generate GHG emissions from mobile and stationary
 12 construction equipment exhaust and on-road vehicle exhaust associated with material deliveries
 13 and worker commute trips. Construction-related GHG emissions were estimated with the CalEEMod

1 emissions model (version 2011.1.1), which analyzes the type of construction equipment used and
2 the duration of the construction period associated with construction of each of the land uses
3 specified. A detailed inventory of construction equipment that will be used for the proposed project
4 was not available, although a detailed estimate of the construction schedule for each project element
5 was provided by the project applicant, by activity (i.e., grading/demolition, building construction,
6 paving, and architectural coating), in addition to maximum daily area disturbed and cut/fill
7 amounts. This data was input into the CalEEMod model to estimate construction equipment based
8 on model default values.

9 **Operation-Related Emissions**

10 The two key permanent sources of GHG emissions are from project operation (additional motor
11 vehicles and energy use) and land cover change (loss of carbon stock and sequestration from tree
12 removal).

- 13 • Project operation would result in direct and indirect GHG emissions as a result of fuel
14 combustion from on-road motor vehicles visiting the project facilities, natural gas combustion
15 for space and water heating, electricity consumption, water consumption, wastewater
16 generation, and solid waste generation.
 - 17 ○ Two types of direct GHG sources are expected during operation of the proposed project:
18 area and mobile sources. Area sources are sources that can include area-wide, natural, and
19 groups of stationary sources (such as dry cleaners and gas stations). At the proposed
20 development sites, area sources include emissions from hearths, consumer products, area
21 architectural coatings (e.g., paint), and landscaping equipment. Mobile sources are sources
22 of emissions associated with vehicle trips and include employee, delivery, and maintenance
23 activities. Area and mobile source GHG emissions were evaluated using the CalEEMod model
24 for the existing year conditions to represent the worst-case emissions year.
 - 25 ○ Indirect operational GHG emissions were also estimated for project operations. Indirect
26 emission sources include energy, waste, and water and wastewater-related emissions.
27 Energy emissions include emissions associated with building electricity and non-hearth
28 natural gas usage. Water and wastewater GHG emissions are those associated with
29 supplying and treating water and wastewater for land use facilities. Waste GHG emissions
30 are those associated with disposal of solid waste into landfills. GHG emission factors and
31 methodology used to calculate indirect GHG emissions associated with the proposed project
32 are based on CalEEMod default values and land use data provided by the project applicant.
- 33 • Implementation of the proposed project would result in the loss of carbon stock and carbon
34 sequestration due to removal of trees and other perennial vegetative matter due to
35 development. These are referred to as land cover change emissions below.
 - 36 ○ Loss of carbon stock is a one-time emission due to removal of natural vegetation and soils.
37 As the trees are unlikely to be used for commercial products and are more likely to be
38 chipped (which eventually results in the release of carbon), it is assumed that tree removal
39 results in loss of 100% of the carbon stock. These emissions were estimated by identifying
40 the acreages of land cover change and then multiplying by factor values to the amount of
41 estimated stock for that land cover.

- 1 ○ Loss of carbon sequestration is an annual emission due to conversion of naturally vegetated
2 areas to urban uses.³ Under existing conditions, the natural land covers uptake carbon
3 which is sequestered in vegetative matter (wood) and soils. These emissions were estimated
4 by identifying the acreages of land cover change and then multiplying by factor values to the
5 amount of estimated annual carbon sequestration loss for that land cover.

6 **Approach to Developing Significance Criteria**

7 There are no established statewide, regional or County significance criteria for evaluating GHG
8 emissions or climate change impacts. The approach to developing significance criteria to evaluate
9 impacts in this EIR is discussed below.

10 **Contribute to Climate Change Impacts (Greenhouse Gas Emissions)**

11 The State CEQA Guidelines do not define the amount of GHG emissions that would constitute a
12 significant impact on the environment. Instead, they leave the determination of the significance of
13 GHG emissions up to the lead agency and authorize the lead agency to consider thresholds of
14 significance previously adopted or recommended by other public agencies or recommended by
15 experts, provided the decision of the lead agency to adopt such thresholds is supported by
16 substantial evidence (State CEQA Guidelines 15064.4[a], 15064.7[c]).

17 The MBUAPCD has not yet established a threshold by which to evaluate impacts related to climate
18 change. Consequently, impacts related to climate change are evaluated based on the project's
19 consistency with the County's identified reduction goal and Assembly Bill 32 reduction goal.

20 Scientific studies (as best represented by the IPCC's periodic reports) demonstrate that climate
21 change is already occurring due to past GHG emissions. Forecasting future growth and related GHG
22 emissions under BAU⁴ conditions indicates large increases in those GHG emissions worldwide
23 accompanied by an increasing severity of changes in global climate. Thus, the best scientific
24 evidence concludes that global emissions must be reduced below current levels.

25 On a state level, the Assembly Bill 32 Scoping Plan identified that an acceptable level of GHG
26 emissions in California 2020 is 427 million metric tons (MT) of CO₂e, which is the same as 1990 GHG
27 emissions level. This is approximately 11% less than 2005 California GHG emissions (477 million
28 MT CO₂e) and was approximately 22% less than currently projected California 2020 BAU emissions
29 (545 million MT CO₂e, not including the effect of state actions to reduce emissions.).

30 On the county level, the County has identified its 2020 target to be to reduce GHG emissions by 15%
31 below 2005 levels by 2020. The County's 2005 emissions of approximately 1.71 million MT CO₂e are
32 projected to increase to 1.91 million MT CO₂e by 2020, which is an increase of approximately 11%.
33 Using the draft inventory data, the county's target would correspond to 1.5 million MT CO₂e, which
34 is approximately 24% below 2020 BAU conditions.

35 Thus, on a state and local level, if California and Monterey County can achieve these reductions,
36 California as a whole will not contribute considerably to global GHG emissions. California's

³ Sequestration is annual because living trees would continually sequester carbon, and carbon (i.e., CO₂e emissions are evaluated on a yearly basis (metric tons per year).

⁴ BAU conditions are defined as population and economic growth in the future using current (2008) building practices. BAU conditions presume no improvements in average energy efficiency, water efficiency, or fuel efficiency beyond that existing today.

1 emissions in 2020 will still make a cumulative contribution to global GHG emissions, but relative to
2 current baseline emissions will be substantively reduced.

3 To achieve these GHG reductions, there will have to be widespread reductions of GHG emissions
4 from sources in many various sectors across the California economy including in Monterey County.
5 Some of those reductions will need to come from the existing sources of emissions in the form of
6 changes in vehicle emissions and mileage, changes in the sources of electricity, and increases in
7 energy efficiency by existing residential, commercial, industrial, and agricultural development as
8 well as other measures. While County action can help to promote GHG reductions from the existing
9 economy, existing development is not under the discretionary land use authority of the County, and
10 thus most of these reductions will come as the result of state and federal mandates. The remainder
11 of the necessary GHG reductions will need to come from requiring new development to have a lower
12 carbon intensity than BAU conditions. County land use discretion can substantially influence the
13 GHG emissions from new development.

14 In terms of determining whether GHG emissions in Monterey County will be cumulatively
15 considerable, one has to evaluate whether Monterey County is doing its part to ensure that
16 California, as a whole, meets the Assembly Bill 32 target. As discussed above, the County's target is
17 roughly consistent with the state target as a whole (and is actually a bit more conservative).

18 Thus, the simplest measure of whether Monterey County emissions will contribute considerably to
19 GHG emissions in 2020 is whether the emissions are 24% less than BAU conditions. If they are,
20 Monterey County would not contribute considerably to state or global GHG emissions and related
21 climate change effects. In other words, if Monterey County emissions are greater than 76% of BAU
22 GHG emissions, then the emissions of new development could contribute considerably to state and
23 global GHG emissions and related climate change effects.

24 **Climate Change Effects on the Proposed Project**

25 A certain amount of environmental change is inevitable in Monterey County due to current GHG
26 emissions and unavoidable future increases in GHG emissions worldwide. Change on a local basis to
27 Monterey County agriculture, water supplies, flooding, wildfire potential, environmental health, and
28 other areas is reasonably foreseeable, although not quantifiable in many aspects at present. New
29 development could place persons and property at higher levels of risk to climate change effects if it
30 does not anticipate reasonably foreseeable changes in environmental conditions.

31 **Significance Criteria**

32 For this CEQA analysis, a project impact would be considered significant if the project would:

33 **A. Contribute to Climate Change Impacts**

- 34 ● Generate GHG emissions, either directly or indirectly, that may have a significant impact on the
35 environment.
- 36 ● Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the
37 emissions of GHGs.

38 Specifically, project-related GHG emissions are considered significant if they are more than 76% of
39 their unmitigated emissions level; this represents a reduction in GHG emissions equal to 24% below

1 2020 BAU conditions, which would allow the County to meet its target to reduce GHG emissions by
2 15% below 2005 levels by 2020.

3 **B. Effects of Climate Change**

- 4 • Result in new development that is unprepared for reasonably foreseeable environmental
5 changes due to climate change and thus would subject property and persons to additional risk of
6 physical harm related to flooding, public health, wildfire risk, and other impacts.

7 **Impacts and Mitigation Measures**

8 The impact zone for climate change is the Monterey Peninsula and beyond. Climate change is
9 inherently a cumulative impact concern and the analysis is entirely an analysis of the proposed
10 project's potential contribution to cumulative GHG impacts.

11 **A. Contribute to Climate Change Impacts**

12 **Impact CC-A1: The proposed project would result in project-related greenhouse gas**
13 **emissions, during construction and from operation, that could considerably contribute to**
14 **climate change impacts and be inconsistent with the goals of Assembly Bill 32. (Less than**
15 **significant with mitigation)**

16 **Temporary Construction Emissions**

17 Construction of the proposed project would result in project-related emissions, from fuel
18 combustion of off- and on-road construction equipment and vehicles that contribute to GHG
19 impacts.⁵ Table 3.4-6 presents an estimate of GHG emissions associated with construction of project
20 elements. This construction impact is considered significant but would be reduced to a less than
21 significant level with implementation of Mitigation Measure CC-A1 because it would help to reduce
22 construction-related GHG emissions.

23 **Mitigation Measure CC-A1: Implement best management practices for GHG emissions** 24 **during construction.**

25 Prior to starting construction activities, the project applicant will ensure the construction
26 contractor includes the following best management practices (BMPs) in the construction
27 specifications, to the extent feasible, to reduce construction-related GHG emissions:

- 28 • Use alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment for at least
29 15% of the fleet.
- 30 • Use local building materials where reasonably available (i.e., within the general Monterey
31 Bay area defined as Monterey County, Santa Cruz County, and San Benito County)).
- 32 • Recycle at least 50% of construction waste or demolition materials.

33 Prior to issuance of grading or building permits of any phase of this project, the project
34 applicant will submit to Monterey County for review and approval a report of construction
35 specifications demonstrating implementation of BMPs.

⁵ The loss of vegetation and associated carbon stock and sequestration due to development is considered a permanent source of GHG emissions and is included in the operational analysis provided in this section.

1 **Table 3.4-6. Estimated Construction GHG Emissions (metric tons/year)**

Development Site	CO₂	CH₄	N₂O	CO₂e
PBL ^a Meeting Facility Expansion	90.73	0.01	0.00	90.96
PBL Fairway One Reconstruction	514.46	0.05	0.00	515.59
PBL New Colton Building	209.95	0.02	0.00	210.33
PBL Parking and Circulation Reconstruction	221.95	0.02	0.00	222.44
SBI ^b Conference Center Expansion (Ballroom)	290.16	0.02	0.00	290.63
SBI Conference Center Expansion (Meeting Rooms)	290.16	0.02	0.00	290.63
SBI New Guest Cottages	925.58	0.08	0.00	927.29
SBI New Employee Parking	221.95	0.02	0.00	222.44
Pebble Beach Driving Range Relocation from Area V to Collins Field	808.20	0.07	0.00	809.59
Equestrian Center Reconstruction and Special Events Area Grading and Expansion	504.75	0.04	0.00	505.70
Area M Spyglass Hill Option 1 (New Resort Hotel)	2,792.74	0.12	0.00	2,795.48
Area M Spyglass Hill Option 2 (New Residential Lots)	642.17	0.03	0.00	642.73
Residential Lot Subdivision (without Area V or Corporation Yard)	482.72	0.05	0.00	483.73
Residential Lot Subdivision (Corporation Yard)	844.61	0.05	0.00	845.64
Residential Lot Subdivision (Area V)	291.15	0.02	0.00	291.51
Congress Road/Lopez Road Intersection Improvement	2.35	0.00	0.00	2.37
SR 1/SR 68/17-Mile Dr Intersection Reconstruction	52.14	0.00	0.00	52.62
Congress Road/17-Mile Drive Intersection Improvement	0.08	0.00	0.00	0.08
Portola Road/Stevenson Drive Intersection Improvement	1.49	0.00	0.00	1.50
Lopez Road/Sunridge Road Intersection Improvement	0.13	0.00	0.00	0.13
Total Option 1	8,545.30	0.59	0.00	8,558.66
Area M Spyglass Hill New Resort Hotel				
Total Option 2	6,394.73	0.50	0.00	6,405.91
Area M Spyglass Hill New Residential Lots				

Source:

ICF calculations using CalEEMod (Appendix E of this EIR).

Notes:

^a PBL: The Lodge at Pebble Beach.

^b SBI: The Inn at Spanish Bay.

2

3 **Permanent Emissions Sources**

4 As discussed above, there are two key permanent sources of GHG emissions:

- 5 ● Project operational emissions due to direct and indirect emissions associated with building
- 6 ● energy, transportation, waste generation, and water.
- 7 ● Loss of carbon stock and carbon sequestration due to removal of trees and other perennial
- 8 ● vegetative matter due to development.

1 Operational Emissions

2 Table 3.4-7 presents the estimated GHG operational emissions without design features or measures
3 to reduce GHG emissions.

4 **Table 3.4-7. Unmitigated Operational GHG Emissions (metric tons/year)**

Development Site	Sector	CO₂	CH₄	N₂O	CO₂e
PBL ^a Meeting Facility Expansion	Area	0.00	0.00	0.00	0.00
	Energy	13.97	0.00	0.00	14.06
	Mobile	23.16	0	0	23.2
	Waste	0.00	0.02	0.00	0.49
	Water	0.82	0.01	0.00	1.16
	Total	37.95	0.03	0.00	38.91
PBL Fairway One Reconstruction	Area	0.00	0.00	0.00	0.00
	Energy	250.56	0.01	0.00	252.11
	Mobile	204.73	0.02	0	205.1
	Waste	0.00	0.23	0.00	4.83
	Water	1.51	0.03	0.00	2.29
	Total	456.80	0.29	0.00	464.33
PBL New Colton Building	Area	0.00	0.00	0.00	0.00
	Energy	143.18	0.00	0.00	144.06
	Mobile	116.99	0.01	0	117.2
	Waste	0.00	0.13	0.00	2.76
	Water	0.86	0.02	0.00	1.31
	Total	261.03	0.16	0.00	265.33
SBI ^b Conference Center Expansion (Ballroom)	Area	0.00	0.00	0.00	0.00
	Energy	26.35	0.00	0.00	26.51
	Mobile	17.32	0	0	17.35
	Waste	0.00	0.04	0.00	0.92
	Water	1.56	0.02	0.00	2.18
	Total	45.23	0.06	0.00	46.96
SBI Conference Center Expansion (Meeting Rooms)	Area	0.00	0.00	0.00	0.00
	Energy	26.35	0.00	0.00	26.51
	Mobile	17.32	0	0	17.35
	Waste	0.00	0.04	0.00	0.92
	Water	1.56	0.02	0.00	2.18
	Total	45.23	0.06	0.00	46.96
SBI New Guest Cottages	Area	0.00	0.00	0.00	0.00
	Energy	286.35	0.01	0.01	288.12
	Mobile	233.98	0.02	0	234.4
	Waste	0.00	0.26	0.00	5.51
	Water	1.72	0.03	0.00	2.62
	Total	522.05	0.32	0.01	530.65

Development Site	Sector	CO₂	CH₄	N₂O	CO₂e
Area M Spyglass Hill Option 1 (New Resort Hotel)	Area	0.00	0.00	0.00	0.00
	Energy	715.88	0.02	0.01	720.30
	Mobile	934.64	0.08	0	936.31
	Waste	0.00	0.66	0.00	13.80
	Water	4.31	0.08	0.00	6.56
	Total	1,654.83	0.84	0.01	1,676.97
Area M Spyglass Hill Option 2 (New Residential Lots)	Area	13.12	0.01	0.00	13.63
	Energy	39.63	0.00	0.00	39.87
	Mobile	151.07	0.01	0	151.32
	Waste	0.00	0.15	0.00	3.21
	Water	1.45	0.02	0.00	2.03
	Total	205.27	0.19	0.00	210.06
Residential Lot Subdivisions (without Area V and Corporation Yard)	Area	83.96	0.06	0.01	87.21
	Energy	253.63	0.01	0.00	255.19
	Mobile	966.82	0.08	0	968.46
	Waste	0.00	0.97	0.00	20.29
	Water	9.29	0.13	0.00	13.00
	Total	1,313.70	1.25	0.01	1,344.15
Residential Lot Subdivisions (Area V)	Area	18.37	0.01	0.00	19.08
	Energy	55.48	0.00	0.00	55.82
	Mobile	211.49	0.02	0	211.85
	Waste	0.00	0.21	0.00	4.44
	Water	2.03	0.03	0.00	2.84
	Total	287.37	0.27	0.00	294.03
Residential Lot Subdivisions (Corporation Yard)	Area	13.12	0.01	0.00	13.63
	Energy	39.63	0.00	0.00	39.87
	Mobile	151.07	0.01	0	151.32
	Waste	0.00	0.15	0.00	3.21
	Water	1.45	0.02	0.00	2.03
	Total	205.27	0.19	0.00	210.06
Total Option 1 Area M Spyglass Hill New Resort Hotel	Area	115.45	0.08	0.01	119.92
	Energy	2,097.73	0.05	0.03	2,110.67
	Mobile	2,877.52	0.24	0.00	2,882.54
	Waste	0.00	2.97	0.00	62.68
	Water	26.83	0.42	0.00	38.79
	Total	5,117.53	3.76	0.04	5,214.60
Total Option 2 Area M Spyglass Hill New Residential Lots	Area	128.57	0.09	0.01	133.55
	Energy	1,421.48	0.04	0.02	1,430.24
	Mobile	2,093.95	0.17	0.00	2,097.55
	Waste	0.00	2.46	0.00	52.09
	Water	23.97	0.36	0.00	34.26
	Total	3,646.97	2.12	0.03	3,667.69

Development Site	Sector	CO ₂	CH ₄	N ₂ O	CO ₂ e
	Total	3,667.97	3.12	0.03	3,747.69

Source:

ICF calculations using CalEEMod (Appendix E of this EIR).

Notes:

^a PBL: The Lodge at Pebble Beach.

^b SBI: The Inn at Spanish Bay.

The PBL Parking and Circulation Reconstruction and SBI New Employee Parking are not reported because they are supporting facilities, and operational emissions from vehicles associated with these facilities are included in the other land use emissions. The estimates assume that the proposed development includes no mitigating features to reduce GHG emissions.

1

2 **Effects of Land Cover Change on Emissions**

3 Table 3.4-8 presents the estimated carbon stock emissions associated with land cover change, as
4 well as loss of carbon sequestration associated with tree removal.

5 **Table 3.4-8. GHG Emissions due to Tree Stock and Carbon Sequestration Associated with Land**
6 **Cover Change**

Development Site	Removed Stock (MT CO ₂ e)	Removed Sequestration (MT CO ₂ e/year)
The Lodge at Pebble Beach ^a	0	4
The Inn at Spanish Bay ^b	667	18
Collins Field–Equestrian Center–Special Events ^c	421	17
Area M Spyglass Hill Option 1 (New Resort Hotel)	555	12
Area M Spyglass Hill Option 2 (New Residential Lots)	270	7
Residential Lot Subdivisions	2,749	154
Residential Lot Subdivisions (Corporation Yard)	0	0
Roadway Improvements ^d	81	3
Total Option 1 Area M Spyglass Hill New Resort Hotel	4,605	216
Total Option 2 Area M Spyglass Hill New Residential Lots	4,320	211
Annualized totals (Stock removals averaged over 100 years)	Removed Stock (MT CO₂e/year)	Removed Sequestration (MT CO₂e/year)
Total Option 1 Area M Spyglass Hill New Resort Hotel	46	216
Total Option 2 Area M Spyglass Hill New Residential Lots	43	211

Source:

ICF Calculations using CalEEMod (Appendix E of this EIR).

Notes:

^a Development sites include Meeting Facility Expansion, Fairway One Reconstruction, New Colton

Building, Parking and Circulation Reconstruction.

^b Development sites include Conference Center Expansion, New Guest Cottages, New Employee Parking.

^c Development sites include Pebble Beach Driving Range Relocation from Area V to Collins Field, Equestrian Center Reconstruction, Special Events Area Grading and Expansion.

^d Development sites include the SR 1/SR 68/17-Mile Drive intersection reconfiguration and four internal intersection improvements at Congress Road/Lopez Road, Congress Road/17-Mile Drive, Portola Road/Stevenson Drive, and Lopez Road/Sunridge Road.

1

2 **Total Project Emissions over Baseline**

3 To characterize total net emissions associated with the proposed project, Table 3.4-9 presents total
 4 net unmitigated operational emissions, accounting for changes in carbon stock and sequestration
 5 emissions.

6 **Table 3.4-9 Total Project Emissions over Baseline (MT CO₂e/year)^a**

	Annual Operational Emissions	Annualized Carbon Stock/Sequestration Loss^b	Net Annualized Operational Emissions
Total Option 1 Area M Spyglass Hill New Resort Hotel	5,206	262	5,468
Total Option 2 Area M Spyglass Hill New Residential Lots	3,801	255	4,056

Source:

ICF Calculations (Appendix E of this EIR).

Notes:

^a This table presents net GHG emissions associated with the proposed project, accounting for emissions from carbon sequestration/stock loss emissions associated with operational project components (i.e., motor vehicles, energy consumption, waste generation).

^b Includes carbon stock emissions associated with land cover change annualized over a 100-year period per The Climate Action Reserve (The Climate Action Reserve 2010). The annualized stock loss equates to 46 MT CO₂e/year for Option 1 and 43 MT CO₂e/year for Option 2 and is added to the annual sequestration loss for each option in Table 3.4-8.

7

8 On their own, these emissions would not result in climate change or global warming. However,
 9 climate change is a cumulative impact resultant from the collective emissions of the state, the
 10 country, and the planet as a whole. Without mitigation, these emissions would contribute to
 11 cumulative Monterey County, California, and global emissions that would result in significant
 12 changes to the local, state, national, and global physical environment. Without mitigation, these
 13 emissions would also have an adverse effect on the ability of California as a whole to meet the
 14 reduction targets in Assembly Bill 32.

15 This operational impact is considered significant. Two different mitigation measures have been
 16 identified for this impact. Two measures are identified: one measure (CC-A2-A) relies on reduction
 17 of project emissions through design features and other measures; the second measure (CC-A2-B) is
 18 based on allowing a credit for forest preservation. The second measure is controversial because it
 19 would not result in a reduction of emissions compared to existing levels but would credit the value

1 of preserving an existing forest in comparison to the future potential to develop and remove the
2 forest. For this EIR, the County has identified both ways of potentially mitigating this impact.

3 Mitigation Measure CC-A2-A would mitigate emissions to a less-than-significant level through a
4 combination of design features (such as energy efficiency or renewable energy), tree replanting,
5 and/or offset purchases sufficient to achieve necessary emission reductions. The County would
6 apply this mitigation in whole or by phases. Either way, the County would not approve the
7 development without having an overall plan in place or a plan for the next development in place.

8 Mitigation Measure CC-A2-B would credit forest preservation as providing sufficient mitigation of
9 project emissions. This measure would require the applicant to validate the GHG emission offset
10 value of preserving Monterey pine forest designated for development using the Climate Action
11 Registry Forest Project Protocol and preserve the lands in perpetuity, and the credit for forest
12 preservation would be equivalent to at least the same amount of mitigation provided by Mitigation
13 Measure CC-A2-A.

14 **Mitigation Measure CC-A2-A: Reduce annual greenhouse gas emission by 26% relative to**
15 **business as usual using a combination of design features, replanting, and/or offset**
16 **purchases.**

17 The project applicant will develop and implement a GHG Reduction Plan to reduce annual
18 emissions of the proposed project by 26% below the unmitigated emissions level of 5,468 and
19 4,056 MT CO₂e/year (Area M Options 1 and 2, respectively) identified for the proposed project.
20 The GHG Reduction Plan will be provided to Monterey County for review and approval prior to
21 grading, or ground disturbance or vegetation removal for any phase of the proposed project. The
22 GHG Reduction Plan will identify the specific design measures proposed to reduce GHG
23 emissions from the proposed project, their timing, and the responsible party. The effect of state
24 measures, as applied to project development, may be counted toward the 26% reduction level.

25 The GHG Reduction Plan will demonstrate how the project-specific measures and the state
26 measures will result in 2020 project emissions of no more than 4,047 MT CO₂e for Area M
27 Spyglass Hill Option 1 (New Resort Hotel) and 3,001 CO₂e for Area M Spyglass Hill Option 2
28 (New Residential Lots).

29 The applicant will evaluate all of the following measures for potential inclusion in the GHG
30 Reduction Plan.

31 Building Energy Use

- 32 ● Exceed Title 24 building envelope energy efficiency standards (applicable at the time of the
33 building permit issuance) by 20%.
- 34 ● Install programmable thermostat timers and smart meters.
- 35 ● Obtain third-party heating, ventilation, and air conditioning commissioning and verification
36 of energy savings.
- 37 ● Install energy-efficient appliances.
- 38 ● Require cool roof materials⁶

⁶ Per EPA ENERGY STAR requirements, cool roofs should have albedo ≥ 0.25 for sloped roofs and ≥ 0.65 for low-slope roofs.

- 1 ● Install green roofs.
- 2 ● Install solar water heaters.
- 3 ● Install tankless water heaters.
- 4 ● Install solar panels.
- 5 ● HVAC duct sealing.
- 6 ● Increase roof/ceiling insulation.

7 Alternative Energy Generation⁷

- 8 ● Install onsite solar facilities
- 9 ● Utilize a combined heat and power system for commercial facilities.

10 Lighting

- 11 ● Install high-efficiency area lighting.
- 12 ● Limit outdoor lighting.
- 13 ● Replace traffic lights with LED traffic lights.
- 14 ● Maximize interior day light.

15 Transportation

- 16 ● Provide electric vehicle charging stations.
- 17 ● Provide preferred electric vehicle parking.
- 18 ● Implement transit access improvements.
- 19 ● Expand transit network.
- 20 ● Provide local shuttle service to and from visitor-serving areas using a hybrid electric,
- 21 electric, or alternative fueled shuttle.
- 22 ● Provide free transit passes for facility employees.

23 Water

- 24 ● Install low-flow water fixtures.
- 25 ● Design water-efficient landscapes and landscape irrigation systems.
- 26 ● Install rainwater collection systems.
- 27 ● Install low-water use appliances and fixtures.
- 28 ● Restrict the use of water for cleaning outdoor surfaces and prohibit systems that apply
- 29 water to non-vegetated surfaces.

30 Area Landscaping

- 31 ● Use only electric-powered landscaping equipment (not gas powered).

⁷ On-site wind facilities are not to be included in any mitigation in order to avoid potential aesthetic impacts and impacts on coastal birds.

1 Solid Waste

- 2 ● Institute or extend recycling and composting services.

3 Carbon Sequestration

- 4 ● Plant trees to replace trees removed by the proposed project.

5 Off-Site Mitigation

- 6 ● Off-site mitigation could take many forms, including:
- 7 ○ Paying for energy-efficiency upgrades of existing homes and business.
- 8 ○ Installing off-site renewable energy.
- 9 ○ Paying for off-site water efficiency.
- 10 ○ Paying for off-site waste reduction.
- 11 ○ Other methods.
- 12 ● Off-site mitigation must be maintained in perpetuity to match the length of project
- 13 operations to provide ongoing annual emission reductions.

14 Carbon Offsets

- 15 ● Purchase offsets from a validated source⁸ to offset annual GHG emissions.
- 16 ● Purchase offsets from a validated source to offset one-time carbon stock GHG emissions.

17 At this time, the applicant has not identified any specific design measures that would reduce

18 GHG operational emissions from the proposed project. The GHG Reduction Plan will consist of

19 the measures described below unless the applicant demonstrates that alternative measures will

20 collectively meet the overall performance standard. The applicant will document the application

21 of all final measures to proposed new development and demonstrate their effectiveness.

- 22 ● State measures that will lower project emissions (compared to BAU conditions):
- 23 ○ Renewable Portfolio Standard (23.9% reduction in energy emissions).
- 24 ○ Vehicle efficiency measures (Pavley/Advanced Clean Cars) (19.5% reduction in mobile
- 25 emissions).
- 26 ○ Low Carbon Fuel Standard (7.6% reduction in mobile emissions).
- 27 ● Project measures that could lower project emissions (compared to BAU conditions):
- 28 ○ Features and measures to exceed Title 24 standards by 20%.
- 29 ○ Installation of low-flow water fixtures and irrigation systems.
- 30 ○ Expanding recycling and composting services to ensure recycling of 50% of materials.
- 31 ○ Replanting of trees to replace those removed.

⁸ Validated sources are carbon offset sources that follow approved protocols and use third-party verification. At this time, appropriate offset providers include only those that have been validated using the protocols and methods of the Climate Action Registry, the Gold Standard, or the Clean Development Mechanism (CDM) of the Kyoto Protocol. Credits from other sources will not be allowed unless they are shown to be validated by protocols and methods equivalent to or more stringent than the CDM standards.

1 Table 3.4-10 below shows that if the state measures and project-level reductions noted above are
 2 incorporated into the design, operational GHG emissions could be reduced by approximately 34%
 3 relative to BAU for Option 1 and 37% relative to BAU for Option 2. While this scenario is
 4 hypothetical, it shows that reduction of emissions to below the significance criteria is feasible.

5 **Table 3.4-10. Mitigated Scenario for Operational GHG Emissions (metric tons/year)**

Phase	Sector	CO ₂	CH ₄	N ₂ O	CO ₂ e
PBL ^a New Colton Building	Area	0.00	0.00	0.00	0.00
	Energy	103.22	0.00	0.00	103.86
	Mobile	87.02	0.01	0.00	87.18
	Waste	0.00	0.07	0.00	1.38
	Water	0.70	0.01	0.00	1.06
	Total	190.94	0.09	0.00	193.48
PBL Fairway One Reconstruction	Area	0.00	0.00	0.00	0.00
	Energy	180.63	0.01	0.00	181.75
	Mobile	152.28	0.01	0.00	152.56
	Waste	0.00	0.11	0.00	2.42
	Water	1.22	0.02	0.00	1.85
	Total	334.13	0.15	0.00	338.58
PBL Meeting Facility Expansion	Area	0.00	0.00	0.00	0.00
	Energy	10.07	0.00	0.00	10.14
	Mobile	17.23	0.00	0.00	17.26
	Waste	0.00	0.01	0.00	0.24
	Water	0.69	0.01	0.00	0.96
	Total	27.99	0.02	0.00	28.60
Residential Lot Subdivision (Corporation Yard)	Area	13.12	0.01	0.00	13.63
	Energy	28.57	0.00	0.00	28.74
	Mobile	112.37	0.01	0.00	112.55
	Waste	0.00	0.08	0.00	1.63
	Water	1.22	0.02	0.00	1.68
	Total	155.28	0.12	0.00	158.23
Residential Lot Subdivisions (without Area V or Corporation Yard)	Area	83.96	0.06	0.01	87.21
	Energy	182.85	0.01	0.00	183.97
	Mobile	719.14	0.06	0.00	720.36
	Waste	0.00	0.48	0.00	10.14
	Water	7.80	0.10	0.00	10.77
	Total	993.75	0.71	0.01	1,012.45
Residential Lot Subdivision (Area V)	Area	18.37	0.01	0.00	19.08
	Energy	40.00	0.00	0.00	40.24
	Mobile	157.31	0.01	0.00	157.58
	Waste	0.00	0.11	0.00	2.21
	Water	1.71	0.02	0.00	2.36
	Total	217.39	0.15	0.00	221.47

Phase	Sector	CO ₂	CH ₄	N ₂ O	CO ₂ e
SBI ^b Conference Center Expansion (Ballroom)	Area	0.00	0.00	0.00	0.00
	Energy	19.00	0.00	0.00	19.11
	Mobile	12.88	0.00	0.00	12.91
	Waste	0.00	0.02	0.00	0.47
	Water	1.31	0.02	0.00	1.81
	Total		33.19	0.04	0.00
SBI Conference Center Expansion (Meeting Rooms)	Area	0.00	0.00	0.00	0.00
	Energy	19.00	0.00	0.00	19.11
	Mobile	12.88	0.00	0.00	12.91
	Waste	0.00	0.02	0.00	0.47
	Water	1.31	0.02	0.00	1.81
	Total		33.19	0.04	0.00
SBI New Guest Cottages	Area	0.00	0.00	0.00	0.00
	Energy	206.44	0.01	0.01	207.71
	Mobile	174.04	0.01	0.00	174.35
	Waste	0.00	0.13	0.00	2.76
	Water	1.39	0.02	0.00	2.11
	Total		381.87	0.17	0.01
Area M Spyglass Hill Option 1 (New Resort Hotel)	Area	0.00	0.00	0.00	0.00
	Energy	516.09	0.01	0.01	519.28
	Mobile	695.20	0.06	0.00	696.45
	Waste	0.00	0.66	0.00	13.80
	Water	3.49	0.06	0.00	5.29
	Total		1,214.78	0.79	0.01
Area M Spyglass Hill Option 2 (New Residential Lots)	Area	13.12	0.01	0.00	13.63
	Energy	28.57	0.00	0.00	28.74
	Mobile	112.37	0.01	0.00	112.55
	Waste	0.00	0.08	0.00	1.60
	Water	1.22	0.02	0.00	1.68
	Total		155.28	0.12	0.00
Tree Removal (All Areas, Option 1)	Trees (2020)	262			262
Tree Removal (All Areas, Option 2)	Trees (2020)	255			255
Tree Replanting (All Areas, Option 1)	Trees (2020)	-302	0.00	0.00	-302
Tree Replanting (All Areas, Option 2)	Trees (2020)	-297	0.00	0.00	-297
Total Option 1	Area	115.45	0.08	0.01	119.92
Area M Spyglass Hill New Resort Hotel	Energy	1,305.87	0.04	0.01	1,313.92
	Mobile	2,140.36	0.18	0.00	2,144.09
	Waste	0.00	1.69	0.00	35.49
	Water	20.84	0.30	0.00	29.70
	Net Tree Sequestration ^c		-40		
Total		3,542.52	2.29	0.02	3,603.12

Phase	Sector	CO ₂	CH ₄	N ₂ O	CO ₂ e
Total Option 2	Area	128.57	0.09	0.00	133.55
Area M Spyglass Hill New Residential Lots	Energy	818.34	0.02	0.01	823.38
	Mobile	1,557.52	0.13	0.00	1,560.20
	Waste	0.00	1.11	0.00	23.29
	Water	18.57	0.26	0.00	26.09
	Net tree Sequestration ^c	-42			-42
	Total	2,481.00	1.61	0.01	2,524.5

Source:

ICF Calculations using CalEEmod (Appendix E of this EIR).

Notes:

^a PBL: The Lodge at Pebble Beach.

^b SBI: The Inn at Spanish Bay.

^c This amount is the net change in annual sequestration taking into account the project tree removal (from Table 3.4-9) and the value of planting new trees noted in this table.

The PBL Parking and Circulation Reconstruction and SBI New Employee Parking are not reported because they are supporting facilities, and operational emissions from vehicles associated with these facilities are included in the other land use emissions. The estimates assume that the proposed development includes no mitigation features to reduce GHG emissions.

1

2

OR

3

Mitigation Measure CC-A2-B: Validate the greenhouse gas emission offset value of preserving Monterey Pine Forest designated for development using the Climate Action Registry Forest Project Protocol and preserve the lands in perpetuity.

4

5

6

The proposed project includes the preservation of 635 acres, which includes approximately 598 acres of Monterey pine forest in part or all of Areas B, C, F-1, F-3, I-1, I-2, J, K, L, N, O, PQR, U, V, and part of the Corporation Yard. The existing LCP designates most of these areas (approximately 437 acres) for either residential development or commercial development; the remainder is designated as open space forest. The Climate Action Reserve’s (CAR’s) Forest Project Protocol (version 3.2) indicates that this process of preservation may qualify as Avoided Conversion. Avoided Conversion involves the use of a conservation easement or transfer of lands to public ownership to prevent forest land being converted to non-forest land, with a preservation time commitment of 100 years (The Climate Action Reserve 2010). Lands that meet CAR’s requirements for avoided conversion are then considered sinks and reservoirs for carbon due to the preservation and growth of forested lands that would otherwise be cleared to land uses that would be considered potential sources of carbon (i.e., non-forested lands).

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For projects to qualify, it must be demonstrated that the project has a feasible and realistic potential for development and loss of the forested lands that would occur in the long run without the proposed preservation. Because the lands proposed for development have been and are currently designated for residential or commercial development and represent technically feasible locations for development, the County preliminarily finds that the lands proposed for preservation that are designated for development in the existing LUP (approximately 437 acres) meet the test for avoided deforestation in the Forest Project Protocol.

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1 In order for this mitigation to be valid, the applicant will be required to submit an application to
 2 the Climate Action Reserve for the proposed preservation areas following the Forest Practices
 3 Protocol and will obtain third-party verification per the protocol to validate the use of such
 4 lands for mitigation credit. If the Reserve validates an amount of GHG mitigation offset greater
 5 than or equal to the predicted emissions of the proposed project described above, the County
 6 will accept preservation of land as mitigation of GHG emissions. If the applicant is unable to
 7 validate the preservation, the applicant will be required to implement Mitigation Measure CC-
 8 A2-A.

9 If validated, the project applicant will establish preservation areas to prohibit a minimum of 598
 10 acres of forested land designated for development under the existing Coastal Plan from being
 11 developed into non-forested land. The preservation areas established by the project applicant
 12 will be consistent with the Climate Action Reserve’s Forest Project Protocol and will ensure that
 13 the preservation areas are maintained for a minimum of 100 years.

14 As shown in Table 3.4-11, if the forest preservation offset credit is fully validated for the
 15 preservation lands designated for development in the existing LUP, then the project emissions
 16 would be reduced by far more than the significance threshold of 26% reduction, and in the
 17 Option 2 case, the proposed project would have a net reduction of GHG emissions. It should be
 18 noted that Table 3.4-11 does not take into account the effect of state GHG emission reduction
 19 measures, so the net project emissions would be even lower than shown in the table, if the offset
 20 credit is validated.

21 **Table 3.4-11. Potential Mitigated GHG Emissions Assuming 100 Percent Validation of Forest**
 22 **Preservation Offset Credit for Preserved Forest Designated for Development in the Existing LUP**

Development Site	Unmitigated Annualized Emissions (MT CO₂e)	Annualized Preserve Stock (MT CO₂e)	Annual Preserved Sequestration (MT CO₂e/year)	Net Annual Project Emissions (MT CO₂e/year)
Total Option 1 Area M Spyglass Hill New Resort Hotel	5,468	-485	-2,620	2,362
Total Option 2 Area M Spyglass Hill New Residential Lots	4,056	-485	-2,620	950

Source:
ICF Calculations using CalEEMod (Appendix E of this EIR).

Notes:
This table presents net GHG emissions associated with the proposed project, accounting for emissions and mitigation value of preservation, assuming the preservation is validated through the Climate Action Reserve’s protocol.

Carbon stock preservation total for the preserved areas designated for development (~437 acres) was estimated as 48,528 MT CO₂e/year and was then annualized over a 100-year period per The Climate Action Reserve Forest Projects Protocol (The Climate Action Reserve 2010) to 485 MT CO₂e/year.

23

1 B. Effects of Climate Change

2 **Impact CC-B1: The proposed project would not result in significant exposure of persons or** 3 **property to reasonably foreseeable impacts of climate change. (Less than significant)**

4 Climate change impacts resulting from past, present, and future GHG emissions could adversely
5 affect the natural and built environment in Del Monte Forest regardless of the success of local, state,
6 national, or international efforts to reduce future GHG emissions due to the existing concentrations
7 of GHG emissions in the atmosphere and the inevitable additional emissions that would occur before
8 future GHG reduction plans are implemented and effectively reduce emissions.

9 For climate specific changes for California coastal regions, summer temperatures are expected to
10 rise by 1–3.3° C (2–11° F) by the end of this century (California Energy Commission 2009a:12).
11 Warmer temperatures may lead to reduction in coastal fog, which is essential to providing moisture
12 for maintaining the terrestrial ecosystem along the California coastline (California Natural
13 Resources Agency 2009:67). Studies also suggest that such decreases in precipitation could result in
14 increased risk of water pollution and spread of infectious diseases in water and seafood
15 (Intergovernmental Panel on Climate Change 2007a; California Natural Resources Agency 2009;
16 California Energy Commission 2009a, 2009b; Karkl and Roland-Holst 2008).

17 Sea-level rise has been identified as likely the greatest climate change–related risk to coastal
18 regions. Sea level rise is expected to increase dramatically over historical rates. The California
19 Energy Commission (CEC) predicts that sea level rise, relative to the 2000 level, could range from
20 11 to 17 inches (30 to 45 centimeters) by 2050 (California Energy Commission 2009). The California
21 Natural Resources Agency estimates that sea level rise could reach up to 55 inches (1.4 meters) by
22 2100 (relative to 2000 levels), under certain global emissions scenarios (CNRA 2010).

23 In addition to the rocky and cliff-edged coastline, Pebble Beach (where the project area is located) is
24 also lined by near-sea-level sandy coastline and, therefore, is susceptible to inundation from rising
25 sea levels. Rising sea levels would also result in erosion at higher elevations from tidal activity along
26 the coast. Although Monterey Bay was identified as having a high risk of coastline erosion along the
27 state coastline, the USGS classified the coastline just south of Monterey, where the project area is
28 located, as a low-risk area of coastal erosion⁹ (US Geological Survey 2001).

29 While sea level rise could affect certain existing infrastructure, residences, golf courses, and visitor-
30 serving areas located directly along the coast as erosion accelerates, none of the proposed project
31 development sites is located close to any coastal bluffs or beaches. Proposed project development is
32 located at elevations well above the predicted sea level for 2050 and 2100.¹⁰ As a result, none of the
33 proposed new development is considered particularly vulnerable to rising sea levels.

34 In addition, residents and visitors to the project area could be subjected to a range of other potential
35 effects of climate change. For climate-specific changes for California coastal regions, summer
36 temperatures are expected to rise by 1–3.3° C (2–11° F) by the end of this century (California Energy
37 Commission 2009a:12). Given the coastal location of the project area, while temperature changes

⁹ While estimates of coastal erosion were not available for Northern California, a recent study for Southern California expects that erosion rates will accelerate by 20% for a 1 meter rise in sea level (CEC 2009b: 63).

¹⁰ Elevations are approximately as follows: proposed development areas at The Lodge at Pebble Beach, 60 to 90 feet above sea level; proposed development at the Inn at Spanish Bay, 50 to 80 feet above sea level; proposed Area L residential, 70 feet above sea level (at the west end nearest the coast); proposed hotel or residential at Area M; 240 to 270 feet above sea level). All other areas are further inland.

1 could be substantial, they would not be likely to substantially increase heat stress days due to the
2 relatively cooler coastal temperatures. Warmer temperatures may also lead to reduction in coastal
3 fog, which is essential to providing moisture for maintaining the terrestrial ecosystem along the
4 California coastline (California Natural Resources Agency 2009:67).

5 Studies also suggest that such decreases in precipitation could result in increased risk of water
6 pollution and spread of infectious diseases in water and seafood (Intergovernmental Panel on
7 Climate Change 2007a; California Natural Resources Agency 2009; California Energy Commission
8 2009a, 2009b; Karkl and Roland-Holst 2008). While changes in temperature, fog, water pollution,
9 and disease vectors are possible, it is not feasible at this time to project the specific effect on the
10 property and persons associated with the proposed project in Del Monte Forest. While these effects
11 are considered potential (and thus not entirely speculative), it is not feasible to prepare for effects
12 that have not been fully locally characterized yet. As such, this does not give rise to a significant
13 effect.

14 As described in Section 3.12, Water Supply and Demand, the proposed project is likely to be
15 provided potable water from the Carmel River through 2016, and may be provided from either the
16 Carmel River or the regional water supply project (Regional Project) (or an equivalent) after 2016.

17 The primary source of water for the Regional Project is desalination of seawater. As discussed in
18 Section 3.12, Water Supply and Demand, the Regional Project, although approved by the CPUC, is
19 somewhat uncertain given unresolved issues concerning permits from the California Coastal
20 Commission, costs, and governance, and may be delayed or possibly replaced by an alternative
21 project. If the Monterey Peninsula utilizes desalination as its principle water source in the future,
22 this is a source that would not ultimately be hindered by future climate changes in precipitation and
23 river flows, and the proposed project would not be expected to be affected by climate change-
24 induced changes in water supply in the very long run. However, in the absence of the Regional
25 Project or an equivalent alternative reliant on desalination, the project would be reliant on the
26 Carmel River, groundwater, the Salinas River, or recycled water or aquifer storage and retrieval that
27 might be affected or limited in the long term by climate change. Currently, climate models have not
28 been sufficiently downscaled to predict the effects of climate change on Carmel River flows.
29 Therefore, the reliability of provision of water from the Carmel River in the long run is unknown.

30 As discussed in Section 3.12, Water Supply and Demand, because there is a potential for the project
31 to intensify water rationing after 2016 in the event of inadequate regional water supply, this is
32 considered a significant and unavoidable water supply impact and it may be further worsened if
33 future regional water supplies are limited by climate change impacts. It is important to note that at
34 this time there is insufficient evidence to conclude the precise effect of climate change on local water
35 supplies; this disclosure errs on the conservative side by identifying a potential effect on regional
36 riverine or groundwater sources other than desalination.

37 Proposed project development is not in an area that is vulnerable to rising sea levels and associated
38 bluff-top erosion, and is not particularly vulnerable to a water supply interruption in the long run
39 given that its water would in all likelihood be derived largely from desalination. While other climate
40 change effects are also likely, at this time their local character and extent cannot be specifically
41 estimated with any accuracy. Thus, based on current understanding of climate change effects, the
42 proposed project does not appear to result in a significant vulnerability to reasonably foreseeable
43 effects of climate change such that undue risks to persons or property would occur. As noted above,
44 there is the potential that the project's reliance directly or indirectly on new regional water supplies,

1 as discussed in Section 3.12, Water Supply and Demand, may be affected in the long term by climate
2 change-related impacts, but there is insufficient information to currently conclude the nature of
3 those effects.
4

Section 3.5
Cultural Resources

Section 3.5 Cultural Resources

This chapter presents a discussion of existing cultural resources in the project area, an evaluation of potential impacts of the proposed project on those resources, and mitigation for significant impacts where feasible and appropriate.

Cultural resources include archaeological resources, historical resources and paleontological resources defined as follows:

- “Archaeological resources” for this report includes both surficial and buried prehistoric and historic cultural materials. Geoarchaeological resources are prehistoric cultural resources that have been buried under sediments due to river flows over time.
- “Historical resources” for this report includes historic building and other structures.
- “Paleontological resources” for this report includes surface and buried fossils containing information about past plants and wildlife.

A summary of the impacts and mitigation measures for proposed development is presented in Table 3.5-1.

Analysis of the impacts related to cultural resources was based on the following materials and sources:

- A review of existing published literature and cultural resource reports that were prepared for development in and immediately adjacent to the various project sites, and the professional opinions rendered in these documents.
- A review of plans for construction and grading at the various project sites.
- The professional judgment of an ICF archaeologist and an ICF architectural historian.

This section is based on a review and summary of the previous reports, which were assessed for their CEQA adherence, and a paleontological sensitivity analysis.

1 **Table 3.5-1. Summary of Project Impacts on Cultural Resources**

Project Impact	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Historical Resources										
CR-A1. The proposed project would not cause a substantial adverse change in the significance of a historical resource.	— (Applies to proposed project as a whole)									—
B. Archaeological Resources										
CR-B1. Project grading and excavation could result in disturbance to previously undiscovered archaeological resources and cause substantial adverse change in the significance of a unique archaeological resource.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	CR-B1. Conduct worker awareness training for archaeological and paleontological resources prior to ground-disturbing construction activities. CR-B2. Stop work if buried cultural deposits or human remains are encountered during ground-disturbing construction activities.									
C. Human Remains										
CR-C1. Project grading and excavation could result in disturbance to previously undiscovered human remains.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	CR-B1, CR-B2. See above.									
D. Paleontological Resources										
CR-D1. Project grading and excavation could result in disturbance and destruction of a previously undiscovered unique paleontological resource or site or unique geologic feature.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	CR-B1. See above. CR-D1. Implement stop work order if vertebrate fossil materials are encountered during ground-disturbing construction activities.									
<p>Notes:</p> <ul style="list-style-type: none"> ● = Significant unavoidable impact. ⊙ = Significant impact that can be reduced to less than significant. ○ = Less-than-significant impact. — = No impact or not applicable to the development site. <p>PBL – The Lodge at Pebble Beach; SBI – Inn at Spanish Bay; COL-EQC – Collins Field-Equestrian Center-Special Events Area; MH – Area M Spyglass Hill Resort Hotel (Option 1); MR – Area M Spyglass Hill Residential Lots (Option 2); RES SUB – Residential Subdivisions; RD – Roadway Improvements; TRA – Trail Improvements; INF – Infrastructure Improvements; Cumulative – Proposed Project’s Contribution to Cumulative Impacts</p>										

1 Regulatory Setting

2 Historical, Archaeological and Native American Resources

3 CEQA contains specific guidelines for evaluating the proposed project's impacts on cultural
4 resources, including historical, archaeological, and Native American resources. The CEQA guidelines
5 define significant historical resources as: 1) resources listed in or eligible for listing in the California
6 Register of Historical Resources (CRHR); 2) resources listed in a local register of historical
7 resources; and 3) any object, building, structure, site, area, or place a lead agency determines to be
8 historically significant in the architectural, engineering, scientific, economic, agricultural,
9 educational, social, political, military, or cultural annals of California (Public Resources Code [PRC]
10 Section 5024.1, State CEQA Guidelines Section 15064.5[a]). CEQA also contains guidelines and
11 regulations for evaluating and mitigating potential impacts on archaeological and Native American
12 resources (State CEQA Guidelines Section 15064.5[c] and [d]).

13 A resource may be eligible for listing in the CRHR if it meets any of the following criteria:

- 14 • It is associated with events that have made a significant contribution to the broad patterns of
15 California's history and cultural heritage.
- 16 • It is associated with the lives of important historical figures.
- 17 • It embodies the distinctive characteristics of a type, period, region, or method of construction, or
18 represents the work of an important creative individual.
- 19 • It possesses high artistic value.
- 20 • It has yielded, or may be likely to yield, important prehistoric or historic information.

21 The question of integrity is an additional factor that must be addressed. Integrity is determined
22 through application of seven factors: location, design, setting, workmanship, materials, feeling, and
23 association. These factors can be roughly grouped into three types of integrity considerations.
24 Location and setting address the relationship between the property and its environment. Design,
25 materials, and workmanship, as they apply to historic buildings, relate to construction methods and
26 architectural details. Feeling and association are the least objective of the seven criteria, and pertain
27 to the overall ability of the property to convey a sense of the historical time and place in which it
28 was constructed. Loss of integrity, if substantial, will render a property ineligible, irrespective of
29 significance. Likewise, a resource can have complete integrity, but if it lacks significance it must also
30 be considered ineligible.

31 The Monterey County Public Review Draft General Plan Environmental Impact Report (Monterey
32 County 2010) provides a map of primary historical resources located in the county and listed on the
33 Monterey County Inventory of Historic Resources (MCIHR). The MCIHR listing meets the
34 requirements of PRC Section 5020.1(k), which states that properties officially designated or
35 recognized as historically significant by a local government are considered significant resources for
36 the purposes of CEQA. Unlike the CRHR, property owner consent is required for listing in the MCIHR.
37 As of March 2002, more than 130 properties were listed in the MCIHR. None of the buildings or
38 structures within the project vicinity are included on the map of the MCIHR.

39 The area of potential effects (APE) for archaeological resources includes all areas potentially
40 affected by ground-disturbing activities related to the proposed project (Figure 3.5-1). For the

1 purposes of identifying historical resources (i.e., historic structures and buildings), the APE for this
2 undertaking includes all areas that may be directly or indirectly affected by the proposed project,
3 including the project area and adjacent parcels. A depiction of the archaeological and historical APE
4 is shown in Figure 3.5-1.

5 **Paleontological Resources**

6 Under the California Environmental Quality Act (CEQA), destruction of a “unique paleontological
7 resource or site or unique geologic feature” constitutes a significant impact. Appendix G of the State
8 CEQA Guidelines provides a checklist of questions a lead agency should address. The question on the
9 checklist with respect to paleontology is: “Would the project directly or indirectly destroy a unique
10 paleontological resource?” The treatment of paleontological resources under CEQA generally
11 requires an evaluation of resources in a project’s area of potential effect; an assessment of potential
12 impacts on significant or unique resources; and the development of mitigation measures for
13 potentially significant impacts, which may include monitoring combined with data recovery or
14 avoidance (or both).

15 The Society of Vertebrate Paleontology (SVP) Conformable Impact Mitigation Guidelines (SVP
16 guidelines) (Society of Vertebrate Paleontology Conformable Impact Mitigation Guidelines
17 Committee 1995; 1996) serve as a method to comply with CEQA and local ordinances and laws
18 which protect paleontological resources. According to the SVP guidelines, significant paleontological
19 resources are defined as fossils that provide important information on evolution, age of a
20 sedimentary strata, past environments, and biotic history, and which are rare or in short supply.

21 **Monterey County Local Coastal Program**

22 **Existing LUP**

23 The existing Policy Guidance Statement for Archeological Resources states that “The Del Monte
24 Forest Area’s archaeological resources will be protected for their scientific and cultural heritage
25 value. New land uses will be considered compatible with this objective only when they incorporate
26 site planning and design features necessary to avoid impacts on archaeological resources.”

27 Policies specific to cultural resources include identification and evaluation of cultural resources
28 during project planning (Policy 60), surveying for such resources (Policy 61), consideration of
29 avoidance of resources (Policy 62), minimization and avoidance of impacts on sites with cultural
30 resources (Policy 63), exclusion of use of categorical exemptions for projects that affect cultural
31 resources (Policy 64), preservation measures where avoidance is not possible (Policy 65),
32 prohibition of unauthorized collection of artifacts (Policy 66), and limitation of public access to
33 known archaeological or paleontological sites (Policy 67).

34 **Proposed LUP Amendment**

35 The proposed LUP Amendment retains the same intent as the existing LUP in regards to cultural
36 resources with minor technical changes and clarifications.

37 The Key Policy Statement for Cultural resources states that: “The Del Monte Forest’s cultural
38 resources shall be maintained, preserved, and protected for their scientific and cultural heritage
39 values. New land uses and development shall be considered compatible with this objective only

1 when they incorporate site planning and design features necessary to avoid impacts to cultural
2 resources, and where impacts are unavoidable they shall be minimized and reasonably mitigated.”
3 This represents a change from the existing LUP in that the LUP Amendment acknowledges that in
4 certain cases, impacts may be unavoidable and other measures may be required. This was actually
5 acknowledged in the existing LUP under existing Policy 65, but the existing policy guidance would
6 give the impression that only avoidance could occur. The change with the LUP amendment is to
7 remove this inconsistency to reflect the pragmatic reality that already exists.

8 Policies specific to cultural resources include identification and evaluation of cultural resources
9 during project planning (Policy 57), surveying for such resources (Policy 58), consideration of
10 avoidance of resources (Policy 59 and 60), preservation and mitigation measures where avoidance
11 is not possible (Policy 61), prohibition of unauthorized collection of artifacts (Policy 62), and
12 limitation of public access to known archaeological or paleontological sites (Policy 63).

13 Environmental Setting

14 The regional conditions for cultural resources consist of the prehistoric, ethnographic,
15 geoarchaeological, and historical contexts of the project area and surrounding lands. The following
16 contexts were summarized from previous reports and other secondary sources.

17 Prehistoric Background

18 Archaeological evidence and radiocarbon dates establish human occupation of the California coast
19 dating back at least 10,000 years. Evidence from coastal areas of Monterey County suggests
20 settlement of this area by at least 7,000 years ago and possibly earlier. Archaeologists have
21 identified early, middle, and late cultural components on the Monterey Peninsula (Monterey County
22 2005)). The early period dates to approximately 5,000 to 2,200 years ago (or 3000 B.C. to A.D. 200)
23 and is characterized by hunters and gatherers (Binford 1980). People foraged for food on a daily
24 basis and were mobile, traveling to local resources to gather what they needed. The population was
25 small, as were the habitation sites, which show up as village sites in the archaeological record. As the
26 middle period approached, these sites were abandoned (Monterey County 2005).

27 The sites that are dated to the end of the middle period show a distinct shift to larger residential
28 centers, such as the Rancho San Carlos area south of Carmel. As technology advanced over the past
29 2000 years, the shift in population settlement patterns reveals that inhabitants of the Monterey
30 Peninsula developed methods of specialized food collection as a result of their new technology.
31 During this era, there were many special-purpose sites for gathering various resources, including
32 shellfish processing sites (CA-Mnt-149) located near the project area in Spanish Bay. Many of the
33 later-period specialized sites are located in the same areas as the early village sites.

34 The resources gathered at the specialized processing sites were transported back to the residential
35 areas, revealing a diversity of site types in the archaeological record. This pattern of large residential
36 sites with dispersed specialized food processing sites persisted until the beginning of the Historic
37 Period (circa 1769) (Monterey County 2005).

38 There is a significant amount of archaeological evidence of settlements in the hills, the coast, and
39 along the coastal bluffs attesting to these populations. The toolkits of these individuals tend to
40 include large projectile points, in addition to milling stones, domed scrapers, large utilized flake

1 stones and many bone and shell tools. The artifacts found within the numerous sites on the
2 Monterey Peninsula reveal that subsistence patterns of the people who lived there were based on
3 the exploitation of marine resources such as mammals, net fishing, fishing, and intensive shellfish
4 processing, and the use of terrestrial resources (Monterey County 2005).

5 **Ethnographic Background**

6 The project area is located within the territory of the Ohlone Indians. Historically, the Ohlone were
7 called the Costanoan Indians. Costanoan is the name assigned to the group by the Spaniards, and is
8 derived from the word *costaiios*, meaning “people of the coast.” However, members of this group
9 currently refer to themselves as Ohlone. The Ohlone are believed to have inhabited the area since
10 A.D. 500 or earlier. Their territory extended along the coast from San Francisco Bay in the north to
11 just beyond Carmel in the south, and as much as 60 miles inland. The Ohlone are a linguistically-
12 defined group, speaking eight different but related languages and composed of several autonomous
13 tribelets. The Ohlone languages, together with Miwok, comprise the Utian language family of the
14 Penutian stock. (Levy 1978)

15 The specific Pebble Beach area relative to the proposed project was inhabited by the Rumsen group
16 of Ohlone Indians at the time of contact. According to maps (Monterey County 2005), the Rumsen
17 territory encompassed the Carmel River Valley and the Monterey
18 Peninsula. Much of the information that has been gathered regarding this population was derived
19 from baptismal records from the Carmel Mission. The closest Rumsen Village was likely named
20 Achasta. (Monterey County 2005)

21 During the months of July and August, the Rumsen spent much of their time camped at the beach to
22 enjoy the abundance of resources such as sea birds and fish. In autumn, the Rumsen would spend
23 more time dispersed in search of acorns and various other resources that could be stored for the
24 winter months ahead (Monterey County 2005). They would return to a more sedentary lifestyle in
25 the winter months when they resided in the villages. In spring (particularly May and June) the
26 Rumsen focused on intense gathering of edible and medicinal plant resources such as clover,
27 goosefoot, wild peas, and lupine.

28 The Ohlone were hunter-gatherers, utilizing only the native flora and fauna. Acorns and various
29 seafoods were heavily relied upon as a means of subsistence. However, a wide range of other foods
30 was exploited. Included were assorted seeds, buckeye, berries, roots, land mammals, sea mammals,
31 waterfowl, reptiles, and insects. The Ohlone practiced some forms of resource management that
32 were close to agriculture. For example, some plants were pruned and re-seeded seasonally for
33 optimum production. Acorns were among several of the foods stored for months at a time.
34 Controlled burning of vast areas of land was carried out to promote the growth of seed-bearing
35 annuals and to increase the available grazing areas for deer, elk, and antelope. (Levy 1978)

36 **Geoarchaeology**

37 The Monterey Bay has undergone a series of significant environmental changes since people first
38 entered and inhabited the region. Studies suggest that climatically induced environmental
39 fluctuations, most notably Holocene sea-level rise, were responsible for large-scale landscape
40 changes in the area. These changes repeated episodes of widespread sediment deposition that
41 buried large portions of the landscape once available for human use and occupation. As a result, the

1 region's archaeological record does not accurately reflect the timing or extent of human use, because
2 older sites tend to have been destroyed, buried, or obscured by Holocene landscape evolution.

3 For the proposed project the types of soils present and currently mapped do not indicate the
4 presence of stable, Holocene-era deposits that would be typical of the type expected to contain
5 possibly buried archaeological sites. Soils present in the project area are generally dune sand and
6 fine loamy sand (Figure 3.5-2). These types of soils are considered generally unstable, shifting, loose,
7 and blowing. These soils are often deposited by wind and are stabilized by coastal vegetation and
8 generally very permeable. The instability of dune sands and fine loamy sand make them hospitable
9 for buried site deposit, although this does not discount the fact that habitation and use of these areas
10 happened prehistorically.

11 There is a low potential to encounter buried archaeological deposits in the project area given the
12 types of soils present. Furthermore, a better indication of the presence of an archaeological site in
13 the project area may be attributed to the presence of shells/shell midden on the ground surface.
14 Associated dark-stained soils, occupation horizons, and hearths present within the dune sands are
15 observable from the ground surface.

16 **Historical Background**

17 **Monterey County**

18 Monterey Bay was the focus of several Spanish exploratory expeditions after it was first noticed by
19 Juan Cabrillo in 1542. The bay was named for Conde de Monterrey, Viceroy of Spain, by Sebastian
20 Vizcaino who sailed into it in 1602. The Franciscans founded three missions (San Carlos Borromeo,
21 San Antonio de Padua, and Nuestra Sonora de Soledad) in what is now Monterey County. These
22 missions became focal points of activity (as did the Presidio of Monterey when it was established in
23 the late 1700s) and eight large ranchos formed from land concessions to Spanish army veterans.

24 When the Mexican Republic formed in 1822, the missions were secularized and new ranchos
25 developed on 68 Mexican land grants. An agrarian economy emerged, based on cattle ranching on
26 large ranchos. This economy received a boost when the Mexican regime opened Monterey harbor to
27 foreign trade, enabling rancheros to trade their hides and tallow for products from the outside
28 world. The Custom House in Monterey became the site for collection of duties, providing the main
29 source of income for Alta California's government. This commercial vitality, supported by Monterey
30 Bay's ideal harbor, led to Monterey's role as the Mexican capital of California.

31 Monterey continued to play a key role after the Americans took control of California in the late
32 1840s. For example, the convention to draft and sign California's new constitution convened at
33 Colton Hall. This period coincided with the California Gold Rush, and during the 1850s the market
34 for tallow and hides shifted to a demand for beef and grain to feed the population of gold
35 prospectors. Simultaneously, dairy farming was introduced in the area around Gonzales and
36 Soledad. This enterprise required irrigation to support alfalfa production, a practice based on
37 rudimentary canal systems used earlier by friars at the missions.

38 Transportation soon became a major factor in supporting the County's growing economy. In 1872,
39 Southern Pacific Railroad extended its line to Salinas from Pajaro and Hollister. As the railroad
40 pushed farther south it opened new markets and stimulated settlement of new towns. From Salinas
41 it extended southward to Chualar, followed by Gonzales and Soledad, as landowners donated right-
42 of-way across their ranches. With this new transport capability, crops could be shipped to market

1 more efficiently. As improved irrigation systems were introduced to the area in the late nineteenth
2 century, and as additional railroad connections were established, fruits and vegetables replaced
3 grains as the leading agricultural products.

4 The economy of Monterey County diversified by the late nineteenth century, when it became a
5 destination for tourism and resort activities. Three hot spring resorts with hotels were developed at
6 Paraiso, Tassajara, and Slates Hot Springs. Pacific Grove was founded as a religious and cultural
7 retreat, growing from a tent city to a town of small Victorian cottages. In the early 1900s, Pebble
8 Beach was subdivided and became a fashionable summer resort. In Carmel, the Arts and Crafts
9 movement took hold in local architecture as the town became a colony for artists and writers.

10 **Monterey Peninsula and Del Monte Forest**

11 Recreational development in the southern Monterey Peninsula began in 1878 when the Pacific
12 Improvement Company acquired land in the area. This enterprise, a real estate holding company of
13 the Southern Pacific Railroad, constructed the Hotel Del Monte in 1879–1880 to cater to wealthy
14 tourists. Between 1878 and 1880, 17-Mile Drive was laid out between the Hotel Del Monte,
15 Monterey, and Carmel. During the mid-1890s, the Del Monte Golf Course was constructed as a nine-
16 hole course and expanded to 18 holes in 1903 (JRP 2001a; Gebhard et al. 1985).

17 Residential development in the Pebble Beach area began in 1909. Initial sales of residential lots
18 were slow, so Samuel F. B. Morse of Pacific Improvement Company designed an ambitious plan for
19 the southern shoreline, including a resort community, an 18-hole golf course, and easements to
20 preserve the natural beauty. When Morse could not get backing from his own company, he teamed
21 with Herbert Fleishhacker of San Francisco to form the Del Monte Properties Company. During the
22 late 1910s and the 1920s, the new company developed the Del Monte Lodge (later renamed The
23 Lodge at Pebble Beach¹), the Pebble Beach Golf Links, and luxury residences. These amenities, along
24 with tennis, horse racing, and polo, led to additional residential development. Development activity
25 remained strong until the advent of the depression of the 1930s. (JRP 2001a)

26 Building designs from the 1910s and 1920s in the Pebble Beach and Del Monte Forest areas conform
27 to a Mediterranean theme, typically the Spanish Colonial Revival, which strengthened the area's
28 reputation as a New World Riviera. Most of California's major residential architects from that era
29 contributed designs for houses in the area, including Bakewell and Brown; Lewis P. Hobart; Johnson,
30 Kaufman & Coate; Bernard Maybeck; Miller and Warnecke; Addison Mizner; Julia Morgan; Willis
31 Polk & Co.; and George Washington Smith. (Gebhard et al. 1985)

32 In the post–World War II era, in-fill new development continued, as well as redevelopment of older
33 properties. For example, the Equestrian Center was greatly expanded during the 1960s, and
34 numerous buildings were constructed in the area of The Lodge.

¹ The Del Monte Lodge was constructed in 1919 and replaced a log cabin that was originally located on 17-Mile Drive near the same site, but burned in 1917. Later, in 1977, the Pebble Beach Company was established and changed the name of The Del Monte Lodge to The Lodge at Pebble Beach.

1 **Site-Specific Conditions**

2 **Archaeological Resources**

3 All of the proposed development sites have been investigated for presence of archaeological
4 resources. The records searches found that there are numerous archaeological sites recorded on the
5 coast in Del Monte Forest, but no recorded sites are found within the proposed development sites
6 (Archaeological Consulting, 1989, 1993, 1996, 2002). While there are several previously recorded
7 archaeological resources within the Spanish Bay vicinity, there are no known archaeological
8 resources considered significant for the purposes of CEQA within the area of this project component.
9 The previously recorded archaeological sites in the vicinity are not within the actual development
10 area and would not be affected by the proposed project.

11 Based on previous records searches and field investigations, there is no evidence of archaeological
12 resources considered significant for the purposes of CEQA, or known burial sites within any of the
13 project development sites (Archaeological Consulting, 1989, 2001, 2001a, 2001b, 2002). However, it
14 should be noted there is an area adjacent to the archaeological APE in Area L that is known as Indian
15 Village. This area is not a formally recorded archaeological site, and no archaeological materials
16 have been noted in this location during previous archaeological surveys in and adjacent to the area.
17 Local literature and folklore indicate the Indian Village site was a Native American campground. In
18 the 1870s and 1880s, the area was a favored picnic ground area for churches and other
19 organizations that frequented the spot and said “arrowheads” were found there (Clark 1991). The
20 Indian Village area presently contains a plaque naming it as such, and the picnic area is open to the
21 public by making reservations through the Del Monte Forest Foundation. The area is part of
22 designated open space area, will remain open space, and will not be directly affected by the
23 proposed project.

24 **Historical Resources**

25 The main sources of information used to prepare the Historical Resources portion of this chapter
26 include historic property evaluation reports (JRP 2002a–b, 2001a–c, 1996; and LSA 2001), which
27 are on file with the Monterey County Planning Department. Archaeological investigations for the
28 project sites were reviewed to include those conducted in the recent past (Monterey County 2005;
29 Archaeological Consulting Services 2001, 2002, 1996, 1995, 1993, 1989, 1985).

30 The only development sites that have structures more than 50 years old and could be considered
31 historical resources eligible for listing on the CRHR are located at The Lodge at Pebble Beach and the
32 Collins Field–Equestrian Center–Special Events Area. Most of the buildings are of modern
33 construction and are not considered historical resources for the purposes of CEQA. Two buildings at
34 The Lodge at Pebble Beach, the Fairway One House and The Lodge itself, are older than 50 years.
35 Two buildings within the Collins Field–Equestrian Center–Special Events Area, the Collins Studio
36 and Building No. 9 at the Equestrian Center, are older than 50 years. Four project elements would
37 affect these structures. Fairway One Reconstruction would remove the existing structures and
38 construct new guest units and a conference facility, and Meeting Facility Expansion would modify
39 and expand the existing meeting facilities called the Lodge Annex located across Cypress Drive from
40 The Lodge. Equestrian Center Reconstruction would demolish all existing structures at the
41 Equestrian Center including Building No. 9. Residential Lot Subdivision Collins Residence would
42 result in the removal of all existing structures on the site, including Collins Cottage.

1 The Fairway One House was previously evaluated for eligibility for listing in the CRHR (JRP 2001c).
2 This Spanish-Eclectic style house was built between 1925 and 1926 as a private residence. Citing a
3 lack of significant historic associations and a lack of historic integrity, the previous evaluation
4 recommended that this property is not eligible for the CRHR. The house is one of many constructed
5 on the Del Monte properties during the 1920s, and the original owner, C. Fritz Howard Jarvis, does
6 not appear to have achieved the special significance required for CRHR listing. Furthermore, the
7 house is a modest example of the Spanish-Eclectic style that appears to have been designed by a
8 local contractor/builder and does not embody distinctive characteristics of that style. Therefore, the
9 Fairway One House is not considered a historical resource for the purposes of CEQA.

10 The Lodge Annex was built in 1949, but its architectural integrity has been compromised by
11 multiple alterations to the interior and exterior occurring over the past 30 years (JRP 2002a). It was
12 designed by San Francisco architect Gardner Daily, but is not considered representative of his
13 better-known works and is not known to be directly associated with persons important to the
14 history of the region, state, or nation. The development of the Annex for commercial purposes
15 during the post-World War II period is not considered a historic context that warrants recognition
16 as an important event in local, state, or national history (JRP 2002a). Although the Annex is within
17 sight of The Lodge², the Annex was built much later and, therefore, is itself an intrusion into the
18 historic setting of The Lodge. Furthermore, the only alterations outside of the existing footprint
19 would be to the north and west elevations and would not be visible from The Lodge. In an evaluation
20 conducted in September 2002, the Lodge Annex was recommended as not eligible for listing in the
21 CRHR (JRP 2002a). Therefore, the Annex is not a historical resource for the purposes of CEQA, and
22 its alteration would not constitute a significant change in the setting of a historical resource.

23 Building No. 9 at the Equestrian Center is quadrangle-type stable built in 1924 as the Del Monte
24 Properties Pebble Beach Stables. It also was evaluated previously for eligibility for listing in the
25 CRHR as part of an evaluation of the entire Equestrian Center complex (Monterey County 2005).
26 Citing a lack of significant historic associations and a lack of historic integrity, the previous
27 evaluation recommended that this complex is not eligible for the CRHR. The building and the overall
28 complex do not retain historic integrity to the early period of Pebble Beach establishment (pre-
29 World War II). Therefore, Building No.9 is not considered a historical resource for the purposes of
30 CEQA.

31 The Collins (James) Cottage was previously evaluated for eligibility for listing in the CRHR (JRP
32 2001a). This Craftsman-style house was built between 1912 and 1913 as a private residence. Citing
33 a lack of significant historic associations, the previous evaluation recommended that this property is
34 not eligible for the CRHR. Although the original owner, Austin James, was active in the early
35 twentieth century Carmel art scene, he does not appear to have achieved the special significance
36 necessary for CRHR consideration. Additionally, the house is a modest example of the Craftsman
37 style as compared to others in the area and is not distinctive. Although the cottage retains a good
38 degree of integrity of workmanship, design and materials, its setting has been substantially altered
39 by construction of a much larger house and barn nearby. Therefore, the Collins (James) Cottage is
40 not considered a historical resource for the purposes of CEQA.

41 The Collins Studio was located adjacent to the Collins Cottage; however, it was destroyed by a storm
42 and subsequently demolished through a County-issued demolition permit (file no. BP020099) .

² The Lodge was constructed in 1919 but has not been evaluated for historical significance.

1 **Paleontological Resources**

2 The potential for presence of paleontological resources is based on the paleontological sensitivity of
 3 the geology. The geology and soils of the project area are shown in Figure 3.5-2. The SVP guidelines
 4 identify three categories to describe the likelihood that a geologic unit contains significant fossil
 5 materials: high potential, low potential, and undetermined potential (Table 3.5-2). The project area
 6 is situated on Pleistocene terrace deposits and Miocene to Paleocene marine sedimentary
 7 formations. These surficial deposits and bedrock formations have been rated as High Potential (High
 8 Sensitivity) to contain significant, non-renewable paleontological resources based on the SVP
 9 guidelines (Society of Vertebrate Paleontology Conformable Impact Mitigation Guidelines
 10 Committee 1995; 1996). In December 2010, two fossilized Ice Age Columbian mammoths were
 11 discovered in Monterey County, in surficial Pleistocene deposits that are correlative in age and
 12 paleoenvironment to that of the Pleistocene deposits within the project area (Allen 2011).
 13 Therefore, the project area is considered to be highly sensitive for paleontological resources.

14 **Table 3.5-2. Society of Vertebrate Paleontology Geologic Unit Sensitivity Designations**

Sensitivity Designation	Characteristics of Geologic Units in This Category
High Potential (High Sensitivity): Pleistocene Units, Monterey Formation (Tm), Los Laureles Sandstone, Vaqueros-Temblor, Formations (Tus), Carmelo Formation	This category consists of rock units known to contain significant vertebrate, invertebrate, or plant fossils anywhere within their geographic extent, including sedimentary rock units that are suitable for the preservation of fossils, as well as some volcanic and low-grade metamorphic rock units. This category includes rock units with the potential to contain: <ul style="list-style-type: none"> • Abundant vertebrate fossils. • A few significant vertebrate, invertebrate, or plant fossils that might provide new and significant taxonomic, phylogenetic, ecologic, and/or stratigraphic data. • Areas that might contain datable organic remains older than Recent. • Areas that might contain unique new vertebrate deposits, traces, and/or trackways. • Fossiliferous deposits with very limited geographic extent or an uncommon origin (e.g., tar pits and cave deposits).
Undetermined Potential	This category includes sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed. Note that sedimentary rocks expected to contain vertebrate fossils are considered highly sensitive, because vertebrates are generally rare and found in more localized strata.
Low Potential (Low Sensitivity): Holocene Dune Sand (Qd) and Holocene Alluvium (Qal) Plutonic Rocks (Kgd)	This category includes rock units of intrusive igneous origin, most extrusive igneous rocks, and moderate- to high-grade metamorphic rocks.
Source: Society of Vertebrate Paleontology 1995, 1996.	

15

1 Impacts Analysis

2 Methodology

3 Approach to Analysis

4 Historical and Archaeological Resources

5 Section 15046.5 of the State CEQA Guidelines defines the resources considered to be historical
6 resources, as discussed above. Section 15064.5[a][3] states that a resource is generally considered
7 “historically significant,” (is considered to be a historical resource) if the resource meets the criteria
8 for listing in the CRHR (PRC Section SS5024.1, CCR, Title 14, Section 4852).

9 Section 15064.5 of the State CEQA Guidelines provides that, in general, a resource not listed on state
10 or local registers of historical resources be considered by the lead agency to be historically
11 significant if the resource meets the criteria for listing in the CRHR. This section also provides
12 standards for determining what constitutes a “substantial adverse change” on archaeological or
13 historical resources, including physical demolition, destruction, relocation, or alteration of the
14 resource or its immediate surroundings such that the significance of the historical resource would
15 be materially impaired (State CEQA Guidelines Section 15064.5[b][1]).

16 The significance of a historical resource is considered to be materially impaired when a project
17 demolishes or materially alters in an adverse manner those characteristics that convey its historical
18 significance and that justify its inclusion on an historical resource list (State CEQA Guidelines
19 15064.5[b][2]). CEQA also requires that the effects of a project on an archaeological resource be
20 taken into consideration, and if a project might affect an archaeological resource that it first be
21 determined if the archaeological resource is a “historical resource”—that is, if the archaeological
22 resource meets the criteria for listing in the CRHR (CEQA Guidelines Sections 15064.5[a][1] and [3]
23 and [c][1] and [2]).

24 Generally, an archaeological resource that qualifies as a historical resource under CEQA qualifies for
25 listing under Criterion D of the CRHR (CEQA Guidelines Section 15064.5[a][3][D]). An archaeological
26 resource might qualify for listing under Criterion D if it can be demonstrated that the resource has
27 the potential to significantly contribute to questions of scientific or historical importance.
28 Archaeological resources that are not historical resources according to the criteria may be unique
29 archaeological resources as defined in PRC Section 21083.2, which generally provides that non-
30 unique archaeological resources do not receive any protection under CEQA. If an archaeological
31 resource is neither a unique archaeological resource nor a historical resource, the effects of a project
32 on those resources are not considered significant.

33 Criterion A, related to whether the proposed project could cause a substantial adverse change in the
34 significance of a historical resource, is addressed under Impact CR-1. Criterion B, related to whether
35 the proposed project could cause a substantial adverse change in the significance of an
36 archaeological resource, is addressed under Impact CR-2. Criterion D, related to whether the
37 proposed project could disturb any human remains, is addressed under Impact CR-3.

1 **Paleontological Resources**

2 Under CEQA, the destruction of a unique paleontological resource or site or unique geologic feature
3 constitutes a significant impact on paleontological resources (CEQA Guidelines Appendix G). The
4 SVP guidelines serve as a method to identify the potential for such resources and comply with CEQA.
5 Consistent with prevailing professional practice and guidance in the SVP guidelines, the impact
6 analysis focuses on the potential for the proposed project to disturb paleontologically sensitive
7 geologic units (Table 3.5-2).

8 **Criteria for Determining Significance**

9 For purposes of this EIR, the County of Monterey considers that the proposed project would have a
10 significant impact on cultural resources if it would result in:

11 **A. Historical Resources**

- 12 • Substantial adverse change in the significance of a historical resource as defined in CEQA
13 Guidelines Section 15064.5.

14 **B. Archaeological Resources**

- 15 • Substantial adverse change in the significance of a unique archaeological resource pursuant to
16 CEQA Guidelines Section 15064.5.

17 **C. Human Remains**

- 18 • Disturbance to any human remains, including those interred outside of formal cemeteries.

19 **D. Paleontological Resources**

- 20 • Destruction of a unique paleontological resource or site or unique geologic feature.

21 **Project Impacts and Mitigation Measures**

22 **A. Historical Resources**

23 **Impact CR-A1. The proposed project would not cause a substantial adverse change in the** 24 **significance of a historical resource. (No impact)**

25 The proposed project would not result in an adverse change to the significance of a historical
26 resource because no historical resources would be affected by the proposed project. As described in
27 the Setting section, the only development sites that have structures more than 50 years old and
28 could be considered eligible for the CRHR are located at The Lodge at Pebble Beach and at the
29 Collins Field–Equestrian Center–Special Events Area. No buildings or structures within the project
30 area, including the structures in these two areas, are included on the MCIHR or have been
31 determined to be historical resources in this CEQA analysis. Therefore, no impacts to historical
32 resources would occur.

1 B. Archaeological Resources

2 **Impact CR-B1. Project grading and excavation could result in disturbance to previously** 3 **undiscovered archaeological resources and cause substantial adverse change in the** 4 **significance of a unique archaeological resource. (Less than significant with mitigation)**

5 No known archaeological resources would be affected as a result of grading and excavation activities
6 at development sites, including the creation of new underground parking facilities at The Lodge at
7 Pebble Beach and Area M Spyglass Hill where substantial excavation would occur; removal of
8 existing structures; or construction of new structures. However, there is always the possibility that
9 ground-disturbing activities could adversely affect unknown archaeological sites and resources
10 including cultural deposits. This is considered a potentially significant impact, but the impact would
11 be reduced to a less-than-significant level with implementation of Mitigation Measures CR-B1 and
12 CR-B2.

13 **Mitigation Measure CR-B1: Conduct worker awareness training for archaeological and** 14 **paleontological resources prior to ground-disturbing construction activities.**

15 Prior to the initiation of any site preparation and/or start of construction, the applicant will
16 ensure that all construction forepersons and field supervisors receive training overseen by a
17 qualified professional archaeologist and paleontologist as defined by SVP's Conformable Impact
18 Mitigation Guidelines Committee (Society of Vertebrate Paleontology Conformable Impact
19 Mitigation Guidelines Committee 1995; 1996) and who are experienced in teaching non-
20 specialists, to ensure that forepersons and field supervisors can recognize archaeological and
21 paleontological resources (e.g., areas of shellfish remains, chipped stone or groundstone,
22 historic debris, building foundations, human bone, fossil materials) in the event that any are
23 discovered during construction. Training will also be provided to all other construction workers,
24 but might include videotape of the initial training and/or the use of written materials rather
25 than in-person training. Training will identify portions of the proposed project that possess a
26 high sensitivity for paleontological resources (i.e., areas underlain by Pleistocene terrace
27 deposits and Miocene to Paleocene marine sedimentary formations).

28 This mitigation applies to all project elements, including the residential lot subdivisions because
29 it is anticipated that excavation will be required to install building foundations and
30 infrastructure for access roads, utilities and drainage facilities. Regarding future residential
31 construction contracted by private property owners, the applicant will inform the new property
32 owners of the requirement at the time lots are purchased, and the County will include the
33 requirement in the conditions of approval applied to residential development. The requirement
34 will be applicable to construction involving future excavation (e.g., basement, cellar, swimming
35 pool).

36 **Mitigation Measure CR-B2: Stop work if buried cultural deposits or human remains are** 37 **encountered during ground-disturbing construction activities.**

38 The applicant will ensure the construction specifications for all ground-disturbing activities
39 (e.g., grading and excavation) include the following stop work order, consistent with the
40 County's standard conditions of approval (PD003[A][B]).

41 If, during the course of construction, cultural, archaeological, historical or paleontological resources
42 are uncovered at the site (surface or subsurface resources), work will be halted immediately within

1 50 meters (165 feet) of the find until a qualified professional archaeologist can evaluate it.
2 Examples of such resources include, but are not limited to, shellfish remains, chipped stone or
3 groundstone, historic debris, building foundations, and bone. The Monterey County Resource
4 Management Agency (RMA)—Planning Department and a qualified archaeologist (i.e., an
5 archaeologist registered with the Register of Professional Archaeologists) will be immediately
6 contacted by the responsible individual present on-site. When contacted, the project planner and
7 the archaeologist will immediately visit the site to determine the extent of the resources and to
8 develop proper mitigation measures required for the discovery.

9 If buried resources in the form of bones or human remains are accidentally discovered during
10 construction, the following steps will be taken:

- 11 • There will be no further excavation or disturbance of the site or any nearby area
12 reasonably suspected to overlie adjacent human remains until the county coroner is
13 contacted to determine that no investigation of the cause of death is required.
- 14 • If the coroner determines the remains to be Native American:
 - 15 ○ The coroner will contact the Native American Heritage Commission and the RMA—
16 Planning Department within 24 hours.
 - 17 ○ The Native American Heritage Commission (NAHC) will identify the person or
18 persons from a recognized local tribe of the Esselen, Salinan, Costonoans/Ohlone,
19 and Chumash tribal groups, as appropriate, to be the most likely descendent.
 - 20 ○ The most likely descendent may make recommendations to the landowner or the
21 person responsible for the excavation work, for means of treating or disposing of,
22 with appropriate dignity, the human remains and any associated grave goods as
23 provided in Public Resources Code Section 5097.9 and 5097.993, or
 - 24 ○ Where the following conditions occur, the landowner or his authorized
25 representatives will rebury the Native American human remains and associated
26 grave goods with appropriate dignity on the property in a location not subject to
27 further subsurface disturbance:
 - 28 1. The NAHC is unable to identify a most likely descendent or the most likely
29 descendent failed to make a recommendation within 24 hours after being
30 notified by the commission.
 - 31 2. The descendent identified fails to make a recommendation; or
 - 32 3. The landowner or his authorized representative rejects the recommendation of
33 the descendent, and the mediation by the NAHC fails to provide measures
34 acceptable to the landowner.

35 The applicant will submit the contract with a Registered Professional Archaeologist to the
36 Director of the RMA—Planning Department for approval. The requirements of this condition
37 will be included as a note on all grading and building plans, on the Subdivision Improvement
38 Plans, in the codes, covenants, and restrictions, and will be included as a note on an additional
39 sheet of the final map.

1 C. Human Remains

2 **Impact CR-C1. Project grading and excavation could result in disturbance to previously** 3 **undiscovered human remains. (Less than significant with mitigation)**

4 No known human remains would be affected as a result of grading and excavation activities at
5 development sites, including the creation of new underground parking facilities at The Lodge at
6 Pebble Beach and Area M Spyglass Hill where substantial excavation would occur. However, there is
7 always the possibility that ground-disturbing activities could disturb previously unknown human
8 remains below the ground surface. This is considered a potentially significant impact but would be
9 reduced to a less-than-significant level with implementation of Mitigation Measures CR-B1, CR-B2.

10 **Mitigation Measure CR-B1: Conduct worker awareness training for archaeological and**
11 **paleontological resources prior to ground-disturbing construction activities.** See above.

12 **Mitigation Measure CR-B2: Stop work if buried cultural deposits or human remains are**
13 **encountered during ground-disturbing construction activities.** See above.

14 D. Paleontological Resources

15 **Impact CR-D1. Project grading and excavation could result in disturbance and destruction of** 16 **a previously undiscovered unique paleontological resource or site or unique geologic** 17 **feature. (Less than significant with mitigation)**

18 No known paleontological resources would be affected as a result of grading and excavation
19 activities at development sites. However, the project area is situated on surficial deposits
20 (Pleistocene terrace) and bedrock formations (Miocene to Paleocene marine sedimentary) that have
21 been rated as High Potential (High Sensitivity) to contain significant, non-renewable paleontological
22 resources based on the SVP guidelines (Society of Vertebrate Paleontology Conformable Impact
23 Mitigation Guidelines Committee 1995; 1996). Therefore, the project area is considered to be highly
24 sensitive for paleontological resources. It is possible that ground-disturbing activities could
25 adversely affect unknown unique paleontological (e.g., fossil) or unique geologic resources. This is
26 considered a potentially significant impact, but the impact would be reduced to a less-than-
27 significant level with implementation of Mitigation Measures CR-B1 and CR-D1.

28 **Mitigation Measure CR-B1: Conduct worker awareness training for archaeological and**
29 **paleontological resources prior to ground-disturbing construction activities.** See above.

30 **Mitigation Measure CR-D1: Implement stop work order if vertebrate fossil materials are**
31 **encountered during ground-disturbing construction activities.**

32 If any indication of a paleontological resource is discovered during any project activity (e.g.,
33 vertebrate fossil materials), all ground-disturbing work within 50 feet of the find will stop
34 immediately until a qualified paleontologist can assess the nature and importance of the find in
35 a timely manner and recommend appropriate treatment. Recommendations could include
36 modifications to the stop-work radius based on the nature of the find, site geology, and the
37 activities occurring on the site; and could include continued monitoring.

38 Paleontological monitoring, if required, will consist of periodically inspecting disturbed, graded,
39 and excavated surfaces. The monitor will have authority to divert grading or excavation away

1 from exposed surfaces temporarily in order to examine disturbed areas more closely, and/or
2 recover fossils. The monitor will coordinate with the construction manager to ensure that
3 monitoring is thorough but does not result in unnecessary delays.

4 The paleontologist's recommendations for any required treatment will be consistent with SVP
5 guidelines (Society of Vertebrate Paleontology Conformable Impact Mitigation Guidelines
6 Committee 1995; 1996) and currently accepted scientific practice. If required, treatment for
7 fossil remains may include preparation and recovery of fossil materials so that they can be
8 housed in an appropriate museum or university collection, and may also include preparation of
9 a report for publication describing the finds. The applicant will be responsible for ensuring that
10 treatment is implemented and that information on the nature, location, and depth of all finds is
11 readily available to the scientific community through university curation or other appropriate
12 means.

13 **Cumulative Impacts and Mitigation Measures**

14 The general methodology for determining cumulative impacts is described under Analysis of
15 Cumulative Impacts at the beginning of Chapter 3.

16 The focus of the analysis of cumulative impacts for cultural resources is Del Monte Forest because
17 this is the only location in which the proposed project could directly contribute cumulative impacts
18 on cultural resources. However, within the Monterey Peninsula and beyond, there is a possibility of
19 a "net loss" of prehistoric and historical resources (i.e., individually small losses at multiple sites
20 resulting in a net substantial overall loss of cultural resources). Construction activities included in
21 the proposed project, as well as construction activities for other existing, approved, proposed, and
22 reasonably foreseeable development in Del Monte Forest could affect archaeological resources,
23 human remains, and paleontological resources in the region. However, implementation of mitigation
24 measures discussed below and proposed under Project Impacts and Mitigation Measures, would
25 reduce cumulative impacts on archaeological resources, human remains, and paleontological
26 resources, and the proposed project's contribution to cumulative cultural resource impacts would
27 be considered less than considerable.

28 **A. Historical Resources**

29 **Impact CR-A1(C). No historical resources would be affected by the proposed project.**
30 **Therefore, the proposed project would not contribute to a cumulative historical resources**
31 **impact.**

32 **B. Archaeological Resources**

33 **Impact CR-B1(C). Cumulative development in Del Monte Forest might have substantial**
34 **adverse effects to archaeological resources, but the proposed project's potential contribution**
35 **would be reduced to a less-than-significant level with mitigation.**

36 Cumulative development may have a substantial adverse effect on unique archaeological resources.
37 However, development of individual lots with single-family residences would be required to
38 individually assess potential for archaeological resources and would be subject to individual
39 measures and regulations to reduce potential impacts. As identified under Project Impacts and
40 Mitigation Measures, there are no known archaeological sites that would be affected by grading and

1 excavation activities at development sites. To address the possibility that ground-disturbing
2 activities could affect archaeological resources; implementation of Mitigation Measures CR-B1 and
3 CR-B2 would include worker awareness training and procedures for stopping work if cultural
4 resources are encountered during construction activities. Therefore, although cumulative
5 development impacts related to unique archaeological resources are considered to be potentially
6 significant, the proposed project's contribution would not be considerable with mitigation.

7 **C. Human Remains**

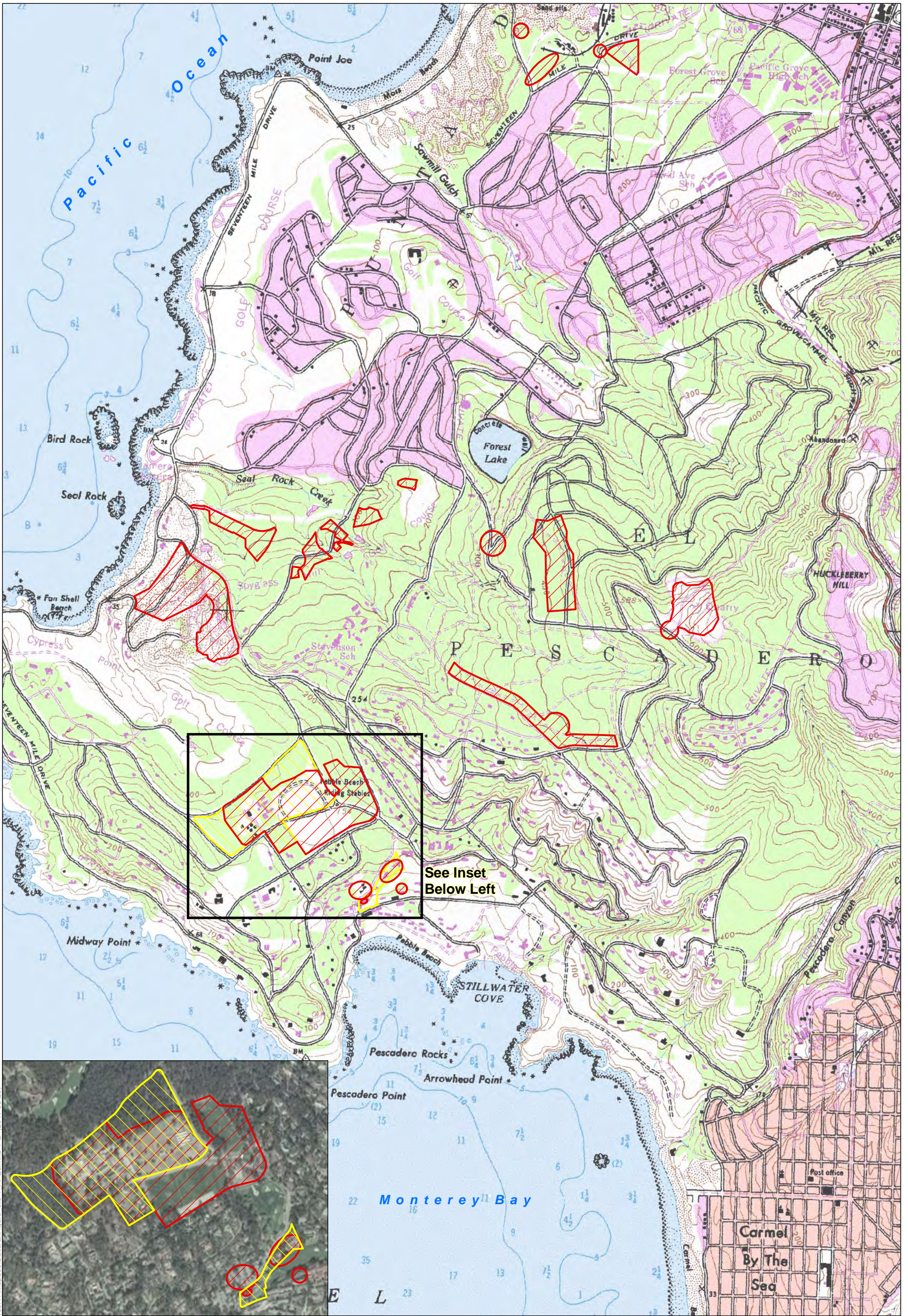
8 **Impact CR-C1(C). Cumulative development in Del Monte Forest might have a substantial**
9 **adverse effect on previously undiscovered human remains, but the proposed project's**
10 **contribution would be reduced to a less-than-significant level with mitigation.**

11 No known human remains would be affected as a result of the proposed project. Ground-disturbing
12 activities of the proposed project and cumulative development both have the potential to adversely
13 affect unknown archaeological resources including human remains. However, the proposed project's
14 contribution to a cumulative impact would be reduced to a less-than-significant level by Mitigation
15 Measures CR-B1 and CR-B2 (see Project Impacts and Mitigation Measures), which would include
16 worker awareness training and procedures for stopping work if human remains are encountered
17 during construction activities. Therefore, although cumulative development impacts related to
18 human remains are considered to be potentially significant, the proposed project's contribution
19 would not be considerable.

20 **D. Paleontological Resources**

21 **Impact CR-D1(C). Cumulative development in Del Monte Forest, including the proposed**
22 **project, might have a substantial adverse effect to unique paleontological resources, but the**
23 **proposed project's contribution would be reduced to a less-than-significant level with**
24 **mitigation.**

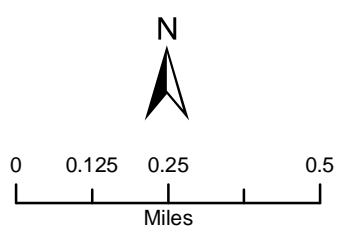
25 No known paleontological resources would be affected as a result of the proposed project. Ground-
26 disturbing activities of the proposed project and cumulative development both have the potential to
27 adversely affect unknown paleontological resources in sensitive geological units. However, the
28 proposed project's contribution to a cumulative impact would be reduced to a less-than-significant
29 level by Mitigation Measures CR-B1 and CR-D1 (see Project Impacts and Mitigation Measures),
30 which would include worker awareness training, and procedures for stopping work if vertebrate
31 fossil materials are encountered during construction activities. Therefore, although cumulative
32 development impacts related to paleontological resources would be considered potentially
33 significant, the proposed project's contribution would not be considerable.
34

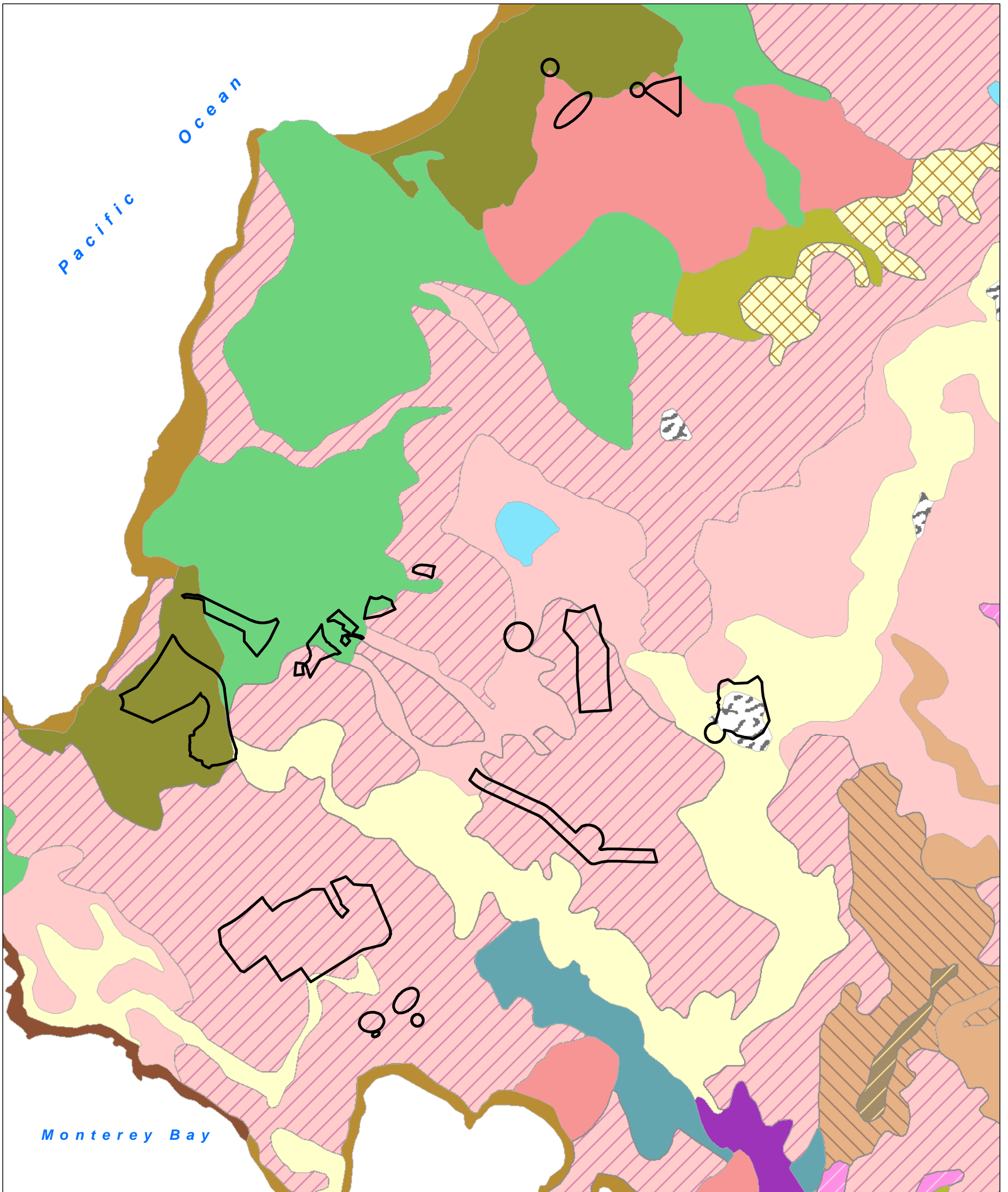


**Pebble Beach Company
Del Monte Forest Plan**

**Figure 3.5-1
Archaeological and Architectural
Areas of Potential Effects**

- Archaeological APE
- Architectural APE

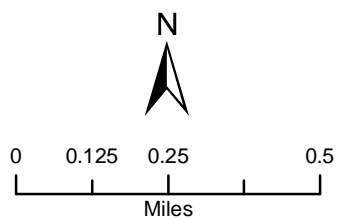




Soil Types

- | | |
|---|--|
| Baywood sand, 2 to 15 percent slopes | Oceano loamy sand, 2 to 15 percent slopes |
| Chamise shaly loam, 9 to 15 percent slopes | Pits and dumps |
| Coastal beaches | Rock outcrop-xerorthrent association |
| Dune land | Santa Lucia shaly clay loam, 15 to 30 percent slopes |
| Elder very fine sandy loam, 2 to 9 percent slopes | Santa Lucia shaly clay loam, 30 to 50 percent slopes |
| Elkhorn fine sandy loam, 9 to 15 percent slopes | Santa Lucia-Reliz association |
| Gazos silt loam, 15 to 30 percent slopes | Sheridan coarse sandy loam, 15 to 30 percent slopes |
| Gazos silt loam, 30 to 50 percent slopes | Sheridan coarse sandy loam, 30 to 75 percent slopes |
| Los Osos-Millsholm complex | Sheridan coarse sandy loam, 5 to 15 percent slopes |
| Narlon loamy fine sand, 15 to 30 percent slopes | Tangair fine sand, 2 to 9 percent slopes |
| Narlon loamy fine sand, 2 to 9 percent slopes | Reservoir |

SOURCE: USDA SSURGO Soils Data, Monterey County



Archaeological APE

**Pebble Beach Company
Del Monte Forest Plan**

**Figure 3.5-2
Soils in the Archaeological
Area of Potential Effects**

Section 3.6

Geology, Seismicity, and Soils

Geology, Seismicity, and Soils

1
2

3 This chapter provides a discussion of the geologic, seismic, and soil conditions that currently exist
4 within the project area. The potential impacts of the proposed project related to existing geologic,
5 seismic, and soil conditions are also evaluated in this chapter, and mitigation is proposed where
6 applicable. A summary of impacts and mitigation measures is presented in Table 3.6-1.

7 The description of existing conditions and subsequent impact analysis presented in this chapter are
8 based on a review of maps and information published by the USGS, the California Geological Survey
9 (CGS) (formerly the California Division of Mines and Geology), the County of Monterey, and the
10 Natural Resources Conservation Service (NRCS). Unless otherwise noted by citation, the existing
11 conditions and impact analysis in this chapter also rely on relevant site-specific geologic and
12 geotechnical reports prepared for the PBC Del Monte Forest Preservation and Development Plan EIR
13 (Monterey County 2005).

1 **Table 3.6-1. Summary of Project Impacts on Geology, Seismicity, and Soils**

Impact Topic	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Seismic Hazards										
GSS-A1. Placement of new structures could result in potential structural damage and associated human safety hazards resulting from ground shaking caused by earthquakes on nearby active and potentially active faults.	⊙	⊙	⊙	⊙	⊙	⊙	⊙	—	—	⊙
Mitigation Measures:	GSS-A1. Ensure final design and construction specifications include recommendations contained in the site-specific geologic and geotechnical reports.									
B. Landslides and Slope Stability										
GSS-B1. Placement of buildings and grading on steep and/or unstable slopes could result in potential structural damage and associated human safety hazards from mass movements (landslides and debris flow).	—	—	—	⊙	⊙	⊙	—	—	—	⊙
Mitigation Measures:	GSS-A1. Ensure final design and construction specifications include recommendations contained in the site-specific geologic and geotechnical reports.									
C. Erosion										
GSS-C1. Grading and excavation could result in substantial soil erosion, loss of topsoil, and sedimentation.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	GSS-C1. Prepare and implement an erosion and sediment control plan.									
D. Soils Constraints										
GSS-D1. Construction in areas of expansive soils could result in substantial damage to overlying building foundations and roadways.	—	⊙	⊙	⊙	⊙	⊙	⊙	—	—	⊙
GSS-D2. Construction of underground structures in the presence of shallow groundwater and weak surrounding deposits could result in inadequate drainage and structural failure during construction or operation.	⊙	—	—	⊙	⊙	⊙	—	—	—	⊙
GSS-D3. Construction in areas of unconsolidated fill could result in settlement and substantial damage to overlying building foundations.	—	⊙	—	⊙	⊙	⊙	—	—	—	⊙

Impact Topic	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
Mitigation Measures:	GSS-A1. Ensure final design and construction specifications include recommendations contained in site-specific geologic and geotechnical reports. GSS-D1. De-water excavations and shore temporary cuts during construction of the underground facilities. HYD-A1. Ensure on-site detention of stormwater run-off at development sites and oil/grease separators at parking lots; prepare final drainage plan with flow calculations and construction detail; and implement approved drainage plan. HYD-A2. Maintain and monitor drainage and flood control facilities, and prepare annual reports that describe the condition, maintenance performed, and required improvements of drainage and flood control facilities.									
E. Hazardous Materials										
Impact GSS-E1. Potential hazardous materials and methane off-gassing related to materials in the fill at the Corporation Yard could result in worker and/or resident exposure to hazardous materials or hazardous conditions.	—	—	—	—	—	⊙	—	—	—	⊙
Mitigation Measures:	GSS-E1. Conduct Phase II investigation consisting of subsurface soil borings and initiate remedial action if warranted at Corporation Yard. GSS-E2. Assess potential for methane off-gassing at the Corporation Yard fill area and incorporate methane controls and/or venting into construction plans and final design if warranted.									
Notes: ● = Significant unavoidable impact. ⊙ = Significant impact that can be reduced to less than significant. ○ = Less-than-significant impact. — = No impact or not applicable to the development site. PBL – The Lodge at Pebble Beach; SBI – The Inn at Spanish Bay; COL-EQC – Collins Field–Equestrian Center–Special Events Area; MH – Area M Spyglass Hill—New Resort Hotel (Option 1); MR – Area M Spyglass Hill—New Residential Lots (Option 2); RES SUB – Residential Lot Subdivisions; RD – Roadway Improvements; TRA – Trail Improvements; INF – Infrastructure Improvements; CUMULATIVE – Proposed Project’s Contribution to Cumulative Impacts										

1 **Regulatory Setting**

2 Relevant regulations that apply to geology and soils are discussed below.

3 **Section 402 of the Federal Clean Water Act**

4 Section 402 of the Federal Clean Water Act mandates that certain types of construction activity
5 comply with the requirements of the Environmental Protection Agency's NPDES stormwater
6 program. Phase II of the NPDES stormwater program regulations are currently in effect and require
7 that construction activities disturbing 1 or more total acres obtain coverage under the NPDES
8 general construction activity stormwater permit issued by the California State Water Resources
9 Control Board (WRCB).

10 Because the proposed project would result in the disturbance of an area greater than 1 acre, the
11 project proponent would need to obtain coverage under the NPDES general construction activity
12 stormwater permit. The Central Coast Regional Water Quality Control Board (CCRWQCB)
13 administers the NPDES stormwater permit program for Monterey County. Obtaining coverage under
14 the NPDES general construction activity permit generally requires that the project applicant (1) file
15 a notice of intent with the SWRCB describing the proposed construction activity before construction
16 begins, (2) prepare a SWPPP that describes the BMPs that will be implemented to control
17 accelerated erosion, sedimentation, and other pollutants during and after project construction, and
18 (3) file a notice of termination with the SWRCB when construction is complete and the construction
19 area has been permanently stabilized.

20 **Alquist-Priolo Earthquake Fault Zoning Act**

21 The major state legislation regarding earthquake fault zones is the Alquist-Priolo Earthquake Faults
22 Zoning Act of 1994 (formerly known as the Alquist-Priolo Special Studies Zones Act of 1972). The
23 purpose of the act is to regulate development near active faults and thereby reduce the hazards of
24 surface fault rupture. There are no zoned faults within the project area (County of Monterey 1995).

25 **California Uniform Building Code**

26 The major state regulations regarding geo-seismic hazards, other than surface faulting, are
27 contained in Title 24, Part 2, California Uniform Building Code (CUBC). The CUBC applies to public
28 building and a large percentage of private building in the State. It is based on the current federal
29 Uniform Building Code, but contains additional amendments, and repeals that are specific to
30 building conditions and structural requirements in the state of California. Local codes are permitted
31 to be more restrictive than Title 24 but are required to be no less restrictive. Chapter 23 of the CUBC
32 deals with general design requirements, including (but not limited to) regulations governing
33 seismically resistant construction. Chapters 29 and 70 deal with excavations, foundations, retaining
34 walls, and grading including (but not limited to) requirements for seismically resistant design,
35 foundation investigations, stable cut and fill slopes, and drainage and erosion control. The project
36 area is within CUBC Seismic Zone 4 and therefore is required to meet the most stringent CUBC
37 construction standards (County of Monterey 1995).

1 **Seismic Hazards Mapping Act**

2 The Seismic Hazard Mapping Act was enacted by the California legislature in 1990 following the
3 Loma Prieta earthquake of 1989. The act requires that, for projects within seismic hazard zones, a
4 certified engineering geologist prepare a site-specific geotechnical report that identifies the nature
5 and severity of the seismic hazards and identifies appropriate mitigation. Several site-specific
6 geotechnical reports were prepared for the proposed project (Haro, Kasunich and Associates, Inc.
7 2001a, 2001b, 2001c, 2001d, 2001e, 2002a, 2002b, 2010a, 2010b, 2010e, 2010f, 2010g, 2010i,
8 2010j, 2010k, 2010l; Nielsen and Associates 2002a, 2002b, 2002c, 2002d, 2002e, 2002f, 2002g,
9 2002h, 2002i; Parikh Consultants 2001; Terratech Inc. 1991).

10 **Monterey County Local Coastal Program**

11 The existing and proposed Del Monte Forest LUP and CIP contain specific policies regarding geologic
12 hazards, soil resources, and grading (erosion control). One policy of particular relevance to this
13 analysis is the existing LUP Policy 3 (proposed LUP Amendment Policy 78) which states that
14 development on slopes exceeding 30% is prohibited unless the proposed development better
15 achieves other resource protection objectives and policies in the LUP than alternative without
16 building on the 30% or over slopes. The existing LUP also includes certain requirements concerning
17 grading and management of erosion potential (Policy 3, 4 and others). The proposed LUP
18 Amendment retains much of the existing LUP requirements on grading and erosion, but also
19 includes technical edits to make the LUP a policy document versus a technical document. Technical
20 detail is proposed to be moved to the CIP and/or removed, provided there are equivalent
21 requirements in the County's grading code, which applies to all new grading in Del Monte Forest.

22 **Monterey County Erosion Control Ordinance**

23 Monterey County has a specific Erosion Control Ordinance (Chapters 16.08 through 16.12 of the
24 County Code). The Building Services Department enforces the ordinance. The ordinance was
25 adopted to safeguard the health, safety and public welfare and to minimize erosion, protect fish and
26 wildlife, and otherwise protect the natural environment. Erosion control plans are required for
27 building, grading, and land clearing.

28 Grading permits are required for all projects that move 100 cubic yards or more of soil. No grading
29 permit can be issued if a determination is made that grading will result in hazards by reason of
30 flood, geological hazard, seismic hazard or unstable soils, or is liable to endanger any other property
31 or result in the deposition of debris on any public way or property or drainage course, or otherwise
32 create a nuisance. Grading/erosion control inspectors and the chief building official conduct the
33 procedural review associated with issuance of grading permits.

34 Erosion control measures are enforced to eliminate and prevent conditions of accelerated erosion
35 that have lead to, or could lead to degradation of water quality, loss of fish habitat, damage to
36 property, loss of topsoil or vegetation cover, disruption of water supply, and increased danger from
37 flooding.

1 Environmental Setting

2 Geology

3 The project area is located in the Coast Ranges geomorphic province of California, near the northern
 4 terminus of the Santa Lucia Range. The most recent geologic map of the project area indicates that
 5 there are nine surficial geologic units located within the project area and vicinity (Allen 2011). The
 6 general characteristics of these units, and the development sites affected by each, are described in
 7 Table 3.6-2 and shown in Figure 3.5-2 in Section 3.5, Cultural Resources.

8 **Table 3.6-2. Geologic Units Within Project Development Sites**

Geologic Unit	Geologic Period	Description	Development Sites
Artificial fill	Holocene	Artificial fill in the project area consists of a heterogeneous mixture of artificially deposited material ranging from well-compacted sand and silt to poorly compacted sediment high in organic matter content.	MH/MR
Dune sand deposits	Holocene	Dune sand deposits in the project area consist of unconsolidated, well-sorted, medium- to coarse-grained sand as much as 80 feet thick.	SBI (Conference Center Expansion)
Undivided alluvial deposits	Holocene	The undivided alluvial deposits that occur within the project area consist of unconsolidated, heterogeneous, moderately sorted silt and sand with discontinuous lenses of clay and silty clay. The thickness of these deposits is highly variable but can be as much as 100 feet.	SBI (New Employee Parking) MR RES SUB (Area L and Corporation Yard)
Young dune deposits	Pleistocene	The young dune deposits that occur within the project area consist of weakly-consolidated, well-sorted, fine- to medium-grained sand. The thickness of these dune deposits ranges from 6.5 to 80 feet.	SBI (New Guest Cottages)
Older dune deposits	Pleistocene	The older dune deposits that occur within the project area consist of weakly- to moderately-consolidated, moderately well-sorted silt and sand. The thickness of these dune deposits ranges from 6.5 to 80 feet.	SBI (New Employee Parking) RES SUB (Areas L and U) MR
Coastal terrace deposits	Pleistocene	The coastal terrace deposits that occur within the project area consist of semi-consolidated, moderately well-sorted marine sand containing thin, discontinuous gravel-rich layers. The terrace deposits are locally overlain by poorly-sorted fluvial and colluvial silt, sand, and gravel. The thickness of coastal terrace deposits in the project area is variable, but is generally less than 20 feet.	COL-EQC (All three development sites) PBL (All three development sites) MH/MR RES SUB (Areas J, I, M, V, U, I-2, F-2 and Corporation Yard)

Geologic Unit	Geologic Period	Description	Development Sites
Lower unit of the Monterey Formation	Miocene	The lower unit of the Monterey Formation consists of thin-bedded, yellowish-brown, semi-siliceous mudstone that is as much as 100 feet thick.	RD (SR 1/SR 68/17-Mile Drive)
Los Laureles/Vaqueros/Temblor	Miocene	The sandstone units in the project area typically consist of dark-yellowish-orange, very thick bedded, coarse- to fine-grained, angular to subangular, poorly to well-sorted arkosic sandstone, with common very thick cobble-boulder conglomerate beds in the lower part and rare siltstone beds in the upper part (Clark et al. 1997).	RES SUB (Area I-2)
Porphyritic granodiorite of Monterey of Ross (1976)	Cretaceous	The porphyritic granodiorite of Monterey of Ross (1976) is light gray to moderate pink and medium grained.	RES SUB (Areas I-2 and Corporation Yard)

Notes:
PBL – The Lodge at Pebble Beach; **SBI** – The Inn at Spanish Bay; **COL-EQC** – Collins Field–Equestrian Center–Special Events Area; **MH** – Area M Spyglass Hill—New Resort Hotel (Option 1); **MR** – Area M Spyglass Hill—New Residential Lots (Option 2); **RES SUB** – Residential Lot Subdivisions; **RD** – Roadway Improvements

1

2 **Seismicity**

3 **Area Faults**

4 The California State Geology and Mining Board (the Board) has established policies and criteria for
 5 the classification of known faults in California based on the presence or absence of a detectable fault
 6 trace and the recency of fault displacement (Hart and Bryant 1997). Detectable fault traces that
 7 show evidence of displacement during the last 10,000 to 11,000 years (i.e., Holocene faults) are
 8 defined as *active* and are considered to have the greatest potential for surface rupture. Detectable
 9 fault traces that show evidence of displacement between 11,000 and 1.6 million years ago (i.e.,
 10 Quaternary faults) are defined as *potentially active*, and are considered to have less potential for
 11 surface rupture. The Board has not established an official category for faults that show no evidence
 12 of displacement greater than 1.6 million years (i.e., pre-Quaternary faults). Although such faults are
 13 not deemed inactive, they are considered to have a relatively low potential for surface rupture.

14 Del Monte Forest is located within a highly seismically active region of California. The fault activity
 15 map of California (Jennings 1994) and recent geologic investigations conducted by Nielsen and
 16 Associates (2002a-i) indicate that the project area is located in the vicinity of several active and
 17 potentially active faults/fault zones. The names of these faults/fault zones, the recency of their
 18 activity, and their approximate distance from the project area are listed below.

19 **Active Faults**

- 20 ● San Andreas Fault: located approximately 28 miles from Del Monte Forest.
- 21 ● Sargeant Fault: located approximately 31 miles from Del Monte Forest.

- 1 • Palo Colorado-San Gregorio Fault: located approximately 4 miles from Del Monte Forest.
- 2 • Calaveras/Paicines/Hayward Fault: located approximately 35 miles from Del Monte Forest.
- 3 • Monterey Bay Fault: located approximately 4 miles from Del Monte Forest.
- 4 • Sylvan Thrust Fault: located approximately 0.5 mile from Del Monte Forest.
- 5 • Hatton Canyon Fault: located approximately 1,000 feet from Del Monte Forest.

6 **Potentially Active Faults**

- 7 • Reliz (King City) Fault: located approximately 10 miles from Del Monte Forest.
- 8 • Cypress Point Fault: located beneath the extreme southwestern part of Del Monte Forest.
- 9 • Zayante-Vergeles Fault: located approximately 25 miles from Del Monte Forest.
- 10 • Navy Fault: located approximately 3 miles from Del Monte Forest.
- 11 • Seaside Fault: located approximately 4 miles from Del Monte Forest.
- 12 • Ord Terrace Fault: located approximately 5 miles from Del Monte Forest.
- 13 • Chupines Fault: located approximately 5 miles from Del Monte Forest.
- 14 • Tularcitos Fault: located approximately 8 miles from Del Monte Forest.
- 15 • Sur-Nacimiento Fault: located approximately 5 miles from Del Monte Forest.

16 The Cypress Point fault trends northwest across the tip of the Monterey Peninsula from Pescadero
 17 Point to Fan Shell Beach and is concealed beneath Quaternary sediments. Terrace deposits do not
 18 appear to be displaced by the Cypress Point faults, suggesting that fault movement occurred before
 19 the period (County of Monterey 1995).

20 **Seismic Hazards**

21 Seismic hazards present in Monterey County include ground rupture along faults, ground shaking,
 22 and liquefaction (Nielsen and Associates 2002a-i). Each of these hazards and their potential to affect
 23 the proposed development sites are discussed below. Slope stability and landslides are discussed
 24 separately below.

25 **Surface Fault Rupture**

26 Surface fault rupture is a seismic hazard that can damage structures constructed above active faults.
 27 Surface fault rupture can occur rapidly during an earthquake or slowly over many years via a
 28 process known as fault creep. None of the proposed development sites are located above or in the
 29 immediate vicinity of the active or potentially active faults identified by Jennings (1994) and Nielsen
 30 and Associates (2002). The Cypress Point fault is the closest of the active or potentially active faults
 31 in the vicinity of the proposed project. This fault is a northwest-trending oblique-slip fault located
 32 approximately 2,000 to 2,500 feet southwest of the proposed facilities at The Lodge at Pebble Beach.
 33 According to the geologic investigations conducted by Nielsen and Associates (2002a-i) the Cypress
 34 Point fault is probably capable of generating earthquakes in the 4–5 magnitude range. Accordingly,
 35 the surface fault rupture hazard at the proposed development sites is very low.

1 **Seismic Ground Shaking**

2 Seismic ground shaking can cause varying degrees of damage to buildings, ranging from cosmetic to
3 severe structural damage. In 1996, California Division of Mines and Geology (CDMG) released a
4 probabilistic seismic hazard assessment for the state of California to aid in the assessment of seismic
5 ground shaking hazards in California (Peterson et al. 1996). The report contains a probabilistic
6 seismic hazard map that depicts the peak horizontal ground acceleration values exceeded in a given
7 region of California at a 10% probability in 50 years (i.e., a 0.2% probability in any one year).

8 The peak horizontal ground acceleration values depicted on the map represent probabilistic
9 estimates of the ground-shaking intensity likely to occur in different regions of California as a result
10 of characteristic earthquake events on active and potentially active faults in California, and can be
11 used to assess the relative seismic ground-shaking hazard for a given region. The probabilistic peak
12 horizontal ground acceleration values for the project area (i.e., the Monterey Peninsula) range from
13 strong (0.3g) to severe (0.6g) (where g is equal to the acceleration due to gravity), suggesting that
14 the development sites will likely experience strong to severe ground shaking from an earthquake in
15 the next 50 years. The ground acceleration values and general ground-shaking hazard reported by
16 Peterson et al. (1996) are consistent with those reported by Monterey County (2002), Haro,
17 Kasunich and Associates, Inc. (2001a, 2001b, 2001c, 2001d, 2001e), 2002a, 2002b, 2010a, 2010b,
18 2010c, 2010d, 2010e, 2010f, 2010g, 2010h, 2010i, 2010j, 2010k, 2010l, 2010m), Nielsen and
19 Associates (2002a, 2002b, 2002c, 2002d, 2002e, 2002f, 2002g, 2002h, 2002i), and Parikh
20 Consultants (2001).

21 All development sites could be potentially affected by seismic ground shaking.

22 **Liquefaction and Related Ground Failures**

23 Liquefaction is a process by which soils and sediments lose shear strength and fail during episodes
24 of intense ground shaking. Liquefaction and related ground failures, such as lateral spreading, could
25 damage pipelines and/or result in the loss of foundation-bearing capacity for buildings, which can
26 cause structures to settle, tip, or rise through liquefied soils and sediments.

27 The susceptibility of a given soil or sediment to liquefaction is primarily a function of local
28 groundwater conditions and inherent soil/sediment properties such as texture and bulk density.
29 Poorly consolidated, well graded, and water-saturated fine sands and silts located within 50 feet of
30 the surface are typically considered to be the most susceptible to liquefaction. The liquefaction
31 potential map of Monterey County (Monterey County 2002) indicates that a high potential for
32 liquefaction exists only in areas underlain by dune sand deposits and undivided alluvial deposits
33 (described above). These areas include the development sites at The Inn at Spanish Bay and
34 residential lot subdivisions in Areas L, M, U, and the Corporation Yard (Allen 2011).

35 **Slope Stability and Landslides**

36 The stability of existing (natural and manufactured) slopes in the proposed development sites has
37 been evaluated by several geologic and geotechnical engineering firms. No slope stability hazards
38 were identified at development sites at The Inn at Spanish Bay, The Lodge at Pebble Beach,
39 Residential Lot Subdivision areas (all areas except Areas K and Corporation Yard), or the SR 1/SR 68
40 interchange (Haro, Kasunich and Associates, Inc. 2001a, 2001b, 2001c, 2001e, 2002a, 2002b, 2010a,
41 2010b, 2010e, 2010f, 2010g, 2010i, 2010j, 2010k, 2010l; Nielsen and Associates 2002a, 2002b,
42 2002c, 2002d, 2002e, 2002f, 2002g, 2002h, 2002i; Parikh Consultants 2001; Terratech Inc. 1991).

1 However, the potential for landsliding/slope instability to occur was identified at Area M Spyglass
 2 Hill (both options)) due to the steep slope gradients that occur in these areas (Foxy, Nielsen &
 3 Associates 1990a,b; M. Jacobs & Associates 1990, 1991a, 1991b; Terratech Inc. 1991; Haro, Kasunich
 4 and Associates, Inc. 2001d, 2001f, 2010c, 2010d, 2010h, 2010m). Slope instability at the
 5 Corporation Yard (Lots 1–7) is due to landfill material, not steep slopes. In Area K, there are steep
 6 cutbanks, an erosional feature caused by surface drainage (Lots 1, 12 and 13).

7 Topography in the proposed development sites is predominantly level to strongly sloping
 8 (0 to 16% slopes). However, some of the proposed development sites include steep slopes, where
 9 gradients exceed 30%, including the SR 1/SR 68 interchange (Pebble Beach Company 2002, Parikh
 10 Consultants 2001).

11 **Soils**

12 Soils on the Monterey Peninsula were mapped by the U.S. Department of Agriculture Soil
 13 Conservation Service during their survey of Monterey County (Cook 1978). There are approximately
 14 nine soil map units located in the proposed development sites. Soil map unit characteristics and
 15 descriptions regarding which sites contain different soil units are summarized in Table 3.6-3. Some
 16 of the typical characteristics, hazards, and constraints associated with the dominant soil series that
 17 comprise the majority of these map units are summarized in Table 3.6-4.

18 **Table 3.6-3. Soil Unit Descriptions for Soils found within Project Development Sites**

Soil Unit	Description	Development Sites
Baywood Sand 2% to 15% Slopes	This map unit is dominated by soils of the Baywood series, which typically consists of very deep, somewhat excessively drained, coarse-textured soils formed from wind-blown (eolian) sand deposits on dunes.	SBI (All three development sites)
Dune Land	This map unit consists of gently sloping to steep areas of loose, excessively drained, wind-deposited sand on hummocks, mounds, and hills.	SBI (Conference Center Expansion, New Guest Cottages)
Narlon Loamy Fine Sand 2% to 9% Slopes	This map unit is dominated by soils of the Narlon series, which typically consists of deep, somewhat poorly drained, coarse- and fine-textured soils formed from soft marine sediments on uplands.	COL-EQC (All three development sites) PBL (All three development sites) RES SUB (U, V, K, I-2, F-2) RD (SR 1/SR 68/17-Mile Drive Intersection Reconfiguration)
Narlon Loamy Fine Sand 15% to 30% Slopes	This map unit is dominated by soils of the Narlon series, which typically consist of deep, somewhat poorly drained, coarse- and fine-textured soils formed from soft marine sediments on uplands.	RES SUB (I-2, F-2, J)
Pits and Dumps	This map unit consists of areas from which native soil and underlying material have been removed and areas of uneven accumulation of waste material. These areas include rock quarries, sand and gravel pits, and excavations for refuse disposal.	COL-EQC (Equestrian Center Reconstruction) RES SUB (Corporation Yard)

Soil Unit	Description	Development Sites
Santa Lucia Shaly Clay Loam 15% to 30% Slopes	This map unit is dominated by soils of the Santa Lucia series, which typically consist of shallow to moderately deep, well drained, moderately fine-textured soils formed from weathered shale.	RD (SR 1/SR 68/17-Mile Drive Intersection Reconfiguration)
Santa Lucia Shaly Clay Loam 30% to 50% Slopes	This map unit is dominated by soils of the Santa Lucia series, which typically consist of shallow to moderately deep, well drained, moderately fine-textured soils formed from weathered shale.	RD (SR 1/SR 68/17-Mile Drive Intersection Reconfiguration)
Sheridan Coarse Sandy Loam 15% to 30% Slopes	This map unit is dominated by soils of the Sheridan series, which typically consist of moderately deep to deep, well drained, moderately coarse-textured soils that formed from weathered granitic and schistose bedrock on hills and mountains.	RES SUB (Corporation Yard)
Tangair Fine Sand 2% to 9% Slopes	This map unit is dominated by soils of the Tangair series, which typically consist of very deep, somewhat poorly drained, coarse-textured soils formed from sand deposits on wind-modified terraces.	SBI (All three development sites)
<p>PBL – The Lodge at Pebble Beach; SBI – The Inn at Spanish Bay; COL-EQC – Collins Field–Equestrian Center–Special Events Area; MH – Area M Spyglass Hill—New Resort Hotel (Option 1); MR – Area M Spyglass Hill—New Residential Lots (Option 2); RES SUB – Residential Lot Subdivisions; RD – Roadway Improvements</p>		

1

1 **Table 3.6-4. Characteristics of Soil Map Units Located in the Project Area and Development Sites**

Soil Map Unit^a	Parent Material	Texture	Depth to Bedrock (inches)	Shrink-Swell Potential	Runoff Rate	Water Erosion Hazard	Wind Erosion Hazard^b	Development Sites with Soil Unit	
BbC	Baywood Sand, 2% to 15% slopes	eolian sand deposits	sand	>60	low	slow-medium	slight-moderate	high	SBI (All three development sites)
Df	Dune Land	eolian sand deposits	sand	>60	low	v. slow-slow	high-v. high	high	SBI (Conference Center Expansion, New Guest Cottages)
NcC	Narlon Loamy Fine Sand, 2% to 9% slopes	soft marine sediments	loamy fine sand, clay	53	low-high	slow-medium	Moderate	high	COL-EQC (All three development sites) PBL (All three development sites) RES SUB (U, V, K, I-2, F-2) RD (SR 1/SR 68/17-Mile Drive Intersection Reconfiguration)
NcE	Narlon Loamy Fine Sand, 15% to 30% slopes	soft marine sediments	loamy fine sand, clay	53	low-high	medium	Moderate	high	RES SUB (I-2, F-2, J)
Pm	Pits and Dumps	N/A	variable	variable	variable	variable	High	variable	COL-EQC (Equestrian Center Reconstruction) RES SUB (Corporation Yard)
SfE	Santa Lucia Shaly Clay, 15% to 30% slopes	weathered shale	shaly clay loam	24	low	medium	Moderate	low	RD (SR 1/SR 68/17-Mile Drive Intersection Reconfiguration)
SfF	Santa Lucia Shaly Clay 30% to 50% slopes	weathered shale	shaly clay loam	<20	low	rapid	High	low	RD (SR 1/SR 68/17-Mile Drive Intersection) Reconfiguration
SoE	Sheridan Coarse Sandy Loam, 15% to 30% slopes	weathered schistose and granitic bedrock	coarse sandy loam	39	low	rapid	Moderate	high	RES SUB (Corporation Yard)

Soil Map Unit^a	Parent Material	Texture	Depth to Bedrock (inches)	Shrink-Swell Potential	Runoff Rate	Water Erosion Hazard	Wind Erosion Hazard^b	Development Sites with Soil Unit	
TaC	Tangair Fine Sand, 2% to 9% slopes	sand	fine sand, sandy loam	>60	low	Slow	Slight	high	SBI (All three development sites)

Notes:

^a Properties listed are for the dominant soil map unit component(s) only.

^b Wind erosion hazard estimated from Wind Erodibility Group (WEG) ratings (U.S. Department of Agriculture Natural Resources Conservation Service 2001) as determined by ICF as follows: WEGs 1 through 3 = high; WEGs 4 through 6 = moderate; WEGs 7 and 8 = low.

N/A = Not Applicable

PBL – The Lodge at Pebble Beach; **SBI** – The Inn at Spanish Bay; **COL-EQC** – Collins Field–Equestrian Center–Special Events Area; **MH** – Area M Spyglass Hill—New Resort Hotel (Option 1); **MR** – Area M Spyglass Hill—New Residential Lots (Option 2); **RES SUB** – Residential Lot Subdivisions; **RD** – Roadway Improvements
Source: (Cook 1978)

1 Geotechnical Constraints and Concerns

2 Geotechnical constraints and concerns identified in the geotechnical reports prepared for the
 3 proposed project are summarized in Table 3.6-5 and Table 3.6-6.

4 **Table 3.6-5. Summary of Geologic, Seismic, and Soil Constraints at Proposed Development Sites**

Constraint	Development Sites							
	PBL	SBI	COL- EQC	MH	MR	RES- SUB	RD	HWY
Strong Seismic Ground Shaking	X	X	X	X	X	X	X	X
Moderate to High Water Erosion Hazard		X	X	X	X	X	X	X
High Wind Erosion Hazard		X	X	X	X	X	X	X
Expansive Soils		X	X	X	X	X	X	X
Unconsolidated Fill		X		X	X	X		
Existing Steep Slopes (>30%)				X	X	X		X
Slope Stability Hazards				X	X	X		
No major constraints with implementation of standard engineering methods; recommendations of Geotechnical Engineer of Record; and CIP, zoning, and UBC standards.	X	X	X	X	X	X	X	X

Source:

Summarized from Table 3.6-6.

5

6 **Table 3.6-6. Summary of Hazards and Concerns mentioned in Geotechnical and Geologic Reports**

Project Development Area	Hazards and Concerns Mentioned
PBL	No adverse geotechnical or geologic hazards that would preclude the proposed development in The Lodge at Pebble Beach area. Area Concerns: strong seismic shaking, firm and uniform bearing support for foundations, and provision for adequate surface and subsurface site drainage during and after construction. Specific Development Site Concerns: Meeting Facility Expansion: potential for significant perched groundwater and expansive soils. Parking and Circulation Reconstruction (underground parking structure): loose subsaturated and subsurface zones and stability of temporary cut slopes, potential for significant groundwater. Fairway One Reconstruction: potential for local weak subsurface zones and stability of temporary cut slopes, potential for significant groundwater.
SBI	No adverse geotechnical or geologic hazards that would preclude the proposed development in The Inn at Spanish Bay area. Area Concerns: strong seismic shaking, perched surface/groundwater, compressible and highly erodible residuals soils in upper 1-2 feet, firm and uniform bearing support for foundations.

Project Development Area	Hazards and Concerns Mentioned
COL-EQC	<p>No adverse geotechnical or geologic hazards that would preclude proposed development in the Collins Field-Equestrian Center-Special Events Area.</p> <p>Area Concerns: inadequate surface site drainage, erosion potential, the potential for strong seismic shaking, potential presence of shallow or perched groundwater and expansive soils.</p>
MH/MR	<p>No adverse geotechnical or geologic hazards that would preclude the proposed development in the Area M Spyglass Hill area for either the New Resort Hotel option or the New Residential Lots option.</p> <p>Area Concerns: strong seismic shaking, extensive grading to ensure proper placement of engineered fills beneath the proposed building sites, adequate removal of unsuitable fill materials, slope instability and erosion of over steepened fill slopes, perched groundwater, expansive clays, and uniform bearing support for foundations.</p>
RES SUB	<p>No identified geotechnical or geologic hazards or constraints that would preclude the development overall of the proposed residential subdivisions.</p> <p>Area Concerns: strong seismic shaking, stability of temporary cut slopes; expansive/weak soils, erosion potential, high potential for perched surface or groundwater, and uniform bearing support for foundations.</p> <p><u>Specific Development Site Concerns:</u></p> <p>Corporation Yard: slope instability within the old landfill embankment and settlement of the existing landfill materials. Settlement of the existing landfill materials, extensive grading to ensure adequate removal of unsuitable fill materials and proper placement of engineered fills beneath proposed building sites, uniform bearing support for the proposed structures and adequate surface and subsurface site drainage during and after construction.</p> <p>Area L: Compressible and highly erodible soils in upper 1-2 feet.</p> <p>Area J: Instability of steep cutbanks along creek, and compressible and highly erodible soils in upper 2 feet.</p> <p>Area F-2: Compressible, highly erodible soils in upper 2 feet.</p> <p>Area U: Highly erodible soils near drainage channel (Lots 3 and 4).</p> <p>Area K: Instability of steep cutbanks, compressible and highly erodible soils in upper 2 feet, and flooding from adjacent drainage channels.</p> <p>Area I-2: Erosion of surface soils from uncontrolled surface runoff and compressible and highly erodible soils in upper 2 feet.</p> <p>Area V: Flooding on portions of Lots 1-5.</p>
RD	<p>No adverse geotechnical hazards identified that would preclude construction of the proposed SR 1/SR 68/17-Mile Drive intersection reconfiguration or other internal intersection improvements</p>

Source:

Foxx, Nielsen and Associates 1990a, 1990b; Haro, Kasunich and Associates, Inc. 2001a, 2001b, 2001c, 2001d, 2001e, 2001f, 2001g, 2002a, 2002b; M. Jacobs & Associates 1990, 1991a, 1991b; Mark Thomas & Co. Inc. 2001; Nielsen and Associates 2002a, 2002b, 2002c, 2002d, 2002e, 2002f, 2002g, 2002h, 2002i; Terratech Inc. 1991; Parikh Consultants, 2001(for SR 1/SR 68); County of Monterey 1995 (for residential areas).

Notes:

PBL – The Lodge at Pebble Beach; **SBI** – The Inn at Spanish Bay; **COL-EQC** – Collins Field–Equestrian Center–Special Events Area; **MH** – Area M Spyglass Hill—New Resort Hotel (Option 1); **MR** – Area M Spyglass Hill—New Residential Lots (Option 2); **RES SUB** – Residential Lot Subdivisions; **RD** – Roadway Improvements

1 Hazardous Materials

2 None of the proposed uses or locations will result in creation of risks associated with hazardous
3 material use, creation of a health hazard, or interference with an emergency response plan
4 (Monterey County 2002b). Thus, operational and upset impacts related to hazardous materials are
5 not analyzed further in this Draft EIR.

6 The Corporation Yard has had past and current use of fuel underground storage tanks, and it is the
7 site of a former landfill. To assess potential hazardous materials related to the existing and prior use
8 of the site, D & M Consulting Engineers (DMCE) completed a Phase 1 Environmental Site Assessment
9 for various Pebble Beach Company-owned properties including the Corporation Yard in July 1999
10 (Monterey County 2005). DMCE conducted an additional site reconnaissance and environmental
11 document review for the Corporation Yard in 2002 (Monterey County 2005).

12 Conclusions regarding the Corporation Yard in the Phase 1 report are as follows:

13 **Underground Storage Tanks.** Double-walled gasoline, diesel, and waste oil underground storage
14 tanks (USTs) have been operated at the Corporation Yard since 1986. The MCHD issued a 1998
15 upgrade compliance certificate for the UST systems, and leaks have not been detected. Overfill
16 protection or sump sensors were not installed until 1997. The annular space sensors for all three
17 USTs failed function tests in October 1997; the monitoring system was later upgraded. Two sumps
18 are located in the Corporation Yard, one in the fueling area. Two hydraulic hoists are operated at the
19 yard, with underground piping leading to aboveground hydraulic oil tanks. DMCE did identify the
20 tanks as a recognized environmental condition, but did not identify any indications of leaks from any
21 of these systems and did not recommend further analytic testing. DMCE did note that the operation
22 of such systems should be monitored closely (Monterey County 2005).

23 **Landfill.** DMCE identified that a portion of the Del Monte quarry was used as an unsupervised
24 dumping ground for many years. During a prior subsurface geotechnical investigation, debris
25 encountered in the fill material included wood chunks, decayed wood fragments, metal, plastic,
26 concrete, asphalt and masonry (all inert debris). Based on the prior subsurface investigation, a fill
27 area was identified on the site, measuring up to 60 feet thick. The fill material has a strong odor of
28 fuel, but this was attributed to decaying organic matter. DMCE identified that methane off-gassing
29 might also be occurring in this area. DMCE did not identify any evidence that hazardous materials
30 were dumped in this area. DMCE identifies that there is an absence of beneficial uses of ground
31 water in this bedrock bowl. DMCE did not identify the landfill as a recognized environmental
32 condition and did not recommend further analytical testing (Monterey County 2005).

33 The 2002 site reconnaissance and records review did not identify any evidence of stains, fuels or
34 potentially hazardous materials and did not identify any spills, contaminant, or leak files for the
35 Corporation Yard site on files at the MCHD (Monterey County 2005).

1 Impacts Analysis

2 Methodology

3 Approach

4 Numerous studies have been completed to establish baseline conditions for the development sites in
5 the project area. These studies have provided a good understanding of site conditions, including site
6 constraints and limitations, and recommendations for mitigating any identified impacts. To
7 determine potential impacts, the proposed activity at each development site was analyzed using the
8 information contained in the studies and the significance criteria described below.

9 Criteria for Determining Significance

10 In accordance with CEQA, State CEQA Guidelines, Monterey County plans and policies, and agency
11 and professional standards, a project impact would be considered significant if the project would:

12 Seismic Hazards

- 13 • Expose people or structures to potential substantial adverse effects resulting from the rupture
14 of a known earthquake fault, seismic ground shaking, landslides, or seismic-related ground-
15 failure, including liquefaction, and that cannot be mitigated through the use of standard
16 engineering design techniques.

17 Landslides and Slope Stability

- 18 • Be located on a geologic unit or soil that is unstable or that would become unstable as a result of
19 the proposed project and potentially result in an onsite or offsite landslide or slope failure.
- 20 • Be located on an existing slope with a gradient greater than 30%.

21 Erosion

- 22 • Result in substantial soil erosion or the loss of topsoil and subsequent sedimentation into local
23 drainage facilities and water bodies.

24 Soil Constraints

- 25 • Be located on an expansive soil, as defined by the CUBC (1997) or be subject to other soil
26 constraints that might result in deformation of foundations or damage to structures, creating
27 substantial risks to life or property.

28 Hazardous Materials

- 29 • Create a significant hazard to the public or the environment through the release of hazardous
30 materials into the environment.

1 Project Impacts and Mitigation Measures

2 A. Seismic Hazards

3 **Impact GSS-A1. Placement of new structures could result in potential structural damage and** 4 **associated human safety hazards resulting from ground shaking caused by earthquakes on** 5 **nearby active and potentially active faults. (Less than significant with mitigation)**

6 Recent regional and site-specific seismic hazard assessments on the Monterey Peninsula indicate
 7 that the entire project area would likely experience strong to severe ground shaking from an
 8 earthquake during the next 50 years (Haro, Kasunich and Associates, Inc. 2001a, 2001b, 2001c,
 9 2001d, 2001e, 2002a, 2002b, 2010a, 2010b, 2010c, 2010d, 2010e, 2010f, 2010g, 2010h, 2010i,
 10 2010j, 2010k, 2010l; Monterey County 2002, Nielsen and Associates 2002a, 2002b, 2002c, 2002d,
 11 2002e, 2002f, 2002g, 2002h, 2002i). Ground shaking could cause damage to project-related
 12 structures and expose people using or inhabiting these structures to adverse effects, such as injury
 13 or death. This impact is considered significant. As stated in Chapter 2, Project Description, all
 14 structures would be constructed to comply with the CUBC. Implementation of Mitigation Measure
 15 GSS-A1, which requires implementation of measures recommended in the site-specific geologic and
 16 geotechnical reports, would reduce this impact to a less-than-significant level.

17 **Mitigation Measure GSS-A1. Ensure final design and construction specifications include** 18 **recommendations contained in site-specific geologic and geotechnical reports.**

19 The applicant will ensure that final design of all proposed structures includes recommendations
 20 contained in the site-specific geologic and geotechnical reports which include, but are not
 21 limited to, those measures summarized below, and any additional recommendations made by
 22 the engineer of record during the final stages of project design. (Haro, Kasunich and Associates,
 23 Inc. 2002a, 2010a, 2010b, 2010c, 2010d, 2010e, 2010f, 2010g, 2010h, 2010i, 2010j, 2010k,
 24 2010l, 2010m)

25 Seismic (All Development Sites)

- 26 ● Design all built structures in accordance with the current CUBC.

27 Expansive Soils (All Development Sites)

- 28 ● Remove expansive soils and replace them with non-expansive engineered fill. A less
 29 desirable option for expansive soil mitigation would include pre-saturating the expansive
 30 soils (clays) and then underpinning foundations with helical anchors and/or post tension
 31 slabs.

32 Shallow/Perched Groundwater (The Lodge at Pebble Beach, The Inn at Spanish Bay, Area M 33 Spyglass Hill)

- 34 ● Construct subsurface drainage for excavations and permanent structures.
- 35 ● For Meeting Facility Expansion at The Lodge at Pebble Beach, construct curtain drains on
 36 the north side (upslope) to protect the foundation from groundwater. Improvements at this
 37 area might affect existing subterranean retaining walls and should be evaluated by a
 38 structural engineer to determine if additional improvements or protection measures are
 39 necessary (Haro, Kasunich and Associates, Inc, 2010b).

1 Slope Stability (Area M Spyglass Hill)

- 2 ● For New Resort Hotel (Option 1) and New Residential Lots 1-7 (Option 2) where the
3 steepened fill slopes possess inadequate engineering qualities for structure support and are
4 unstable, remove un-engineered fill in the quarry area down to firm in situ earth materials
5 and replace with compacted engineered fill (inclined at 2:1 slope or flatter) in areas
6 designated to support improvements. For residential lots, development will be on portions
7 of the lots with less steep slopes (Haro, Kasunich and Associates, Inc. 2010c, 2010d).

8 Unconsolidated Fill (The Inn at Spanish Bay, Area M Spyglass Hill, Corporation Yard)

- 9 ● For the Conference Center Expansion where the undocumented fill is medium dense but can
10 be variable, design the foundation elements to penetrate undocumented fill and be
11 imbedded into competent native soil or, alternatively, the undocumented fill could be sub-
12 excavated to the underlying native bedrock and replaced with engineered fill to provide
13 uniform bearing support (Haro, Kasunich and Associates, Inc. 2010a.).
- 14 ● For Residential Lot Subdivision at the Corporation Yard (10 residential lots) where man-
15 made fill underlies the area, completely remove existing landfill materials and reclaim
16 building sites with engineered fill placed in accordance with standard engineered fill
17 procedures to provide adequate load-bearing support and adequate surface and subsurface
18 drainage during and after construction (Haro, Kasunich and Associates, Inc. 2010m).
- 19 ● For Residential Lot Subdivision at Area K where there are some steep cutbanks, the
20 structural foundation elements will be set back at least 20 feet from the crest of cutbanks of
21 drainage channels.

23 **B. Landslides and Slope Stability**

24 **Impact GSS-B1. Placement of buildings and grading on steep and/or unstable slopes could**
25 **result in potential structural damage and associated human safety hazards from mass**
26 **movements (landslides and debris flow). (Less than significant with mitigation)**

27 Area M Spyglass Hill has steep and/or unstable slopes on most of the development site. The steep
28 slopes appear to be associated with a small ravine and the excavated Spyglass quarry pit. Proposed
29 development on steep and/or unstable slopes includes most of the New Resort Hotel (Option 1) and
30 New Residential Lots 1–7 (Option 2).

31 For New Residential Lots (Option 2), impacts would be reduced to a less-than-significant level
32 through proper site design and/or dedication of conservation easements, while allowing for
33 residential development on portions of the lots with less steep slopes.

34 For New Resort Hotel (Option 1), movement of the structures from their proposed location to
35 another portion of the development area is not considered feasible without likely resulting in
36 additional environmental impact because of the multiple environmental and physical constraints for
37 the hotel alternative. The geotechnical/geologic feasibility assessment did not identify the existing
38 steep slopes as a hazard that would preclude development of the resort hotel facilities in this area,
39 although certain recommendations were made relevant to hotel construction such as control of
40 surface and subsurface drainage, removal of unconsolidated fill and use of engineered fill (Haro,
41 Kasunich and Associates, Inc. 2001d). A 2002 geologic investigation also recommended removal of

1 any unengineered fill and use of engineered compacted fill to properly support structures and
2 development of an engineered drainage and erosion control plan (Nielsen and Associates 2002d).
3 The geotechnical and geologic feasibility update letters (Haro, Kasunich and Associates, Inc. 2010c
4 and 2010d) for both options corroborated those previous studies and concluded that
5 recommendations presented by HKA in 2001 and Nielson and Associates in 2002 still apply.

6 There are also steep side slopes at the SR 1/SR 68 location, but these are not identified as a
7 construction constraint in the geotechnical report (Parikh 2001).

8 The current LUP prohibits development on slopes exceeding 30% unless the proposed development
9 better achieves the resource protection objectives and policies of the Del Monte Forest LUP and
10 development standards of the CIP.

11 The proposed development activities would also involve a substantial amount of land grading,
12 which could destabilize existing slopes and create unstable manufactured (cut-and-fill slopes)
13 slopes. Resulting slope failures (e.g. landslides and debris flows) could cause damage to existing and
14 proposed structures and expose people to resultant risk. Therefore, construction and placement of
15 structures on steep slopes and manufacture of steep slopes in Area M Spyglass Hill is considered a
16 potentially significant impact.

17 This impact would be reduced to a less-than-significant level with implementation of Mitigation
18 Measure GSS-A1.

19 **Mitigation Measure GSS-A1. Ensure final design and construction specifications include**
20 **recommendations contained in site-specific geologic and geotechnical reports.** See above.

21 C. Erosion

22 **Impact GSS-C1. Grading and excavation could result in substantial soil erosion, loss of topsoil,** 23 **and sedimentation. (Less than significant with mitigation)**

24 Construction of the proposed development would involve land clearing, land grading, and other
25 ground-disturbing activities that could temporarily increase soil erosion rates during and shortly
26 after project construction. The proposed project would involve grading at almost all development
27 sites and excavation of approximately 196,000 to 247,000 cubic yards (cy) of soil.¹ Table 2-3 in
28 Chapter 2, Project Description, identifies the cut-and-fill amounts by location. Three project
29 elements would result in substantial excavation (> 20,000 cubic yards) at the development site:

- 30 • Pebble Beach Driving Range Relocation from Area V to Collins Field (35,600 cy).
- 31 • Area M Spyglass Hill New Resort Hotel (Option 1) (99,800 cy) or New Residential Lots (Option
32 2) (48,500 cy).
- 33 • Residential Lot Subdivision at the Corporation Yard (58,000 cy).

34 As currently planned, net project cut-and-fill balances would be 36,000 cy under Option 1 and 2,000
35 cy under Option 2. Fill will be supplied from cut material from the same or another project element.
36 Cut material not used for fill would be transported to the Marina Landfill.

¹ There would be 247,000 cy under Option 1 New Resort Hotel and 196,000 cy under Option 2 New Residential Lots in the Area M Spyglass Hill development site.

1 The hazard of water and wind erosion at development sites in the project area ranges from
2 moderate to very high (Cook 1978). Construction-related erosion could result in the loss of a
3 substantial amount of nonrenewable topsoil and could adversely affect water quality in nearby
4 surface waters. This impact is considered potentially significant. Compliance with the County's
5 Erosion Control Ordinance (Chapters 16.08 through 16.12 of the County Code) and implementation
6 of Mitigation Measure GSS-C1 would reduce this impact to a less-than-significant level because it
7 ensures preparation and implementation of an erosion and sedimentation control plan.

8 **Mitigation Measure GSS-C1. Prepare and implement an erosion and sediment control**
9 **plan.**

10 The applicant with a qualified consultant will prepare and implement an erosion and sediment
11 control plan(s) for the proposed development activities. The plan will be prepared in
12 accordance with the requirements of the County's Erosion Control Ordinance (Chapters 16.08
13 through 16.12 of the County Code) and be approved by the County Building Services
14 Department. The plan will contain details and specifications for a variety of standard and site-
15 specific BMPs that will be implemented to control wind and water erosion, stormwater runoff,
16 sediment, and other construction-related pollutants during project construction. The plan will
17 also include additional erosion control measures, as required by the Monterey County Erosion
18 Control Ordinance (Section 16.12.090), such as use of mulching, construction of sediment catch
19 basins and cessation of operations when soils are saturated and other measures as needed to
20 control erosion.

21 The erosion and sediment control plan will remain in effect until all areas disturbed during
22 construction have been permanently stabilized. Many of the erosion and sediment control BMPs
23 that will be used during project construction are described in the BMP plan (Questa 2003).
24 Additional measures may be prescribed during the final stages of project design and
25 construction. The Erosion and Sediment Control Plan for each portion of the proposed project
26 will be submitted to Monterey County Building Services Department for review and approval
27 prior to issuance of any grading permit for that portion of the proposed project. This measure
28 can be combined with requirements of Mitigation Measure HWQ-C1 (see Section 3.4, Hydrology
29 and Water Quality) to prepare a SWPPP in compliance with NPDES general construction permit
30 requirements.

31 **D. Soil Constraints**

32 **Impact GSS-D1. Construction in areas of expansive soils could result in substantial damage to**
33 **overlying building foundations and roadways. (Less than significant with mitigation)**

34 All of the proposed development sites contain at least one soil map unit that contains expansive soil
35 at some depth. If these expansive soil materials are exposed at finished grade, they could cause
36 substantial damage to overlying building foundations and roadways. This impact is considered
37 potentially significant, but it would be reduced to a less-than-significant level by implementing
38 Mitigation Measure GSS-A1.

1 **Mitigation Measure GSS-A1. Ensure final design and construction specifications include**
2 **recommendations contained in the site-specific geologic and geotechnical reports. See**
3 above.

4 **Impact GSS-D2. Construction of underground structures in the presence of shallow**
5 **groundwater and weak surrounding deposits could result in inadequate drainage and**
6 **structural failure during construction or operation. (Less than significant with mitigation)**

7 The underground parking structures at The Lodge at Pebble Beach (Parking and Circulation
8 Reconstruction and New Colton Building) and Area M Spyglass Hill (Option 1 New Resort Hotel)
9 would be excavated into areas with shallow groundwater. Thus excavation would likely result in
10 significant seepage. Deep subdrains may not be able to disperse subsurface flow via gravity. The
11 terrace deposits and buried alluvium at The Lodge at Pebble Beach and the loose dune sands that
12 overlie the dense decomposed granodiorite at Area M Spyglass Hill are potentially unstable.
13 Inadequate surface drainage in this area could exacerbate soil instability.

14 Additionally, future residential development in Area M Spyglass Hill, Area F-2, Area L, Area I-2, Area
15 J, Area V, Area K, and Area U could include underground structures (e.g., garage, cellar) and be
16 subject to the same impact described above.

17 This impact is considered potentially significant, but it would be reduced to a less-than-significant
18 level by implementing Mitigation Measures GSS-A1, GSS-D1, HYD-A1, and HYD-A2.

19 **Mitigation Measure GSS-A1. Ensure final design and construction specifications include**
20 **recommendations contained in site-specific geologic and geotechnical reports. See above.**

21 **Mitigation Measure GSS-D1. Dewater excavations and shore temporary cuts during**
22 **construction of the underground facilities.**

23 The applicant will ensure construction specifications require dewatering and shoring as
24 necessary to handle drainage and potential excavation wall stability during construction of
25 underground facilities. Underground facilities include parking structures for the New Resort
26 Hotel (Option 1) at Area M Spyglass Hill and for the Parking and Circulation Reconstruction and
27 the New Colton Building at The Lodge at Pebble Beach. Additionally, there could be
28 underground facilities at new residential development at Area M Spyglass Hill (Option 2).

29 **Mitigation Measure HYD-A1. Ensure on-site detention of stormwater run-off at**
30 **development sites and oil/grease separators at parking lots; prepare final drainage plan**
31 **with flow calculations and construction detail; and implement approved drainage plan.**
32 See Section 3.7, Hydrology and Water Quality.

33 **Mitigation Measure HYD-A2. Maintain and monitor drainage and flood control facilities,**
34 **and prepare annual reports that describe the condition, maintenance performed, and**
35 **required improvements of drainage and flood control facilities. See Section 3.7, Hydrology**
36 and Water Quality.

1 **Impact GSS-D3. Construction in areas of unconsolidated fill could result in settlement and**
2 **substantial damage to overlying building foundations. (Less than significant with mitigation)**

3 Project elements that would be constructed in areas of unconsolidated fill include Conference Center
4 Expansion at The Inn at Spanish Bay; New Resort Hotel (Option 1) and New Residential Lots (Option
5 2) at Area M Spyglass Hill; and Residential Lot Subdivision at the Corporation Yard. Placement of
6 structures in these areas could result in uneven settlement that could cause substantial damage to
7 overlying building foundations. This impact is considered potentially significant, but it would be
8 reduced to a less-than-significant level by implementing Mitigation Measure GSS-A1 because it
9 includes specific recommendations from the geotechnical reports for constructing these project
10 elements.

11 **Mitigation Measure GSS-A1. Ensure final design and construction specifications include**
12 **recommendations contained in site-specific geotechnical and geologic reports. See above.**

13 **E. Hazardous Materials**

14 **Impact GSS-E1. Potential hazardous materials and methane off-gassing related to materials in**
15 **the fill at the Corporation Yard could result in worker and/or resident exposure to hazardous**
16 **materials or hazardous conditions. (Less than significant with mitigation)**

17 While the Phase 1 Environmental Site Assessment did not identify any evidence of hazardous
18 material being dumped in the Corporation Yard area, the area is identified as an unsupervised
19 dumping ground. Thus, there is a potential for hazardous material to have been placed in the fill,
20 perhaps without the knowledge of operating personnel. In addition, DMCE identified a potential for
21 methane off-gassing from the fill (Monterey County 2005). Additionally, workers and/or future
22 residents could be exposed to hazardous materials, if present in the fill area. Methane off-gassing
23 could also result in a hazardous condition for workers and/or future residents. This impact is
24 considered potentially significant, but it would be reduced to a less-than-significant level by
25 implementing Mitigation Measures GSS-E1 and GSS-E2.

26 **Mitigation Measure GSS-E1. Conduct Phase II investigation consisting of subsurface soil**
27 **borings and initiate remedial action if warranted at Corporation Yard.**

28 In order to prevent potential worker and/or resident exposure to potential hazardous materials
29 that might have been placed in the Corporation Yard fill area, the applicant will hire a qualified
30 consultant to conduct a subsurface soil investigation, including analytical testing of subsurface
31 soil samples from within the fill, for the presence of hazardous constituents. The sampling
32 results will be provided to Monterey County Environmental Health Bureau and the California
33 Department of Toxic Substances Control. If warranted based on the results, the applicant will
34 remediate the site as necessary to prevent significant exposure of workers and/or future
35 residents to hazardous constituents, if found. Remedial action, if warranted, will be conducted in
36 compliance with all applicable local, state, and federal regulations regarding hazardous material
37 and hazardous waste. Remedial action, if warranted, will be completed prior to construction of
38 the infrastructure for the residential subdivision at the Corporation Yard.

1 **Mitigation Measure GSS-E2. Assess potential for methane off-gassing at the Corporation**
2 **Yard fill area and incorporate methane controls and/or venting into construction plans**
3 **and final design if warranted.**

4 In order to prevent hazardous conditions (e.g., explosion, asphyxiation), the applicant will hire a
5 qualified consultant to assess the potential for methane off-gassing (including collection of soil
6 gas samples) to result in unsafe conditions for workers during construction and/or future
7 residents. The assessment will be provided to the Monterey County Environmental Health
8 Bureau. If warranted based on the assessment, the applicant will incorporate methane control
9 measures (such as geomembranes) and/or venting in design plans as necessary to avert
10 hazardous conditions. Monitoring of methane will be conducted post-construction, if
11 determined necessary by the County, to confirm the effectiveness of any implemented control
12 measures. Design changes will be included in final engineering plans submitted to County prior
13 to issuance of grading permit.

14 **Cumulative Impacts and Mitigation Measures**

15 The impact zone for geology, seismicity, and soils is Del Monte Forest. The methodology for
16 determining cumulative impacts is described under Analysis of Cumulative Impacts at the beginning
17 of Chapter 3.

18 **A. Seismic Hazards**

19 **Impact GSS-A1(C). Cumulative development in Del Monte Forest would include new**
20 **structures that may result in exposure to seismic hazards, but the proposed project's**
21 **contribution would be reduced to a less-than-significant level with mitigation.**

22 As discussed above, recent regional and site-specific seismic hazard assessments on the Monterey
23 Peninsula indicate that the entire project area, which includes the proposed project and other
24 potential cumulative development in Del Monte Forest, would be susceptible to strong to severe
25 ground shaking from an earthquake in the next 50 years. However, implementation of Mitigation
26 Measure GSS-A1 would ensure that the requirements contained in site-specific geologic and
27 geotechnical reports. Similarly, other cumulative development would be required to comply with
28 building code requirements and geologic/geotechnical report analyses as required by the County.
29 Therefore, although cumulative development impacts related to seismic hazards are considered to
30 be potentially significant, the proposed project's contribution would not be considerable.

31 **B. Landslides and Slope Stability**

32 **Impact GSS-B1(C). Cumulative development in Del Monte Forest could expose people and**
33 **structures to landslides and slope instability, but the proposed project's contribution would**
34 **be reduced to a less-than-significant level with mitigation.**

35 Cumulative development in Del Monte Forest other than the proposed project would be very limited
36 to construction of single-family residences. These individual homes would be required to comply
37 with site-specific geotechnical recommendations/measures as required by the County. Potential
38 areas where steep and/or unstable slopes exist within the project area include Area M Spyglass Hill
39 and at the SR 1/SR 68/17-Mile Drive intersection. However, implementation of Mitigation Measure
40 GSS-A1 would implement design criteria in these areas, and would reduce potential project impacts

1 from placement of building and grading on steep and/or unstable slopes. Therefore, although
2 cumulative development impacts related to landslides/slope stability are considered to be
3 potentially significant, the proposed project's contribution would not be considerable.

4 **C. Erosion**

5 **Impact GSS-C1(C). Cumulative development in Del Monte Forest could result in substantial**
6 **soil erosion, loss of topsoil, and sedimentation, but the proposed project's contribution**
7 **would be reduced to a less-than-significant level with mitigation.**

8 Cumulative development in Del Monte Forest other than the proposed project would be limited to
9 construction of single-family residences. These individual homes would be required to comply with
10 site-specific geotechnical recommendations/measures as required by the County. Potential areas
11 where there would be substantial excavation include the Pebble Beach Driving Range, Area M
12 Spyglass Hill, and Residential Lot Subdivision at the Corporation Yard. Furthermore, potential
13 water/wind erosion impacts at the development sites ranges from moderate to high. These
14 conditions could lead to a substantial loss of topsoil and could adversely affect nearby water quality.
15 Implementation of Mitigation Measure GSS-C1 would include preparation of an erosion and
16 sediment control plan that would reduce these impacts to a less-than-significant level. Therefore,
17 although cumulative development impacts related to erosion are considered to be potentially
18 significant, the proposed project's contribution would not be considerable with mitigation.

19 **D. Soil Constraints**

20 **Impact GSS-D1(C) and Impact GSS-D3(C). Cumulative development in Del Monte Forest,**
21 **including the proposed project, may result in damage to structures or exposure of people to**
22 **risks due to soil constraints, but the proposed project's contribution would be reduced to a**
23 **less-than-significant level with mitigation.**

24 Cumulative development in Del Monte Forest other than the proposed project would be limited to
25 construction of single-family residences. These individual homes would be required to comply with
26 site-specific geotechnical recommendations/measures as required by the County. Potential areas of
27 expansive soils that could result in substantial damage to overlying building foundations and
28 roadways exist within all of the proposed development sites. Areas of unconsolidated fill include the
29 Conference Center Expansion, New Guest Cottages at The Inn at Spanish Bay, both development
30 options at Area M Spyglass Hill, and the Residential Lot Subdivision at the Corporation Yard.
31 Placement of structures in these areas could result in uneven settlement causing substantial damage
32 to overlying building foundations. However, all structures are required to be designed in accordance
33 with the requirements of the current CUBC and implementation of Mitigation Measure GSS-A1
34 would ensure that structures are designed pursuant to the requirements contained in site-specific
35 geologic and geotechnical. Therefore, although cumulative development impacts related to
36 expansive soils/unconsolidated soils susceptible to settlement are considered to be potentially
37 significant, the proposed project's contribution would not be considerable with mitigation.

1 **Impact GSS-D2(C). Cumulative development in Del Monte Forest may expose structures or**
2 **people to risk from structural failure in areas of shallow groundwater and weak surrounding**
3 **deposits, but the proposed project's contribution would be reduced to a less-than-significant**
4 **level with mitigation.**

5 Cumulative development in Del Monte Forest would be limited to construction of single-family
6 residences. These individual homes would be required to comply with site-specific geotechnical
7 recommendations/measures as required by the County. The underground parking structures at The
8 Lodge at Pebble Beach and Area M Spyglass Hill would be excavated into areas with shallow
9 groundwater. Excavation could result in seepage and deep subdrains may not be able to disperse
10 subsurface flow via gravity, and terrace deposits and buried alluvium at these locations are
11 potentially unstable. Residential development in Area M Spyglass Hill, Area F-2, Area L, Area I-2,
12 Area J, Area V, Area K, and Area U also could have underground structures and may be subject to the
13 impacts from shallow groundwater and weak surrounding deposits. Implementation of Mitigation
14 Measures GSS-A1 and GSS-D1 would ensure that recommendations contained in the site-specific
15 geologic and geotechnical reports are implemented and that any excavation and temporary cuts
16 would be dewatered and shored during construction of underground facilities. Therefore, although
17 cumulative development impacts related to shallow groundwater, weak soils, and inadequate
18 drainage are considered to be potentially significant, the proposed project's contribution would not
19 be considerable with mitigation.

20 **E. Hazardous Materials**

21 **Impact GSS-E1(C). Cumulative development in Del Monte Forest might result in potential**
22 **exposure to hazardous materials, but the proposed project's contribution would be reduced**
23 **to a less-than-significant level with mitigation.**

24 Cumulative development may result in exposure of workers and/or residents to hazardous
25 materials or hazardous conditions. Specifically, at the project site, this includes the Corporation Yard
26 area, identified as an unsupervised dumping ground. However, individual development projects in
27 Del Monte Forest are not situated in proximity to the Corporation Yard and would be subject to
28 hazardous materials/wastes investigations specific to their site. Potential hazardous conditions that
29 would occur as a result of the proposed project would be addressed by Mitigation Measures GSS-E1
30 and GSS-E2, which would require preparation of a Phase II investigation, including subsurface
31 borings and remedial action if necessary, and assess potential for methane off-gassing at the
32 Corporation Yard, including methane controls and/or venting if warranted. Therefore, although
33 cumulative development impacts related to exposure of workers/residents to hazardous materials
34 would be considered potentially significant, the proposed project's contribution would not be
35 considerable with mitigation.
36

Section 3.7

Hydrology and Water Quality

Hydrology and Water Quality

1
2

3 This section presents a discussion of existing hydrology and water quality conditions in the project
4 area, potential hydrologic and water quality impacts, and proposed mitigation where applicable. It is
5 based on a review of several technical investigations and environmental studies performed in and
6 immediately adjacent to the project area (Balance Hydrologics 2001; EcoSynthesis 2000, 2003;
7 Questa Engineering 2003; Wetlands Research Associates 2001), and on recent drainage reports
8 prepared for the proposed project (WWD Corporation 2010, 2011). A summary of the impacts
9 identified is in Table 3.7-1.

10 The study area for the hydrology and water quality analysis includes all potentially affected
11 drainages and associated watersheds (within and adjacent to the project area), including Sawmill
12 Gulch, Seal Rock Creek, Fan Shell Beach, and Carmel Bay ASBS watersheds.

1 **Table 3.7-1. Summary of Project Impacts on Hydrology and Water Quality**

Project Impact	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Alteration of Drainage Patterns										
HYD-A1. The proposed project would result in the alteration of surface drainage patterns, but would not alter the course of a stream or river in a manner that would result in substantial erosion or siltation on or off the site.	⊙	⊙	⊙	⊙	⊙	⊙	—	—	—	⊙
Mitigation Measures:	HYD-A1. Ensure on-site detention of stormwater run-off at development sites and oil/grease separators at parking lots; prepare final drainage plan with flow calculations and construction detail, and implement approved drainage plan. HYD-A2. Maintain and monitor drainage and flood control facilities, and prepare annual reports that describe the condition, maintenance performed, and required improvements of drainage and flood control facilities.									
B. Stormwater Run-off and Drainage Infrastructure										
HYD-B1. The proposed project would result in increased stormwater run-off due to an increase in impervious surfaces and topographic alterations.	○	⊙	⊙	⊙	⊙	⊙	○	—	—	⊙
Mitigation Measures:	HYD-A1, HYD-A2. See above.									
C. Water Quality										
HYD-C1. The proposed project would degrade surface water quality due to an increase in sediment and pollutant loading in stormwater drainage during construction and from operation.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	HYD-A1, HYD-A2. See above. HYD-C1. Prepare and implement a stormwater pollution prevention plan to prevent and reduce sediments and contaminants in stormwater run-off during construction. HYD-C2. Provide regular inspection and maintenance of operational best management practices to ensure function and minimize the discharge of pollutants to surface water. GSS-C1. Prepare and implement an erosion and sediment control plan. GSS-D1. Dewater excavations and shore temporary cuts during construction of the underground facilities.									
HYD-C2. The proposed project could degrade water quality due to pesticide, herbicide, and fertilizer use from the Pebble Beach Driving Range Relocation from Area V to Collins Field.	—	—	⊙	—	—	—	—	—	—	⊙
Mitigation Measures:	HYD-C3. Prepare and implement an integrated pest management program for the relocated Pebble Beach Driving Range.									

Project Impact	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
<p>Notes:</p> <ul style="list-style-type: none"> ● = Significant unavoidable impact. ⊙ = Significant impact that can be reduced to less than significant. ○ = Less-than-significant impact. — = No impact or not applicable to the development site. <p>PBL – The Lodge at Pebble Beach; SBI – The Inn at Spanish Bay; COL-EQC – Collins Field–Equestrian Center–Special Events Area; MH – Area M Spyglass Hill—New Resort Hotel (Option 1); MR – Area M Spyglass Hill—New Residential Lots (Option 2); RES SUB – Residential Lot Subdivisions; RD – Roadway Improvements; TRA – Trail Improvements; INF – Infrastructure Improvements; Cumulative – Proposed Project’s Contribution to Cumulative Impacts</p>										

1

1 Regulatory Setting

2 Federal

3 Clean Water Act

4 The Clean Water Act (CWA) is the primary federal law that protects the quality of the nation's
5 surface waters, including lakes, rivers, and coastal wetlands. It operates on the principle that all
6 discharges into the nation's waters, unless exempted, are unlawful unless specifically authorized by
7 a permit. Permit review is the CWA's primary regulatory tool. The following sections provide
8 additional details on specific sections of the CWA.

9 All regulatory requirements are implemented by the State Water Resources Control Board, who has
10 jurisdiction throughout California (refer to the Porter-Cologne Water Quality Control Act below),
11 through nine regional water boards established throughout the state. The Central Coast Regional
12 Water Quality Control Board is responsible for implementing these requirements for Monterey
13 County.

14 Section 303—Impaired Water Bodies and Total Maximum Daily Loads

15 In accordance with Section 303(d) of the CWA, state governments must present EPA with a list of
16 *impaired water bodies*, defined as those water bodies that do not meet water quality standards, even
17 after point sources of pollution have installed the minimum required levels of pollution control
18 technology. NPDES permits (discussed below) for water discharges must take into account the
19 pollutant for which a water body is listed as impaired.

20 No creeks or tributaries in the study area have been included in the State Water Resources Control
21 Board's (SWRCB's) list of impaired water bodies (Central Coast Regional Water Quality Control
22 Board 2007).

23 Section 402—NPDES Program

24 The 1972 amendments to the federal Water Pollution Control Act established the NPDES permit
25 program to control discharges of pollutants from point sources (Section 402). The 1987
26 amendments to CWA created a new CWA section devoted to stormwater permitting (Section
27 402[p]). The EPA has granted the State of California primacy in administering and enforcing the
28 provisions of CWA and the NPDES permit program within the state. The NPDES permit program is
29 the primary federal program that regulates point source and nonpoint source discharges to waters
30 of the United States. The NPDES program provides for both general permits (which cover a number
31 of similar or related activities) and individual permits.

32 General Construction Permit

33 Most construction projects that disturb 1 acre of land or more are required to obtain coverage under
34 the NPDES General Permit for Construction Activities (Construction General Permit), which requires
35 that the applicant file a public NOI to discharge stormwater and to prepare and implement a SWPPP.
36 The SWPPP includes a site map, description of proposed construction activities, demonstration of
37 compliance with relevant local ordinances and regulations, and overview of the BMPs that will be
38 implemented to prevent soil erosion and discharge of other construction-related pollutants that
39 could contaminate nearby water resources. Permittees are required to conduct annual monitoring

1 and reporting to ensure that BMPs are correctly implemented and are effective in controlling the
2 discharge of stormwater-related pollutants.

3 **National Toxics Rule (40 CFR Part 131.36)**

4 The National Toxics Rule is EPA's rule promulgating the quantitative water quality criteria
5 necessary to bring all states into CWA compliance. The National Toxics Rule applies to the 14 states
6 and territories that were without EPA-approved criteria when the final rule was published (Alaska,
7 Arkansas, California, Florida, Idaho, Kansas, Michigan, Nevada, New Jersey, Rhode Island, Vermont,
8 Washington, District of Columbia, and Puerto Rico). For these states and territories, the criteria in
9 the National Toxics Rule are the legally enforceable standards for all purposes and programs under
10 the CWA.

11 **Federal Antidegradation Policy**

12 Federal water quality regulation contains an antidegradation policy and a requirement that states
13 develop a similar policy (40 CFR Section 131.12). This regulation establishes a three-part test to
14 determine whether increases in pollutant loading or adverse changes in the quality of federal
15 surface water may be permitted. The state antidegradation policy described below complies with
16 this requirement and incorporates the federal policy by reference.

17 **State**

18 **Porter-Cologne Water Quality Control Act**

19 The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) established the SWRCB and
20 divided the state into nine regions, each overseen by a Regional Water Board. The SWRCB is the
21 primary state agency responsible for protecting the quality of the state's surface water and
22 groundwater supplies, although much of its daily implementation authority is delegated to the
23 regional water boards, which are responsible for implementing CWA Sections 402 and 303(d). In
24 general, the SWRCB manages both water rights and statewide regulation of water quality, while the
25 regional water boards focus exclusively on water quality within their regions.

26 The regional water boards designate beneficial uses and establish water quality objectives within
27 the Basin Plan under the Porter-Cologne Act, federal CWA, and general provisions of California
28 Water Code Section 13000. Beneficial uses represent the services and qualities of a water body (i.e.,
29 the reasons the water body is considered valuable), while water quality objectives represent the
30 standards necessary to protect and support those beneficial uses.

31 The CCRWQCB is responsible for implementing the Water Quality Control Plan for the Central Coast
32 Region (Basin Plan), which includes Monterey County. The Basin Plan designates beneficial uses and
33 water quality objectives for waters of the state, including surface waters and groundwaters. The
34 Basin Plan includes both narrative and quantitative water quality objectives that can differ
35 depending on the specific beneficial uses being protected. Narrative objectives are established for
36 parameters such as color, suspended and settleable material, oil and grease, biostimulatory
37 substances, and toxicity. Numeric objectives can include such parameters as dissolved oxygen,
38 temperature, turbidity, pH, and specific chemical constituents such as trace metals and synthetic
39 organic compounds.

1 The Central Coast RWQCB implements the Basin Plan through the issuance and enforcement of
2 Waste Discharge Requirements (WDRs) and waivers of WDRs. WDRs may be issued to any entity
3 that discharges waste that may affect the quality of any Central Coast surface water or groundwater.
4 For discharges to waters protected under CWA, WDRs also could serve as a federally required
5 NPDES permit (under CWA) to regulate waste discharges so that water quality objectives are met
6 and to incorporate the requirements of other applicable regulations. Basin Plans are required to be
7 reviewed every 3 years and provide the regulatory basis for determining WDRs and waivers of
8 WDRs.

9 **Antidegradation Policy**

10 The Antidegradation Policy, formally known as the Statement of Policy with Respect to Maintaining
11 High Quality Waters in California (SWRCB Resolution No. 68-16), restricts degradation of surface
12 water and groundwater and is a key policy of California's water quality program. In particular, the
13 policy protects water bodies where existing quality is higher than necessary for the protection of
14 beneficial uses. Under the Antidegradation Policy, any action that can adversely affect water quality
15 in surface water and groundwater must (1) be consistent with maximum benefit to the people of the
16 state; (2) not unreasonably affect present and anticipated beneficial use of the water; and (3) not
17 result in water quality less than that prescribed in water quality plans and policies. The policy also
18 requires that waste discharges to high-quality waters meet WDRs that result in best practicable
19 treatment or control of the discharge and ensure that avoidance of pollution or nuisance and highest
20 water quality consistent with maximum benefit to the people of the state be maintained (State
21 Water Resources Control Board 1968).

22 **California Toxics Rule**

23 EPA's California Toxics Rule (40 CFR Part 131.38) promulgates numeric water quality criteria for
24 more than 126 priority pollutants. The numeric criteria in the California Toxics Rule must be
25 achieved in the surface waters of the state with relevant beneficial uses (e.g., municipal supply,
26 aquatic life). If these objectives are not met within a water of the state with a designated beneficial
27 use, the water body would be listed as impaired.

28 **Ocean Plan—Carmel Bay Area of Special Biological Significance**

29 The SWRCB adopted the Water Quality Control Plan for Ocean Waters of California, Resolution No.
30 90-27 (the Ocean Plan), which establishes beneficial uses and water quality objectives for waters of
31 the Pacific Ocean adjacent to the California Coast. In accordance with the Ocean Plan, the SWRCB
32 designated Carmel Bay one of 34 Areas of Special Biological Significance. The Ocean Plan requires
33 wastes to be discharged a sufficient distance from the ASBS to assure maintenance of natural water
34 quality conditions.

35 **Local**

36 **Monterey County Water Resources Agency**

37 The Monterey County Water Resources Agency (MCWRA) is the primary regulatory authority for
38 review and approval of flood control and drainage measures. For flood design criteria, peak run-off
39 rates must not exceed predevelopment flows under comparable storm events, and run-off must not

1 cause erosion. For drainage design criteria, stormwater detention facilities must be sized to limit the
2 100-year post-development runoff rate to the 10-year pre-development rate.

3 **Monterey County Grading and Erosion Control Ordinance**

4 The Grading and Erosion Control Ordinances (Chapter 16.08 through 16.12) were adopted to
5 minimize erosion, protect fish and wildlife and to otherwise protect the natural environment. The
6 Grading/Erosion Control section oversees the construction process to ensure that sedimentation in
7 streams, creeks, waterways and Monterey Bay is properly controlled. Erosion control plans,
8 stormwater plans, and watershed protection plans are three types of erosion-related plans required
9 for specific projects in the County.

10 **Monterey County Local Coastal Program**

11 The existing and proposed Del Monte Forest LUP and CIP contain governing policies and regulations
12 for stormwater management within the project area.

13 The Water and Marine Resources section of both the existing and proposed LUP requires
14 implementation of appropriate management practices as necessary, including stream setbacks,
15 stream flow maintenance, riparian vegetation protection, and careful grading to prevent erosion and
16 sedimentation.

17 The existing and proposed CIP require stormwater be collected and conveyed in an approved
18 drainage system that is designed by a registered civil engineer. The policy requires drainage systems
19 be designed for the ultimate buildout condition and ensure that adjacent properties are protected
20 from adverse effects of increased run-off.

21 As described in Chapter 2, Project Description, the proposed LUP and CIP would retain the intent of
22 the existing LUP in regard to hydrology and water quality. The proposed changes to the LUP are
23 mostly minor rewordings. There is a technical change to remove prohibition of large-scale winter
24 grading from the LUP, but a requirement is maintained in the CIP (and there are similar
25 requirements in the County's grading ordinance). Where the existing LUP described specific permit
26 requirements (such as for wastewater discharges offshore) that are duplicative of those permit
27 requirements, they are proposed for deletion from the LUP to make it more of a policy document.
28 However, in the context of those other permit requirements, this would be no less protective than
29 the current LUP of water quality or hydrologic conditions. The proposed LUP includes a new policy
30 to limit Carmel Bay ASBS watershed development site impervious coverage to 9,000 square feet (at
31 present, there is no fixed limit in the LUP but there is a 9,000-square-foot limit in the CIP) in order to
32 help control runoff impacts on Carmel Bay.

33 **Environmental Setting**

34 **Hydrology**

35 **Regional Conditions**

36 The primary water features of the region include the Pacific Ocean and coastline of the Monterey
37 Peninsula, small inland drainage basins of the peninsula (described below), the Carmel River, and

1 the Carmel Bay ASBS, which lies immediately south of the project area. The regional climate is
 2 dominated by the north Pacific high pressure system that produces northerly winds along the entire
 3 west coast of the United States during most of the year and dominates the climate of the Monterey
 4 Peninsula. Seasonal conditions are characterized by summers that are often cool and foggy in the
 5 morning and warm in the afternoon and by winters that are cool and wet. The average annual
 6 precipitation in the project area is about 19 inches. Most precipitation is associated with rainstorms
 7 that generally occur from October through April.

8 **Site-Specific Conditions**

9 **Surface Hydrology**

10 The project area includes coastal drainage watersheds that discharge into the ocean (Figure 3.7-1).
 11 The watersheds and the development sites that occur within the watersheds are presented in Table
 12 3.7-2.

13 **Table 3.7-2. Development Sites in Coastal Drainage Watersheds**

Coastal Drainage Watershed	Description	Development Sites within Watershed
Seal Rock Creek	Contains Seal Rock Creek and drains a portion of Poppy Hills Golf Course, surrounding residential areas, Spyglass Hill Golf Course, and open space areas near 17-Mile Drive before entering the ocean.	Residential Lot Subdivisions (Areas F-2, J, K, L, and a portion of I-2) Area M Spyglass Hill (both Option 1, New Resort Hotel and Option 2, New Residential Lots)
Fan Shell Beach	Contains Fan Shell Creek, an ephemeral drainage located south of Portola and Sombria Lane. Lacks a well-defined channel until it reaches Cypress Point Club, which drains to the ocean at Fan Shell Beach. Drains the Equestrian Center, most of the existing Pebble Beach Driving Range, adjacent residential development, and much of Cypress Point Club.	Equestrian Center Reconstruction Special Events Staging Area Residential Lot Subdivisions (Areas U and V)
Sawmill Gulch	Contains Sawmill Gulch, which originates from three primary unnamed tributaries on Huckleberry Hill. Drains the area around the Inn at Spanish Bay, Huckleberry Hill Natural Habitat Area, the Monterey Peninsula Country Club Dunes Course, and adjacent residential areas.	New Guest Cottages at Spanish Bay New Employee Parking at Area B Residential Lot Subdivision (Corporation Yard)
Carmel Bay ASBS	Contains Pescadero Creek, which is fed by a number of tributaries in Area PQR, then flows down Pescadero Canyon to enter the ocean just west of the Carmel Gate. Also contains Stillwater Creek. Drains Pescadero Canyon, residential areas, a small portion of the existing Pebble Beach Driving Range, Collins Field, and Peter Hay Golf Course.	Relocated Pebble Beach Driving Range Residential Lot Subdivision (portion of Area I-2 and Collins) Proposed Improvements at the Pebble Beach Lodge

Coastal Drainage Watershed	Description	Development Sites within Watershed
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Note:

The development areas and location of the roadway improvements within the identified watersheds are shown in Figure 3.7-1.

1
2 None of the proposed development parcels lie within designated 100-year floodplains for any
3 drainage channels within these basins. Seal Rock Creek is the only drainage basin that has any
4 designated floodplains. Soils are relatively shallow, consisting of sands or loams with high water
5 infiltration rates. Consequently, erosion and sedimentation rates are considered low or moderate.
6 All drainage channels are considered intermittent and do not contain flowing water for portions of
7 the year, although pools within Seal Rock Creek, and several other drainages, retain water
8 throughout the year.

9 Wetland resources of the Del Monte Forest area have been studied for the proposed project. A total
10 of 9.59 acres of wetlands occur within the project area: 0.06 acres within development site
11 boundaries that would be disturbed by the project and 9.53 acres within proposed preservation
12 areas or areas that will not be disturbed by the project (see Table 3.3-3 in Section 3.3, Biological
13 Resources). Some of the wetlands are natural and result from their topographic or soil
14 characteristics coupled with the presence of adequate rainfall, infiltration, and/or shallow
15 groundwater interaction. Others are artifacts of human intervention, either through diverted or
16 blocked drainage such as roads and trails, or by interception of run-off from developed areas.
17 Groundwater flow is estimated to be about 0.1 foot daily in Del Monte Forest soils. Consequently, the
18 area of soil contributing shallow seepage to any wetland during the dry season is relatively small.

19 **Groundwater Hydrology**

20 The project area is not located within a groundwater basin. The area is underlain by massive
21 bedrock and groundwater is not a significant component of streamflow in the project area.
22 Groundwater is not used as a water source in the project area.

23 **Water Quality**

24 **Regional Conditions**

25 Surface water quality depends primarily on the mineral composition of the soils and associated
26 parent materials within a watershed, hydrologic conditions, and sources and timing of contaminant
27 transport within the watershed. Beginning in 1995, the applicant hired Kinnetic Laboratories, Inc.
28 (KLI) and Environmental & Turf Services (ETS) to collect and analyze stormwater samples from its
29 golf courses in Del Monte Forest and upstream areas. Samples were collected for seven consecutive
30 storm seasons beginning with the 1995/1996 wet season (Kinnetic Laboratories, Inc. 2002).

31 The purpose of the monitoring is to characterize the quality of the run-off and to determine what, if
32 any, impacts the golf courses might have on stormwater quality. The constituents sampled included
33 pesticides and nutrients (ammonia as nitrogen, nitrate as nitrate, and phosphorus). The results of
34 the monitoring indicated that phosphorous was the only constituent to be consistently detected
35 above EPA water quality criteria (WQC) levels for streams discharging into lakes. However,

1 phosphate run-off into oceans is a lesser threat than run-off into lakes, which are much more
2 susceptible to eutrophication.

3 However, since the above-referenced sampling occurred, the applicant has completed the
4 implementation of a wastewater reclamation project in an effort to meet the irrigation needs of the
5 golf courses and recreational areas including those found within the project area. The project
6 included the rehabilitation of Forest Lake Reservoir in Del Monte Forest to allow for the storage of
7 110 million gallons of recycled water produced in the winter for use in the peak summer irrigation
8 months. The proposed project also included the addition of a microfiltration/reverse osmosis
9 (MF/RO) desalination system that converts wastewater into high-quality recycled water so that the
10 golf courses in Del Monte Forest can use recycled water for all irrigation requirements. Before the
11 addition of the MF/RO system, salt in the recycled water would accumulate in the grass and had to
12 be periodically flushed away with potable water. Now, the MF/RO system removes the salt, so no
13 potable water is needed.

14 Existing surface water quality conditions in Del Monte Forest are probably similar to other locations
15 of the greater Monterey Peninsula. This conclusion is based on the existing predominant land uses
16 within watersheds encompassing the project elements that include open space, urban residential
17 and commercial development, and golf course areas.

18 During the summer low-flow conditions, natural water courses may consist entirely of incidental
19 urban run-off from landscape irrigation and other residential uses. Contaminants of concern during
20 the summer include fertilizer and pesticide use, detergents and other household chemical uses, oil
21 and grease, and accidental or illicit chemical spills. Contaminants of concern during the dry summer
22 season include biostimulatory nutrients (e.g., nitrogen and phosphorus), inorganic salts, turbidity,
23 synthetic organic compounds, and trace metals.

24 During peak winter streamflow periods, water quality is largely a function of stormwater
25 contaminant transport. Potential contaminants include those described above, and can also include
26 run-off from roads and other impervious surfaces (e.g., parking lots, driveways, buildings), and
27 other deposits that have accumulated on the ground surface (e.g., organic litter, trash, animal
28 wastes). Winter stormwater is also responsible for a majority of soil erosion that occurs during the
29 year, particularly from areas that have been previously disturbed by construction activities,
30 agriculture, or natural geologic processes.

31 Winter stormwater run-off often is relatively clean, and low in dissolved solids due to the large
32 proportion of rainwater. However, dissolved solids loading is likely higher in the wet season. Run-off
33 from urban areas can contain elevated concentrations of heavy metals, oil, grease, antifreeze, and
34 other synthetic organic compounds. Other contaminants of concern include turbidity, settleable and
35 total suspended solids, biochemical oxygen demand, pesticides, and nutrients.

36 None of the surface waters within the project area have specified designated beneficial uses in the
37 Central Coast RWQCB Basin Plan (discussed in Regulatory Setting), and none are listed as water
38 quality impaired pursuant to CWA Section 303(d) listing requirements.

39 **Site-Specific Conditions**

40 Since 1994, golf courses, athletic fields, and other landscaped areas in the Pebble Beach area have
41 been irrigated with tertiary treated reclaimed water produced at the CAWD treatment plant.
42 Tertiary treated wastewater is oxidized, filtered, and disinfected to comply with state RWQCB and

1 Department of Health Services water quality treatment and disposal standards. However, the salt
2 content of the reclaimed water (i.e., measured as total dissolved solids [TDS]) was higher than that
3 of potable water supplies delivered in the community by the California-American Water Company
4 (Cal-Am). The TDS in CAWD's reclaimed water ranged from 650 to 1,110 milligrams per liter
5 (mg/L). For reference, the TDS in rainwater is typically 23 to 27 mg/L, Pebble Beach tap water is
6 typically 335 mg/L, and in ocean water is 35,000 to 37,000 mg/L (Questa Engineering 2003).
7 Because of the elevated salt levels in the reclaimed water used to irrigate the golf courses, the turf
8 was periodically irrigated with potable water supplies to flush out salts that accumulated in the
9 upper soil layers. This is no longer necessary. In 2010, PBC and CAWD completed the second phase
10 of the Wastewater Reclamation Project, which added the MF/RO desalination system to CAWD's
11 facilities, eliminating the need for flushing with potable water and eliminating the discharge of salt
12 to nearby water courses.

13 Nitrogen content in the reclaimed water occurs primarily in the form of nitrate, which is more
14 soluble and available as a plant nutrient than inorganic ammonia or organic nitrogenous
15 compounds. Nitrogen content in the reclaimed water was analyzed as nitrate only—other forms of
16 nitrogen such as ammonia were not assessed. Nitrate concentrations in the reclaimed water range
17 from 0.1 to 41 mg/L nitrate as nitrogen (N) and average 16 mg/L N. Recommended guidelines
18 indicate that concentrations of less than 5 mg/L N are “no problem” and that concentrations
19 between 5 and 30 mg/L N indicate “increasing problems” for golf turf management (Questa 2003a).

20 Surface water at several locations near one of the wetland complexes and nearby shallow
21 groundwater from two wells in Area MNOUV were monitored during 2001 to evaluate existing TDS
22 and nitrogen conditions (Balance Hydrologics 2002, Questa 2003a). Collected data indicate that
23 existing TDS concentrations of surface water in the sampled wetlands ranged from 1,000 to 7,000
24 mg/L; shallow groundwater values were within the same range.

25 Field measurements of specific conductance in wetlands adjacent and downslope of Spyglass Hill
26 Golf Course in February and March 2001 indicated TDS levels ranging from 1,050 to 2,300 mg/L.
27 Nitrate concentrations in the surface water samples from the proposed golf course were generally
28 low (<1 mg/L N). However, inorganic nitrate and ammonia values have been detected in adjacent
29 surface drainage samples up to about 12 mg/L. Higher nitrogen values may be associated with run-
30 off from the existing Equestrian Center and associated riding trails that comes in contact with horse
31 manure. Stormwater run-off sampling in Del Monte Forest was conducted from 1995 to 2002. The
32 sampling stations are identified in Table 3.7-3, and the results are summarized in Tables 3.7-4 and
33 3.7-5.

1 **Table 3.7-3. Stormwater Run-Off Sampling Stations**

Station	Watershed	Upstream Uses	Downstream Uses
Area PQR	Pescadero Creek/Carmel Bay	Forest, Del Monte Forest residential, Carmel residential	Del Monte Forest residential
Carmel Way	Pescadero Creek/Carmel Bay	Del Monte Forest residential, Carmel residential	Del Monte Forest residential, Pebble Beach Golf Course
10th Hole Pebble Beach	Pescadero Creek/Carmel Bay	Pebble Beach Golf Course, Del Monte Forest residential, Carmel residential	Ocean
Palmero Way	Stillwater Creek/Carmel Bay	Del Monte Forest residential	Pebble Beach Golf Course
Stillwater Cove	Stillwater Creek/Carmel Bay	Pebble Beach Golf Course, Del Monte Forest residential	Ocean
Fan Shell Beach	Fan Shell Beach	Cypress Point Golf Course, Del Monte Forest residential	Ocean
Spyglass	Seal Rock Creek	Spyglass Hill Golf Course, Poppy Hills GC, Del Monte Forest residential	Ocean
8th Hole Spanish Bay	Sawmill Gulch	Spanish Bay Golf Course, Monterey Peninsula Country Club Dunes, Del Monte Forest residential	Ocean
14th Hole Spanish Bay	Moss Beach	City of Pacific Grove, 14th Hole of Spanish Bay Golf Course	Ocean

Source:
Stations from Kinnetic Laboratories, Inc. (2002); Upstream and downstream uses identified from topographic maps.

2

1 **Table 3.7-4. Water Quality Parameter Results from Stormwater Monitoring Sampling in Del Monte Forest, 1995-2002**

Parameter	Background (PQR ^a)	Range of Mean Detections	Location of Highest Mean Detection	Ocean Plan ^b	Central Coast RWQCB Basin Plan ^c	EPA Recommended Water Quality Criteria	
						1999 ^d	1986 ^e
Oil and Grease (mg/l)	ND	ND	NA	75 (effluent limit)	visible, nuisance/ adverse affect beneficial use	No update ^f	visible; deleterious effect
TOC (mg/l)	23.2	21.3 to 42.8	Fan Shell Beach	None	None	None	None
TSS (mg/l)	448	66.2 to 768.0	Carmel Way	Degradation	Nuisance/ adverse affect beneficial use	No update ⁶	reduction in light penetration by 10%
pH (mg/l)	7.2	7 to 7.5	Spyglass	Change of < 0.2 units from natural (effluent limit)	7 - 8.5	6.5 to 9 (fw) 6.5 to 8.5 (sw)	6.5 to 9 (fw) 6.5 to 8.5 (sw)
Nitrates as NO ₃ (mg/l)	1.8	2.1 to 13.2	Stillwater Cove	Degradation	45 (drinking water)	None	None
Ammonia as Nitrogen (mg/l)	0.11	0.11 to 0.67	8th Hole Spanish Bay Golf Course	2.4 (daily maximum)	Nuisance/ adverse affect beneficial use	None	19.7 (fw, ph 7.0 temperature 15° C, 1-hr average)
MBAS (surfactants) (mg/l)	ND	0.005 to 0.49	14th Hole Spanish Bay Golf Course	Degradation	0.2 (freshwater)	None	None
Total Phosphorus as PO ₄ (mg/l)	1.33	1.08 to 2.92	Carmel Way	Degradation	Nuisance/ adverse affect beneficial use	No update ^f	0.1 (in streams) 0.05 (in streams flowing to lakes)

Source:

Analytical results from Kinnetic Laboratories, Inc. 2002.

Notes:

All sampling took place after two storm events each year during the wet season. Since a few changes after the first year, each stormwater monitoring has assessed standard measures of water quality (such as oil and grease, total suspended solids, etc.) and concentrations of pesticides and byproducts that are associated with golf course maintenance. **Bold** indicates an exceedance of a water quality objective.

fw = freshwater aquatic life

NA = not applicable

ND = non detect (no contaminant detected)

sw = saltwater aquatic life

- ^a PQR was the name given to the sampling site on Pescadero Creek that was used as the baseline for water quality because it was upstream and unaffected by the golf courses discharges.
 - ^b California State Water Resources Control Board 2001. California Ocean Plan: Water Quality Control Plan—Ocean Waters of California (Ocean Plan).
 - ^c Central Coast Regional Water Quality Control Board Basin Plan.
 - ^d U.S. Environmental Protection Agency 1999. National Recommended Water Quality—Correction. Report. No. EPA 822-A-99-001. April.
 - ^e U.S. Environmental Protection Agency 1986. Quality Criteria for Water. Report No. EPA 440/5-86-001.
 - ^f No update of this parameter was provided in U.S. Environmental Protection Agency 1999. Refer to U.S. Environmental Protection Agency 1986.
-

1 **Table 3.7-5. Pesticides Detected in Stormwater Monitoring Conducted in Del Monte Forest, 1995-2002**

Parameter	Range of Detections micrograms/ liter (µg/l)	Location of Highest Detection (# detections/ #sampling events)	Other Detections (# detections/#sampling events)	Ocean Plan ^a (µg/l)	Basin Plan ^b	CTR/EPA Rec. WQC (2001) ^c (µg/l)	Canadian EQG (2002) ^d (µg/l)
Daconil (chlorathinol)	0.08 to 0.24	14th Hole Spanish Bay (1/15)	10th Hole Pebble Beach (1/16), 8th Hole Spanish Bay (1/15)		Toxicity; antidegradation		0.18 (fw); 0.36 (sw)
4,4 - DDD	0.051	Carmel Way (1/16)	None		Toxicity; antidegradation	(for DDT) 1.1 (fw); 0.13 (sw)	
Aldrin	0.06	Stillwater Cove (1/16)	None		Toxicity; antidegradation	3.0 (fw); 1.3 (sw)	
beta- BHC	0.076 to 0.085	Spyglass (1/16)	8th Hole Spanish Bay (1/15)	0.012	Toxicity; antidegradation		
delta - BHC	0.14 to 0.25	8th Hole Spanish Bay (1/15)	Spyglass GC (1/16), Fan Shell Beach (2/12)	0.012	Toxicity; antidegradation		
gamma-BHC	0.096	10th Hole Pebble Beach (1/16)	None	0.012	Toxicity; antidegradation	0.95 (fw); 0.16 (sw)	
Endosulfan I	0.055	Fan Shell Beach (1/13)	None	0.027	Toxicity; antidegradation	0.22 (fw); 0.034 (sw)	
Heptachlor	0.07	10th Hole Pebble Beach (1/16)	None		Toxicity; antidegradation	0.52 (fw); 0.053 (sw)	
PCNB	0.13 to 1.6	Spyglass (1/14)	Fan Shell Beach (1/12), 8th Hole Spanish Bay (1/15)		Toxicity; antidegradation		
Glyphosate (Roundup)	8.2 to 170	Fan Shell Beach (1/12)	8th Hole Spanish Bay (1/15) Stillwater Cove (1/16)		Toxicity; antidegradation		65 (fw)
Triclopyr (Garlon, Turflon)	0.18 to 40	Stillwater Cove (9/16)	10th Hole Pebble Beach (2/15), 14th Hole Spanish Bay (1/2)		Toxicity; antidegradation		
Ethofumesate (Prograss)	0.65 to 5.35	10th Hole Pebble Beach (1/15)	Stillwater Cove (2/16)		Toxicity; antidegradation		
Dicamba	0.82 to 1.5	Fan Shell Beach (2/12)	None		Toxicity; antidegradation		10 (fw)

Sources:

Analytical results from Kinnetic Laboratories, Inc. 2002.

Notes:

^a California State Water Resources Control Board 2001. California Ocean Plan: Water Quality Control Plan—Ocean Waters of California (all standards noted are instantaneous averages for marine aquatic life).

^b Central Coast Regional Water Quality Control Board Basin Plan.

^c U.S. Environmental Protection Agency 1999. National Recommended Water Quality—Correction. Rpt. No. EPA 822-A-99-001. April (fw = freshwater aquatic life; sw =

saltwater aquatic life).

^d Environment Canada, Canadian Environmental Quality Guidelines, Summary Update Table 2002 as cited in prior 2005 DMF/PDP EIR (County of Monterey 2005) (fw = freshwater aquatic life; sw = saltwater aquatic life); cited where no EPA or California benchmark exists.

All sampling took place after two storm events each year during the wet season. Since a few changes after the first year, each stormwater monitoring has assessed standard measures of water quality (such as oil and grease, total suspended solids, etc.) and concentrations of pesticides and byproducts that are associated with golf course maintenance. **Bold** indicates an exceedance of a water quality objective.

1 No oil or grease was detected in any sampling events. Mean detections of pH and surfactants have
2 been within the ranges of the Basin Plan and the Ocean Plan (California State Water Resources
3 Control Board 2001).

4 Nutrient results for nitrates and phosphorus in some sampling events (such as 2001–2002 between
5 Palmero Way and Stillwater Cove) seem to indicate that fertilizer application may be contributing to
6 levels of nutrients in receiving water bodies. EPA has not recommended criteria for maximum total
7 phosphorus levels. Phosphate levels at all stations exceeded the EPA criterion for streams (0.1 mg/l)
8 by a factor of 10.

9 As shown in Table 3.7-4 and Table 3.7-5, pesticides were detected infrequently at sampling stations
10 with the exception of trichlopyr at the Stillwater Cove station, which was detected in more than half
11 of the sampling events. Trichlopyr has been infrequently detected at the stations at the 10th Hole at
12 Pebble Beach Golf Course and the 14th Hole at Spanish Bay Golf Course. There is no water quality
13 standard for trichlopyr in the Basin Plan or the Ocean Plan, and the EPA has not issued a water
14 quality criteria for this compound. Trichlopyr is the active ingredient in Garlon and Turflon, which is
15 commonly used on golf courses.

16 Overall, of the total of 67 pesticides sampled, 13 were detected (in a total of 36 individual
17 detections). Several chlorinated pesticides such as heptachlor, (which has been banned since 1988)
18 and endosulfan and delta-BHC (which are not used by local golf courses) were detected infrequently
19 during the sampling period. These detections suggest that household and or other non-golf course
20 pesticide applications may also contribute to pesticides in stormwater run-off (Kinnetic
21 Laboratories, Inc. 2002).

22 The information in this section is based on studies conducted in 2001 to 2003 and is considered
23 representative of current conditions because maintenance practices are generally the same as when
24 the tests and studies were conducted (Balance Hydrologics 2002; Kinnetic Laboratories, Inc. 2002;
25 Questa 2003; California State Water Resources Control Board 2001; Stilwell pers. comm.).

26 **Site Drainage**

27 This section describes site-specific drainage characteristics and the development sites for the
28 different project elements. Information in this section was obtained from the Preliminary Drainage
29 Report prepared for the proposed project (WWD Corporation 2010) and the Addenda to the
30 Preliminary Drainage Report (WWD Corporation 2011).

31 **The Lodge at Pebble Beach**

32 The four development sites in this area include Meeting Facility Expansion, Fairway One
33 Reconstruction, New Colton Building, and Parking and Circulation Reconstruction. All four sites are
34 within a developed area and are currently paved and impervious.

35 **The Inn at Spanish Bay**

36 **Conference Center Expansion**

37 This development site is within a developed area and is currently paved and impervious.

1 **New Guest Cottages**

2 This development site is contained within the Sawmill Gulch watershed. Storm run-off currently
3 flows off the Spanish Bay Golf Course across the project site and is collected by the storm drain
4 system for The Inn at Spanish Bay. The storm drain system collects run-off from the existing
5 development and is routed to an existing detention basin north of The Inn; existing detention basin
6 capacity is equal to 144,000 cubic feet.

7 **New Employee Parking**

8 This 4.87-acre development site is currently undeveloped and a small portion is used for overflow
9 parking (small dirt area accessed by a dirt fire road). The entire project area is contained within the
10 Sawmill Gulch watershed. Surface run-off currently flows toward 17-Mile Drive where it is collected
11 by a dirt drainage ditch that discharges into the storm drain system at the intersection of 17-Mile
12 Drive and Congress Road. This system discharges into the storm drain system for the Spanish Bay
13 Golf Course.

14 **Collins Field–Equestrian Center–Special Events Area**

15 **Pebble Beach Driving Range Relocation from Area V to Collins Field**

16 This 15.87-acre development site is currently a field used for local sports and recreation activities
17 and parking during special events. The entire project area is contained within the Carmel Bay
18 watershed. Surface drainage is uncontrolled sheet flow to the southeast where it is collected by a 12-
19 inch corrugated metal pipe (CMP) culvert and piped under Ondulado Road. The culvert discharges
20 into a natural drainage ravine flowing south which is collected up by a storm drain system that ends
21 up discharging into the ocean.

22 **Equestrian Center Reconstruction**

23 The 11.82-acre development site is contained primarily within the Fan Shell Beach Watershed and a
24 small portion within the Carmel Bay ASBS watershed. Surface drainage is currently uncontrolled
25 sheet flow to the northwest that crosses the property line and contributes to a drainage course that
26 runs through the proposed Area U residential subdivision. The drainage course crosses Drake Road
27 and continues through the Cypress Point Golf Links Golf Course as described for Area U.

28 **Area M Spyglass Hill**

29 The proposed development site, under either Option 1 (New Resort Hotel) or Option 2 (New
30 Residential Lots), is currently undeveloped; and surface drainage is collected by natural drainage
31 ravines flowing to the north and northwest. The northern portion of the development site is
32 contained within the Seal Rock Creek Watershed. Storm run-off flows north via natural drainage
33 ravines onto the Spyglass Hill Golf Course where it is collected by a minor drainage course running
34 through the golf course to a detention basin along Stevenson Drive. Detention basin overflow
35 follows Stevenson Drive northwest to the ocean.

36 The southern portion of the development site is contained within the Fan Shell Beach watershed.
37 Storm run-off flows northwest through the sand dune preservation area onto the Spyglass Hill Golf
38 Course where it flows overland into natural drainage courses flowing northwest to the ocean.

1 Residential Lot Subdivisions

2 Area F-2

3 This 19.50-acre development site is bounded by Poppy Hills Golf Course on all sides. The area is
4 currently undeveloped and surface drainage is uncontrolled sheet flow to the west. The entire
5 project area is contained within the Seal Rock Creek Watershed. The northern portion lies east of
6 Congress Avenue and storm run-off currently discharges to a 24-inch CMP culvert crossing Congress
7 Avenue into a tributary of Seal Rock Creek that flows west to the ocean. The southern portion lies
8 east of Lopez Road and currently discharges storm run-off to a 20/1 CMP culvert, and a 12-inch
9 reinforced concrete pipe (RCP) culvert. Both culverts drain to tributaries of Seal Rock Creek, which
10 flow west to the ocean.

11 Area I-2

12 This 18.74-acre development site area is currently undeveloped and surface drainage is
13 uncontrolled sheet flow to the south and southwest. The western portion of the proposed project is
14 contained within the Seal Rock Creek watershed. The area currently discharges storm run-off into a
15 drainage swale running along Viscaino Road that eventually discharges into a tributary of Seal Rock
16 Creek, which flows west to the ocean. The eastern portion of the proposed project is contained
17 within the Carmel Bay ASBS watershed. The area currently discharges storm run-off into drainage
18 swales running along Ronda Road and Viscaino Road that eventually discharge into a 30-inch CMP
19 culvert, which discharges into the Pebble Beach Creek, which flows south to the ocean.

20 Area J

21 This 9.38-acre development site is divided into two project sites, one on the north side of Spyglass
22 Woods Drive and one on the south side of Spyglass Woods Drive. Both areas are currently
23 undeveloped and are contained within the Seal Rock Creek Watershed.

24 The 4.29-acre northern site (J-2) currently drains run-off to the west into a tributary of Seal Rock
25 Creek which utilizes a 24-inch RCP culvert to cross Stevenson Drive. This culvert discharges into
26 Seal Rock Creek, which flows west to the ocean. The 4.29-acre southern site (J-1) currently drains
27 run-off to the northwest where it flows across Spyglass Woods Drive and is eventually picked up by
28 a drainage swale along Stevenson Drive. The drainage swale is routed to the same 24-inch RCP
29 culvert crossing Stevenson Drive and discharging into Seal Rock Creek.

30 Area K

31 This 10.62-acre development site is currently undeveloped and is contained within the Seal Rock
32 Creek Watershed. Stevenson Drive currently collects storm run-off from the southern portion of the
33 site and discharges into a drainage ravine that utilizes a 36-inch culvert to cross under Stevenson
34 Drive. The culvert drains into a tributary of Seal Rock Creek that flows northwest to the ocean. The
35 northern portion of the site drains into that same tributary of Seal Rock Creek.

36 Area L

37 This 20.85-acre development site is currently undeveloped and is within the Seal Rock Creek
38 Watershed. This development site consists of 10 residential lots, a private 1,400-foot access road,
39 and land set aside for preservation areas. Surface drainage is uncontrolled sheet flow to the

1 northwest that is eventually collected by a tributary of Seal Rock Creek. This tributary stream flows
2 north from Spyglass Hill Golf Course through the west portion of the project site to Seal Rock Creek,
3 which flows west to the ocean.

4 **Area U**

5 This 22.17-acre development site is currently undeveloped and is contained within the Fan Shell
6 Beach Watershed. There are three drainage courses flowing northwest through the site. Each
7 drainage course utilizes a 24-inch CMP culvert to cross under Drake Road. All three culverts
8 discharge to drainage courses that drain onto the Cypress Point Golf Course. They are eventually
9 collected by the main drainage course running through the golf course, which flows northwest to the
10 ocean.

11 **Area V**

12 This 25.9-acre development site is currently developed with the Pebble Beach Driving Range and is
13 primarily contained within the Fan Shell Beach Watershed, with a small portion draining to Carmel
14 Bay ASBS. Surface drainage is uncontrolled sheet flow to the west and is collected by a wetland that
15 parallels Stevenson Drive. A 12-inch culvert allows for the extension of the wetland across
16 Stevenson Drive. Wetland overflow eventually flows through the Cypress Point Golf Course
17 northwest to the ocean.

18 **Collins Residence**

19 This 3.85-acre development site is contained within the Carmel Bay ASBS watershed. The majority
20 of the site drains to the northwest and stormwater is picked up by the drainage ditch along Portola
21 Road. A 12-inch polyvinyl chloride (PVC) culvert takes the run-off across Portola Road and
22 discharges it onto the Equestrian Center parcel. The flow continues overland until it crosses Drake
23 Road at Area U and continues through the Cypress Point Golf Course, as described for Area U, to the
24 Fan Shell Beach watershed.

25 **Corporation Yard**

26 This 22.46-acre development site is part of the PBC Corporation Yard and is currently used as a
27 stockpiling area and at one time was a granite rock quarry site. The entire site is contained within
28 the Sawmill Gulch watershed, and all drainage is currently detained by a detention basin located at
29 the west end of the project site. Ten-year pre-development flow and overflow are released overland
30 prior to entering a tributary of Sawmill Gulch which flows northwest to the ocean.

31 **Roadway Improvements**

32 Roadway improvements would occur at five intersection locations:

- 33 ● SR 1/SR 68/17-Mile Drive.
- 34 ● Congress Road/17-Mile Drive.
- 35 ● Congress Road/Lopez Road.
- 36 ● Sunridge Road/Lopez Road.
- 37 ● Portola Road/Stevenson Drive.

1 All roadway improvements would occur within developed areas that are currently paved and
2 impervious.

3 **Impacts Analysis**

4 **Methodology**

5 **Approach**

6 Construction and operation of the proposed project could affect the hydrology and water quality
7 resources in the study area by increasing impervious surface and stormwater run-off, changing
8 drainage patterns, exceeding the capacity of drainage infrastructure, degrading water quality from
9 construction activities and increased pollutants in stormwater run-off, depleting or interfering with
10 groundwater hydrology, or causing flooding or exposing people and structures to flood hazards.
11 Regional and site-specific documents and maps were reviewed and field inspections were conducted
12 to identify hydrology and water quality resources in the study area that, because of their proximity,
13 could be directly or indirectly affected by construction, operation, or maintenance activities.

14 The proposed project was determined to have no impact for the following issues/questions;
15 therefore, these are not addressed further in this section.

- 16 • Groundwater hydrology and quality. The proposed project would not substantially deplete
17 groundwater supplies or substantially interfere with groundwater recharge, nor would it include
18 any use of groundwater.
- 19 • Flood hazards. The proposed project would not place housing within a 100-year flood hazard
20 area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood
21 hazard delineation map, nor place development within a flood hazard zone, as shown on panels
22 305, 306, and 308 of the Federal Emergency Management Agency Flood Insurance Rate Map for
23 Monterey County dated April 2, 2009.

24 Impacts to wetlands, including potential impacts to wetland hydrology from changes in drainage
25 patterns, are addressed in Section 3.3, Biological Resources.

26 **Proposed Drainage Facilities**

27 The evaluation of hydrology and water quality impacts is based on reviewing the application plan
28 set and the preliminary drainage reports prepared for the proposed project. The preliminary
29 drainage reports identify the amount of new impervious surface, proposed drainage design, and
30 changes to drainage patterns (WWD Corporation 2010, 2011). Therefore, this information has been
31 summarized below for each development site. Most sites require a closed underground detention
32 system that utilizes a metered release of the pre-construction 10-year design run-off rate and an
33 overflow. The detention facility would accommodate the difference between the 100-year post-
34 development design storm and the 10-year pre-development design storm, as required by the
35 MCWRA. Therefore, the existing drainage system could accommodate the increased stormwater
36 flow.

1 **The Lodge at Pebble Beach**

2 All four development sites in this area (Meeting Facility Expansion, Fairway One Reconstruction,
3 New Colton Building, and Parking and Circulation Reconstruction) are within a developed area and
4 are currently paved and impervious (Figures 2-3 to 2-7). Parking and Circulation Reconstruction
5 would reconfigure the existing 113-space surface parking area, located north of the existing Meeting
6 Facility, to include a new two-level 224-space parking facility and 23-space short-term surface lot
7 (Figure 2-7). No additional impervious area is proposed for the sites; the sites would not be
8 contributing any additional run-off to existing drainage facilities. All run-off from these development
9 sites would be channeled via storm drain improvements to the existing storm drain system serving
10 the site. There would be no substantial change to overall drainage in the area.

11 **The Inn at Spanish Bay**

12 **Conference Center Expansion.** No additional impervious area is proposed for the site (Figure 2-9);
13 the site would not be contributing additional run-off to existing drainage facilities. All run-off from
14 this development would be channeled via storm drain improvements to the existing storm drain
15 system serving the site.

16 **New Guest Cottages.** Proposed development would remove the southernmost part of the existing
17 parking lot (approximately 30 parking spaces), 1,450 linear feet of cart path/walkway, and
18 approximately 3 acres of undeveloped land. It would be replaced with six new structures, 2,630
19 linear feet of cart path/walkway, and surface parking (Figure 2-10). The development would
20 increase the impervious area on the site by 0.88 acre, which would result in a total site run-off
21 detention of 2,792 cubic feet. Storm run-off from the proposed development would be collected and
22 discharged into the existing storm drain system serving the site which has a capacity of 144,000
23 cubic feet (WWD Corporation 2010). This additional increase in site run-off detention equates to
24 2.0% of the existing detention basin's capacity. This is a less-than-significant addition to the existing
25 detention basin volume, and there would be no substantial changes in drainage patterns at the site.

26 **New Employee Parking.** This development area consists of a parking lot with 285 stalls and land set
27 aside for open space (Figure 2-11). The development would increase the impervious area on the site
28 by 2.64 acres, which would result in total site run-off detention of 8,377 cubic feet. The proposed
29 drainage system includes bio-retention planters and a closed underground detention system that
30 utilizes a metered release of the pre-construction 10-year design run-off rate and an overflow. The
31 detention facility would accommodate the difference between the 100-year post-development
32 design storm and the 10-year pre-development design storm, as required by the MCWRA. An
33 overflow will allow for the 10-year pre-development rate and excessive storm events to be released
34 overland prior to entering the catch basin located at the corner of 17-Mile Drive and Congress Road.

35 **Collins Field–Equestrian Center–Special Events Area**

36 **Pebble Beach Driving Range Relocation from Area V to Collins Field.** The turf field at Collins Field
37 would be replaced with a predominately turf driving range, and there would also be support
38 structures and a 26-space surface parking lot (Figure 2-13). The development would increase the
39 impervious area of the site by 0.92 acre, which would result in a total site run-off detention of 2,917
40 cubic feet. An overflow would allow for the 10-year pre-development rate and excessive storm
41 events to be released to the existing culvert crossing Ondulado Road. The rest of the site would drain

1 to a bio-retention pond, which would filter run-off through a sand underlay prior to releasing it to
2 the existing culvert crossing Ondulado Road.

3 **Equestrian Center Reconstruction.** The existing equestrian center would be demolished and a new
4 equestrian center constructed in its place (Figure 2-14). The existing equestrian center currently has
5 surface run-off onto Area U. When the equestrian center is reconstructed, the surface drainage
6 would be replaced with a new storm drain system for the site. This system would discharge into a
7 new 36-inch culvert that would also collect run-off discharging from Portola Road and the new
8 Residential Lot Subdivision at Collins Residence. A utility corridor would allow for the underground
9 culvert to pass through the proposed Residential Lot Subdivision at Area U and replace an existing
10 24-inch culvert crossing Drake Road to maintain the discharge on the north side of Drake Road. Run-
11 off collected by the 36-inch culvert would continue through Cypress Point Golf Course by mutual
12 agreement with PBC.

13 Redevelopment of the equestrian center would increase the impervious area on the site by an
14 estimated 2.73 acres, would result in a total site run-off detention of 21,798 cubic feet. Surface run-
15 off from the site would be collected and detained by detention facilities that would not infiltrate.
16 This development would require a closed detention facility at the north end of the site. The closed
17 detention facility would be required to have a metered release of the pre-construction 10-year
18 design run-off rate and overflow. The metered release and overflow would discharge into the same
19 new 36-inch culvert, discussed above. PBC would own and maintain this detention facility.

20 **Special Events Area Grading and Expansion.** The special events staging area is 14.2 acres of
21 predominately open dirt pervious surface, and it would be graded and expanded northward (Figure
22 2-15). All existing structures and corrals on the site would be removed, slightly increasing the
23 amount of pervious surface.

24 Area M Spyglass Hill

25 **New Resort Hotel (Option 1).** Proposed development includes a new hotel with 100 guest rooms,
26 restaurant, lobby, meeting facility, spa facility, three-level parking facility for 301 vehicles at the
27 main hotel, and 2-level parking facility for 41 vehicles at the spa (Figure 2-17). The development
28 would increase the impervious area on the site by 7.30 acres, which would result in a total site run-
29 off detention of 23,121 cubic feet. All site storm run-off would be collected by an underground storm
30 drain system that would discharge into a basin located at the northwest end of the development site
31 or a closed underground detention system. Either system would utilize a metered release of the pre-
32 construction 10-year design run-off rate and an overflow. The detention facility would
33 accommodate the difference between the 100-year post-development design storm and the 10-year
34 pre-development design storm, as required by the MCWRA. A standpipe would be designed to
35 release the 10-year pre-construction flow rate; it would also be designed to accommodate overflow
36 from severe storm events. This overflow would be released near Spyglass Hill Road and would
37 follow the road's existing drainage course.

38 **New Residential Lots (Option 2).** Proposed development includes 10 residential lots, 1,905 linear
39 feet of private access roadway, and land set aside for open space (Figure 2-18). The development
40 would increase the impervious area on the site by 3.41 acres and would result in a total site run-off
41 detention of 10,795 cubic feet.

42 Each individual lot would include a closed underground detention system that utilizes a metered
43 release of the pre-construction 10-year design run-off rate and an overflow. The detention facility

1 would accommodate the difference between the 100-year post-development design storm and the
2 10-year pre-development design storm, as required by the MCWRA. Overflows would be situated on
3 each lot so that flows would disperse overland prior to leaving the site. Individual lot owners would
4 be responsible for installing the lot detention facilities, and PBC would be responsible for
5 maintaining and reporting to the County.

6 PBC would own, operate, and maintain two detention facilities sized to detain run-off from the new
7 private roadway. An underground storm drain system would collect run-off from the road's gutter
8 via catch basins and route it to the two facilities. Both facility overflows are directed toward a
9 natural drainage ravine that flows onto the Spyglass Hill Golf Course.

10 Residential Lot Subdivisions

11 The proposed project includes 90 residential lot subdivisions in nine areas described below and
12 shown in Figures 2-19 to 2-27. For purposes of analysis it was assumed that the total increase in
13 impervious surface for the various development areas was distributed evenly among the lots within
14 that area.

15 **Area F-2.** Residential development could increase the impervious area on the site by 4.29 acres,¹
16 which would result in a total site run-off detention of 13,588 cubic feet. Uphill lots 9–16 would each
17 include a detention facility that would prevent infiltration. A drain pipe designed to release the pre-
18 construction 10-year design run-off and overflow for the facility would be piped directly into the
19 underground storm drain system within the private cul-de-sac loop access road. Individual lot
20 owners would be responsible for installing the lot detention facilities, and PBC would be responsible
21 for maintaining and reporting to the County.

22 The underground storm drain system would also collect run-off from the access road's v-gutter via
23 catch basins and from a concrete swale that runs along the uphill side of the project area, collecting
24 run-off draining onto the site. The underground storm drain system would route storm run-off to a
25 closed detention facility at the northeast corner of Lot 8 and a closed detention facility located at the
26 southeast corner of Lot 2. The closed underground detention system would utilize a metered release
27 of the pre-construction 10-year design run-off rate and an overflow. The detention facility would
28 accommodate the difference between the 100-year post-development design storm and the 10-year
29 pre-development design storm, as required by the MCWRA. Both detention facilities would
30 discharge overflow run-off onto the Poppy Hills Golf Course; the overflow run-off would sheet-flow
31 overland to the roadside ditches to a ravine crossing Lopez Road. Each discharge point would
32 incorporate an energy dissipater and be located to best minimize erosion. PBC would own, operate,
33 and maintain both detention facilities.

34 Downhill Lots 1–8 would include a closed detention facility in the development of each lot that
35 utilizes a metered release of the pre-construction 10-year design run-off rate and an overflow. The
36 detention facilities would accommodate the difference between the 100-year post-development
37 design storm and the 10-year pre-development design storm, as required by the MCWRA. Overflows
38 would be released at the back of each individual lot, and those overflow releases would then sheet-
39 flow overland onto the Poppy Hills Golf Course, where it would infiltrate and flow overland to the
40 roadside ditches to a ravine crossing Lopez Road.

¹ This estimate assumes 9,000 square feet of impervious surface per lot plus associated roadway (WWD Corporation 2010, 2011).

1 Individual lot owners would be responsible for installing the lot detention facilities, and PBC would
2 be responsible for maintaining and reporting to the County.

3 **Area I-2.** The development could increase the impervious area on the site by 3.50 acres,² which
4 would result in a total site run-off detention of 11,092 cubic feet. Storm run-off from the access road
5 would be routed via v-gutter to a closed detention facility located at the south west corner of Lot 12.
6 An overflow would allow for discharge into the existing swale running along Viscaino Road. PBC
7 would own, operate, and maintain this facility.

8 Each individual lot would include a closed detention facility. Overflows would be designed to release
9 flows at the front of each individual lot, which would then be dispersed overland before discharging
10 into the existing swales running along Viscaino Road and Ronda Road. Individual lot owners would
11 be responsible for installing the lot detention facilities, and PBC would be responsible for
12 maintaining and reporting to the County.

13 Detention facilities would be designed and utilize metered release to accommodate the difference
14 between the peak 100-year post-development design storm and the peak 10-year pre-development
15 design storm. This design should allow for overflow rates from such facilities to be consistent with
16 existing run-off rates, except for extreme storm events. Because these facilities would be preventing
17 increases in run-off, existing swales with little maintenance would be adequate to maintain run-off
18 flows from the project site.

19 **Area J.** The development could increase the impervious area on the site by 1.03 acres,³ which would
20 result in a total site run-off detention of 3,260 cubic feet. Each individual lot would include a closed
21 detention facility that utilizes a metered release of the pre-construction 10-year design run-off rate
22 and an overflow. The detention facility would accommodate the difference between the 100-year
23 post-development design storm and the 10-year pre-development design storm, as required by the
24 MCWRA. For the northern project site, facility overflows would be designed to release flows at the
25 back of each individual lot toward the south. Overflow run-off would then be dispersed overland
26 before entering an existing drainage ravine. For the southern project site, facility overflows would
27 be designed to release flows at the front of each individual lot. Overflow run-off would then be
28 dispersed overland before crossing Spyglass Woods Drive and following the existing drainage
29 course. Each overflow would incorporate an energy dissipater and be located to best minimize
30 erosion. Individual lot owners would be responsible for installing the lot detention facilities, and
31 PBC would be responsible for maintaining and reporting to the County.

32 **Area K.** The development could increase impervious area on the site by 1.91 acres⁵, which would
33 result in a total site run-off detention of 6,053 cubic feet. Each individual lot would include a closed
34 detention facility that utilizes a metered release of the pre-construction 10-year design run-off rate
35 and an overflow. The detention facility would accommodate the difference between the 100-year
36 post-development design storm and the 10-year pre-development design storm, as required by the
37 MCWRA. For lots south of Stevenson Drive, overflows would be released at the front of the lots and
38 would disperse overland prior to entering the existing drainage system along Stevenson Drive. For
39 lots north of Stevenson Drive, overflows would be released at the back of the lots and would
40 disperse overland before discharging onto the Spyglass Hill Golf Course. Individual lot owners would

² This estimate assumes 9,000 square feet of impervious surface per lot plus associated roadway (WWD Corporation 2011).

³ This estimate assumes 9,000 square feet of impervious surface per lot plus associated roadway (WWD Corporation 2011).

1 be responsible for installing the lot detention facilities, and PBC would be responsible for
2 maintaining and reporting to the County.

3 **Area L.** Residential development could increase the impervious area on the site by 2.68 acres,⁵
4 which would result in a total site run-off detention of 13,238 cubic feet. Surface run-off from the site
5 would be collected and detained by detention facilities that would not infiltrate.

6 Each individual lot in this development would include a closed detention facility that utilizes a
7 metered release of the pre-construction 10-year design run-off rate and an overflow. The detention
8 facility would accommodate the difference between the 100-year post-development design storm
9 and the 10-year pre-development design storm, as required by the MCWRA. Individual lot owners
10 would be responsible for installing the lot detention facilities, and PBC would be responsible for
11 maintaining and reporting to the County.

12 A storm drainpipe with individual lot drainage stubs would be placed within the private cul-de-sac
13 access road and would discharge into the stream flowing through the west end of the property. The
14 metered release and overflow for the individual lot detention facilities would discharge into the
15 storm drain stub provided. Individual lots would be required to include best management practices
16 (e.g., vegetated drainage swales, dispersion trenches) in their developmental designs to help
17 eliminate contaminants from entering the drainage system.

18 This development would also require a closed detention facility for the private access road. The
19 closed detention facility would be required to have a metered release of the pre-construction 10-
20 year design run-off rate and an overflow. The metered release and overflow would discharge into
21 the stream that flows through the west end of the property. PBC would own and maintain this
22 detention facility.

23 **Area U.** This proposed development consists of 7 residential lots along Drake Road and land set
24 aside for preservation areas. One of the drainage courses discussed above runs directly through the
25 proposed lots. This drainage course is a result of storm run-off from the existing equestrian center
26 to the south. The proposed project includes reconstruction of the equestrian center. As part of the
27 reconstruction, a new 36-inch culvert would collect surface run-off from the equestrian center, so
28 surface run-off into Area U would be eliminated. Instead, a utility corridor would allow for the
29 underground culvert to pass through the proposed subdivision and replace an existing 24-inch
30 culvert crossing Drake Road to maintain the discharge on the other side of Drake Road. Run-off
31 collected by the 36-inch culvert would continue through Cypress Point Golf Course by mutual
32 agreement with PBC.

33 Residential development could increase the impervious area on the site by 1.47 acres,⁴ which would
34 result in a total site run-off detention of 9,240 cubic feet. Surface run-off from the site would be
35 collected and detained by closed detention facilities that would not infiltrate. This development
36 would require that each individual lot include a closed detention facility that utilizes a metered
37 release of the pre-construction 10-year design run-off rate and an overflow. The detention facility
38 would accommodate the difference between the 100-year post-development design storm and the
39 10-year pre-development design storm, as required by the MCWRA. Individual lot owners would be
40 responsible for installing the lot detention facilities, and PBC would be responsible for maintaining
41 and reporting to the County.

⁴ This estimate assumes 9,000 square feet of impervious surface per lot plus associated roadway (WWD Corporation 2011).

1 A storm drain pipe with individual lot drainage stubs would be placed along the frontage of the
2 proposed 7 lots and would discharge into the proposed 36-inch culvert that would run through the
3 site. The metered release and overflow for the individual lot detention facilities would discharge
4 into the storm drain stub provided. Individual lots would be required to include best management
5 practices in their developmental designs to help eliminate contaminants from entering the drainage
6 system.

7 **Area V.** The residential development could increase the impervious area on the site by 3.37 acres⁶,
8 which would result in a total site run-off detention of 10,670 cubic feet. Site run-off detention is
9 proposed as follows. Each individual lot would be required to include a closed detention facility that
10 utilizes a metered release of the pre-construction 10-year design run-off rate and an overflow. The
11 detention facility would accommodate the difference between the 100-year post-development
12 design storm and the 10-year pre-development design storm, as required by the MCWRA. Overflows
13 would be designed to release flows at the front or back of each individual lot, which would then be
14 dispersed overland before entering the proposed road's drainage system or entering the wetland.
15 Individual lot owners would be responsible for installing the lot detention facilities, and PBC would
16 be responsible for maintaining and reporting to the County. Best management practices (e.g.,
17 vegetated drainage swales, dispersion trenches) would be used at both road drainage outlets to help
18 control sediment and contaminants from entering wetland.

19 **Collins Residence.** The development could increase the impervious area by 1.03 acres,⁷ which would
20 result in a total site run-off detention of 6,765 cubic feet. The site would be graded so that the entire
21 site drains towards the Fan Shell Beach watershed. Surface run-off from the site would be collected
22 and detained by detention facilities that would not infiltrate.

23 This development would include a closed detention facility at each individual lot. Closed detention
24 facilities would utilize a metered release of the pre-construction 10-year design run-off rate and an
25 overflow. The detention facility would accommodate the difference between the 100-year post-
26 development design storm and the 10-year pre-development design storm, as required by the
27 MCWRA. A storm drain system with individual lot drainage stubs would be implemented to direct
28 run-off to a new 15-inch culvert that would cross Portola Road and discharge into the proposed
29 storm drain system for the Equestrian Center parcel. The metered release and overflow for the
30 individual lot detention facilities would discharge into the storm drain stub provided. Individual lots
31 would include best management practices in their developmental designs to help eliminate
32 contaminants from entering the drainage system. Individual lot owners would be responsible for
33 installing the lot detention facilities, and PBC would be responsible for maintaining and reporting to
34 the County.

35 This development would also include a closed detention facility for the access road. The closed
36 detention facility would be required to have a metered release of the pre-construction 10-year
37 design run-off rate and overflow. The metered release and overflow would discharge into the same
38 storm drain system for the site as discussed above. PBC would own and maintain this detention
39 facility.

40 **Corporation Yard.** The development could increase the impervious area of the site by 3.02 acres;⁵
41 this increase would result in a total site run-off detention of 9,578 cubic feet. All drainage from road

⁵ This estimate assumes 9,000 square feet of impervious surface per lot, plus the roadway (WWD Corporation 2010, 2011).

1 and lot development would be hard-piped to the existing detention basin located at the west end of
2 the development site. The existing detention basin would be increased to accommodate the
3 additional 9,578 cubic feet of storm run-off created by this development. A new overflow for the
4 detention basin would be designed to allow for the appropriate 10-year pre-development and
5 excessive storm event releases. Existing overflow is released overland prior to entering a tributary
6 of Sawmill Gulch.

7 **Criteria for Determining Significance**

8 In accordance with CEQA, State CEQA Guidelines, Monterey County plans and policies, and agency
9 and professional standards, a project impact would be considered significant under the following
10 conditions:

11 **A. Alteration of Drainage Patterns**

- 12 • Substantially alter the existing drainage pattern of the site or area, including through the
13 alteration of the course of a stream or river, in a manner which would result in substantial
14 erosion or siltation on or off the site.

15 **B. Stormwater Run-Off and Drainage Infrastructure**

- 16 • Substantially increase the rate or amount of surface run-off, which would exceed capacity of
17 existing or planned storm drain facilities, cause downstream or offsite drainage problems, or
18 increase the risk or severity of flooding in downstream areas.

19 **C. Water Quality**

- 20 • Violate any water quality standards or otherwise substantially degrade surface water quality or
21 contribute substantial non-point sources of pollution to the Carmel Bay ASBS.

22 **Project Impacts and Mitigation Measures**

23 **A. Alteration of Drainage Patterns**

24 **Impact HYD-A1. The proposed project would result in the alteration of surface drainage**
25 **patterns, but would not alter the course of a stream or river in a manner that would result in**
26 **substantial erosion or siltation on or off the site. (Less than significant with mitigation)**

27 The proposed project would result in ground disturbance, grading, and construction of new
28 impervious surface at some of the development sites, which would alter surface drainage patterns.
29 The alteration would not be to a degree such that it would alter the course of a stream or river in a
30 manner that would result in substantial erosion or siltation on or off the site.

31 The preliminary drainage reports prepared for the proposed project (WWD Corporation 2010,
32 2011) include general drainage control design for all development sites such that the difference
33 between the peak 100-year post-development design and the peak 10-year pre-development
34 designs is accommodated, MCWRA. Detention and retention structures have been included in
35 project designs which can slow the flow of stormwater run-off, reducing the risk of erosion and
36 gullying in the downstream drainages. These controls would help reduce the likelihood of significant
37 alteration of surface drainage patterns. The site-specific geotechnical/geologic reports identify soils

1 and subsurface constraints in several areas (Areas M, F-2, I-2, J, K, L, U and V) and thus recommends
2 closed detention facilities (Haro, Kasunich and Associates 2010a-2010m). The final drainage plans
3 need to be approved by the County Water Resources Agency. This impact is considered significant,
4 but it would be reduced to a less-than-significant level with implementation of Mitigation Measure
5 HYD-A1, which ensures that the final drainage plans are prepared per the requirements of and
6 approved by the MCWRA, and Mitigation Measure HYD-A2, which ensures that the drainage facilities
7 will be maintained and monitored.

8 **Mitigation Measure HYD-A1. Ensure on-site detention of stormwater run-off at**
9 **development sites and the presence oil/grease separators at parking lots; prepare final**
10 **drainage plan with flow calculations and construction detail, and implement approved**
11 **drainage plan.**

12 Prior to filing the final map, the applicant will provide a drainage plan prepared by a registered
13 civil engineer addressing on-site and off-site impacts (flow) with supporting calculations and
14 construction detail. The drainage plan will include on-site stormwater detention facilities
15 designed to limit the 100-year post-development run-off rate to the 10-year pre-development
16 rate (including supporting flow calculations), and it will include oil/grease separators for all
17 parking areas with 20 or more parking spaces as required by Monterey County Water Resources
18 Agency (MCWRA). The drainage plan will incorporate the recommendations from the
19 Geotechnical/Geologic Feasibility Update Letters (Haro, Kasunich and Associates 2010a-2010m)
20 and include closed detention facilities to address soils and subsurface constraints. The final
21 drainage plan will be submitted to MCWRA for review and approval.

22 Once approved by MCWRA, the applicant will implement the final Drainage Plan by including it
23 in the final design, mapping, and construction specifications. Regarding future residential
24 construction contracted by private property owners, the applicant will inform the new property
25 owners of the on-site detention requirements at the time lots are purchased, and the County will
26 include the requirements in the conditions of approval applied to residential development.

27 **Mitigation Measure HYD-A2. Maintain and monitor drainage and flood control facilities,**
28 **and prepare annual reports that describe the condition, maintenance performed, and**
29 **required improvements of drainage and flood control facilities.**

30 The applicant will be responsible for maintenance and reporting responsibilities for all drainage
31 and flood control facilities associated with the proposed project, including the individual
32 stormwater detention systems proposed for future development in the residential lot
33 subdivision areas.

34 Prior to filing the final map, the applicant will provide a signed and notarized Drainage and
35 Flood Control Systems Agreement to the MCWRA for review and approval. The agreement will
36 include a summary of required annual maintenance activities and provisions for the preparation
37 of an annual drainage and flood control report.

38 For future residential construction contracted by private property owners, the applicant will
39 inform the new property owners of the inspection, maintenance and reporting responsibilities
40 at the time lots are purchased. Once sites have been developed, the applicant will provide an
41 annual report that addresses each development site. The annual report will be prepared by a
42 registered civil engineer and will document the effectiveness of the drainage facilities, the
43 maintenance performed, and any required improvements or additional maintenance required to

1 ensure proper function. The report will be submitted to the MCWRA by August 15 for review
2 and approval.

3 The MCWRA will notify the applicant if any action is required. If, after notice and hearing, the
4 applicant fails to properly maintain, repair, or operate the drainage and flood control facilities,
5 the MCWRA will be granted the right by the property owners to enter any and all portions of the
6 property to perform repairs, maintenance, or improvements necessary to properly operate the
7 drainage and flood control facilities in the proposed project. The MCWRA will have the right to
8 collect the cost for said repairs, maintenance, or improvements from the applicant. The
9 appropriateness of the cost will be considered in a hearing by the Board of Supervisors. The
10 signed Drainage and Flood Control Systems Agreement will be recorded concurrently with the
11 final map.

12 For future residential construction contracted by private property owners, the applicant will
13 inform the new property owners of the requirements at the time lots are purchased, a modified
14 Drainage and Flood Control Systems Agreement will be signed by applicant and property owner,
15 and the County will include the requirements in the conditions of approval applied to residential
16 development.

17 B. Stormwater Run-off and Drainage Infrastructure

18 **Impact HYD-B1. The proposed project would result in increased stormwater run-off due to an** 19 **increase in impervious surfaces and topographic alterations. (Less than significant with** 20 **mitigation)**

21 Construction of the proposed project would create more impervious areas than currently exist at
22 development sites and within the project area. The introduction of new impervious surfaces would
23 reduce the ground surface available for infiltration of rainfall and run-off, and subsequently would
24 generate additional run-off during storm events. Increased run-off can contribute to flood potential
25 of natural stream channels, accelerate processes of soil erosion and stream channel scour, and
26 increase the transport of pollutants to waterways. Increased run-off can also overwhelm
27 downstream stormwater infrastructure resulting in localized flooding.

28 The preliminary drainage reports for the proposed project (WWD Corporation 2010, 2011) indicate
29 that impervious surface would increase by 32.85 acres (0.63% of the total area of Pebble Beach). Net
30 increases in impervious surfaces are identified at all project locations, except portions of The Lodge
31 at Pebble Beach (Parking and Circulation Reconstruction, Fairway One Reconstruction, and New
32 Colton Building) and The Inn at Spanish Bay (Conference Center Expansion). The peak rate of
33 stormwater run-off for a 1-in-100-year storm would increase in most of the development sites, and
34 estimated changes in stormwater flows between pre-project 10-year run-off and post-project 100-
35 year run-off would range from 1.79 cubic feet per second (cfs) to 14.82 cfs (WWD Corporation
36 2010).

37 The preliminary drainage reports identify that each development site would support its own
38 retention or detention storage requirements and that the design criteria would accommodate the
39 difference between the peak 100-year post-development volume and the peak 10-year pre-
40 development volume, as required by MCWRA.

41 The preliminary drainage reports and site plans describe the proposed new drainage facilities and
42 improvements, including a variety of new controlled discharge outfalls; connections with existing

1 stormwater drainage features; and localized, and less formal, discharge structures that flow to open
2 space areas and existing swales. The development plans also depict a number of areas where
3 detention basins would be created to reduce peak drainage flow rates during storm events and
4 identifies the required detention storage and required design volumes on a site-by-site basis.

5 Because the preliminary drainage plans for the proposed project include on-site detention facilities
6 and features to control stormwater flow (limiting the 100-year post-development run-off rate to the
7 10-year pre-development rate), the proposed project would not substantially increase the rate or
8 amount of surface run-off to the point that it would exceed capacity of existing or planned storm
9 drain facilities (which is primarily roadside drainage ditches), cause downstream or off-site
10 drainage problems, or increase the risk or severity of flooding in downstream areas. However, the
11 drainage plans need to be finalized and approved by the MCWRA. This impact is considered
12 significant, but it would be reduced to a less-than-significant level with implementation of Mitigation
13 Measure HYD-A1, which ensures the final drainage plans are prepared per the requirements of and
14 approved by the MCWRA, and Mitigation Measure HYD-A2, which ensures the drainage facilities will
15 be maintained and monitored.

16 C. Water Quality

17 **Impact HYD-C1. The proposed project would degrade surface water quality due to an**
18 **increase in sediment and pollutant loading in stormwater drainage during construction and**
19 **from operation. (Less than significant with mitigation)**

20 Construction

21 Construction activities would involve initial clearing of vegetation and grading, construction of
22 building foundations and structures, grading and paving of roadway/parking lot surfaces, and
23 installation of landscape features. Construction activities could impair water quality temporarily
24 because disturbed and eroded soil, petroleum products, and miscellaneous waste may be discharged
25 into receiving waters. Soil and associated contaminants entering stream channels can increase
26 turbidity, stimulate algae growth, increase sedimentation of aquatic habitat, and introduce
27 compounds that are toxic to aquatic organisms. If they are released into the environment,
28 construction materials such as soil, concrete, fuel, oil, and paint are potentially harmful to fish and
29 other aquatic life.

30 The extent of potential environmental effects depends on the erodibility of soil types encountered,
31 the type of construction practices employed, the extent of disturbed area, the duration of
32 construction activities, the timing of precipitation, the proximity to receiving water bodies, and the
33 sensitivity of those water bodies to contaminants of concern. Section 3.6, Geology, Seismicity, and
34 Soils, describes potential impacts associated with construction-related discharges of soil due to
35 erosion and slope stability hazards.

36 All proposed project features would involve construction activities and the associated potential for
37 water quality impacts. The receiving waters include the drainage area to the Carmel Bay, Seal Rock
38 watershed, Sawmill Gulch watershed, Fan Shell Beach watershed, and smaller unnamed drainage
39 basins immediately adjacent to the coastline.

40 The proposed project would involve construction activities occurring over several years. The
41 majority of site development for some facilities could be constructed relatively quickly within
42 single-summer dry seasons. However, other components such as the larger commercial

1 development components could occur during at least one winter rainfall season. Potential for
2 inadvertent offsite run-off or for mobilization of construction-related materials or waste products
3 by stormwater is greatest when construction activities are carried out in winter.

4 The potential for accidental spills of fuel and other toxic materials could exist during any
5 construction period. The water quality effects of spills could be short- or long-term, depending on
6 the type of material, size of the spill, and seasonal timing. The need for construction-site dewatering
7 has not been identified. However, it is reasonable to assume that dewatering might be needed
8 during the construction of deep excavations such as those necessary for underground parking
9 facilities. This could result in the compromise of water quality and therefore is considered a
10 significant impact.

11 **Operation**

12 As described for Impacts HYD-A1 and HYD-B1, the proposed development could increase rates and
13 quantities of stormwater drainage. Increases in the total run-off volume could accelerate soil erosion
14 and stream channel scour, and could increase the transport of contaminants to waterways, including
15 the Carmel Bay ASBS. Approximately half of the 16 Lots in Area I-2 and the Pebble Beach Driving
16 Range would drain into storm drain systems that enter Carmel Bay ASBS.

17 The proposed project would also involve the construction of roads, parking lots, infrastructure, and
18 maintenance areas associated with the proposed facilities. Run-off from these areas could be
19 expected to contain non-point pollution sources comparable to those from urban areas. The type of
20 pollutants contained in street/parking lot run-off include oil, grease, heavy metals, and other
21 petroleum derivatives from engines and from wearing of auto parts and roadway surfaces. The
22 applicant has conducted stormwater run-off sampling in Del Monte Forest since 1995 (refer to
23 Water Quality/Site-Specific Conditions under Environmental Setting), and no oil and grease has
24 been detected in any sampling events. New parking areas are proposed at most development sites.
25 Those with 20 or more parking spaces include: Fairway One Reconstruction, New Colton Building,
26 and Parking and Circulation Reconstruction at The Lodge at Pebble Beach; New Guest Cottages and
27 New Employee Parking at The Inn at Spanish Bay; New Resort Hotel (Option 1) at Area M Spyglass
28 Hill; Driving Range Relocation from Area V to Collins Field and Equestrian Center Reconstruction.
29 The application plan set includes sediment traps, vegetated filtering strips and swales, and
30 detention-retention systems to control these pollutant sources (Pebble Beach Company 2011). The
31 County also requires oil and grease separators at all parking lots with 20 or more parking spaces
32 and annual inspection of the separators.

33 The proposed increase in the number of permanent residential units could also incrementally
34 increase the potential for common household materials such as pesticides, fertilizers, automotive
35 fluids (e.g., fuel, oil, grease, antifreeze, brake pad dust), cleaning agents, and pet wastes to enter
36 storm run-off.

37 In summary, construction and operation of the proposed project could create sediments and
38 contaminants in stormwater run-off that violate water quality standards or otherwise substantially
39 degrade surface water quality or contribute substantial non-point sources of pollution to the Carmel
40 Bay ASBS. The proposed project would include drainage improvements that have been identified in
41 the preliminary drainage reports (WWD Corporation 2010, 2011), including detention basins to
42 reduce the size of peak drainage flow rates during storm events. These basins would also provide
43 water quality benefits by allowing settling of sediment particles and reducing their transport. The
44 drainage plans have not yet been finalized.

1 This impact is considered significant. Implementation of Mitigation Measures HYD-A1, HYD-A-2,
2 (described above); HYD-C1 and HYD-C2 (described below); and GSS-C1, and GSS-D1 (described in
3 Section 3.6 Geology, Seismicity, and Soils) would reduce this impact to a less-than-significant level.

4 **Mitigation Measure HYD-C1. Prepare and implement a stormwater pollution prevention**
5 **plan to prevent and reduce sediments and contaminants in stormwater run-off during**
6 **construction.**

7 Prior to project construction, the applicant will ensure the general contractor(s) prepare a
8 SWPPP to prevent sedimentation or other contamination of stormwater run-off, in compliance
9 with NPDES general construction permit requirements. The SWPPP will include standard and
10 site-specific measures to address soil stabilization, wind and water erosion, stormwater run-off,
11 sediment, and other construction-related pollutants. Typical BMPs considered for inclusion in
12 the SWPPP include:

- 13 ● Temporary sediment control: silt fence, sandbag, straw bale, and fiber roll barrier; desilting
14 basin.
- 15 ● Temporary soil stabilization: hydraulic or straw mulch; seeding; soil binders; and erosion
16 control mats or blankets.
- 17 ● Preservation of existing vegetation.
- 18 ● Scheduling to avoid rainfall season.
- 19 ● Stockpile management: size restriction, run-off control, and covers.
- 20 ● Sediment tracking control: street sweeping, covered hauling trailers.
- 21 ● Waste management: spill prevention, concrete waste management, material delivery and
22 storage, vehicle fueling and cleaning.
- 23 ● Dewatering: clear water diversion, desilting basins, filter discharges, discharge to grass
24 fields, monitor discharges and restrict if necessary.

25 The SWPPP will include emergency spill control and response measures to reduce the potential
26 for impacts through prevention and rapid cleanup should a spill occur.

27 All elements of the SWPPP will be reviewed by Monterey County staff to ensure that measures
28 are included to conform to the erosion control ordinance and provisions of the CIP. Under the
29 direction of Monterey County staff, the general contractor(s) and all subcontractor(s)
30 conducting the work will be responsible for constructing or implementing, regularly inspecting,
31 and maintaining the BMPs in good working order.

32 The applicant will require the general contractor(s) to file an NOI to discharge stormwater and
33 an application for the NPDES stormwater permit for general construction activity with the
34 RWQCB before starting construction. All construction activities will be subject to this
35 requirement. However, the number of NOIs and SWPPPs prepared will depend on the phasing of
36 each project element and the general contractor(s) involved. Applications for the various project
37 elements can be separate or combined, as deemed necessary by the applicant and their
38 representatives.

1 **Mitigation Measure HYD-C2. Provide regular inspection and maintenance of operational**
2 **best management practices to ensure function and minimize the discharge of pollutants**
3 **to surface water.**

4 The applicant will provide inspection and maintenance as needed, but no less than annually, of
5 all operational best management practices such as sediment traps, vegetated filtering strips, and
6 swales to ensure effectiveness and proper function. Where deficiencies are identified, the
7 applicant will take corrective action to restore the structure to a proper working condition. This
8 mitigation measure could be combined with Mitigation Measure HYD-A2, described above.

9 **Impact HYD-C2. The proposed project could degrade water quality due to pesticide,**
10 **herbicide, and fertilizer use from the Pebble Beach Driving Range Relocation from Area V to**
11 **Collins Field. (Less than significant with mitigation)**

12 The Pebble Beach Driving Range would be relocated from Area V to Collins Field. The current
13 driving range in Area V is within the Fanshell Beach Watershed, and the relocated driving range
14 would be within the Carmel Bay ASBS watershed.

15 Turf management activities would include the use of pesticides, herbicides, and fertilizers that could
16 be transported off-site through surface drainage and shallow groundwater seepage. Contaminants of
17 concern from turf management activities could be carried into local drainages by irrigation water in
18 summer, or stormwater run-off in winter. Contaminants of concern include synthetic organic
19 compounds in pesticides and herbicides. Nitrogen is the primary fertilizing agent.

20 Several key components would be implemented to control quantity and quality of drainage and run-
21 off to local drainages. As described above, run-off would be controlled through the use of the
22 stormwater drainage collection system to limit adverse changes in hydrologic conditions at the
23 wetlands. Run-off would be conveyed to the detention basin to intercept and otherwise reduce off-
24 site transport of contaminants.

25 This impact is considered significant but would be reduced to a less-than-significant level with
26 implementation of Mitigation Measure HYD-C3.

27 **Mitigation Measure HYD-C3. Prepare and implement an integrated pest management**
28 **program for the relocated Pebble Beach Driving Range.**

29 Prior to operation, the applicant will prepare and implement an integrated pest management
30 (IPM) program that describes irrigation and pesticide application management procedures for
31 the Pebble Beach Driving Range. The IPM program will use the best available monitoring
32 technology to manage course operations and use the smallest amount of pesticides possible. The
33 applicant will identify a selected list of potential pesticides, herbicides, and fungicides and the
34 typical application areas where they would be used.

35 As part of the IPM program and before the relocated driving range begins operating at the new
36 location the applicant will develop a risk management plan (pursuant to California Department
37 of Food and Agricultural regulations) to manage the risk of pesticides, herbicides and fungicides
38 contaminating surface waters. The plan will describe responsibilities of the Pebble Beach
39 Driving Range management for planning, implementing, and supervising all grounds
40 maintenance activities. Staff organizational structure, professional qualifications, and associated
41 licensing requirements of principal course employees will be identified, including those
42 requiring a Qualified Applicator Certificate (QAC) as certified by the California Department of

1 Food and Agriculture, and Pest Control Operator (PCO) licensing. Water quality monitoring and
2 reporting procedures will be addressed for implementation during the winter rainfall season to
3 verify that discharges to Carmel Bay do not contain contaminants at levels harmful to aquatic
4 life. The plan will also include an equipment washdown and recycling system that will be used to
5 clean mowers and other equipment that could be contaminated with driving range chemicals,
6 oils, and grease. The IPM program will use the best available monitoring technology to manage
7 course operations and utilize slow-release fertilizers to limit run-off of nutrients.

8 Cumulative Impacts and Mitigation Measures

9 The impact zone for hydrology is Del Monte Forest because this is the only area in which the project
10 could contribute to flooding and run-off impacts. The impact zone for water quality is the Monterey
11 Peninsula and beyond because the project could contribute to marine water quality impacts in
12 Carmel Bay and Monterey Bay. The methodology for determining cumulative impacts is described
13 under Analysis of Cumulative Impacts at the beginning of Chapter 3.

14 A. Alteration of Drainage Patterns

15 **Impact HYD-A1(C). Cumulative development in Del Monte Forest would alter surface**
16 **drainage patterns, but the project's contribution would be reduced to a less-than-significant**
17 **level with mitigation.**

18 Cumulative development in Del Monte Forest would be limited to single-family residences. These
19 individual homes would be required to comply with site-specific hydrology/water quality
20 recommendations/measures as required by the Monterey County Water Resources Agency. The
21 proposed project would include ground disturbance, grading, and construction of new impervious
22 surfaces that would alter surface drainage patterns. Implementation of Mitigation Measures HYD-A1
23 and HYD-A2 would ensure that stormwater run-off is addressed by on-site detention, and that a final
24 drainage report is prepared, including evaluation of adequacy of all on-site and off-site drainage
25 improvements. Therefore, although cumulative development impacts related to drainage patterns
26 are considered to be potentially significant, the project's contribution would not be considerable.

27 B. Stormwater Run-Off and Drainage Infrastructure

28 **Impact HYD-B1(C). Cumulative development in Del Monte Forest would result in increased**
29 **stormwater run-off, but the proposed project's contribution would be reduced to a less-than-**
30 **significant level with mitigation.**

31 Cumulative development in Del Monte Forest, other than the project, would be limited to residential
32 construction and roadways that would contribute to the overall amount of impervious surfaces
33 within Del Monte Forest. The proposed project would result in an addition of 32.85 acres (0.63% of
34 the total area of Pebble Beach) of impervious surfaces. An increase in impervious surfaces would
35 occur at all project locations, except portions of The Lodge at Pebble Beach and The Inn at Spanish
36 Bay. New drainage facilities and detention basins would also be included in the project.
37 Implementation of Mitigation Measures HYD-A1 and HYD-A2 would include an assessment of
38 downstream stormwater infrastructure and drainage improvements necessary to handle increased
39 stormwater flows, and would require preparation of a drainage detention facilities annual report.
40 Therefore, although cumulative development impacts related to stormwater run-off and drainage

1 infrastructure are considered to be potentially significant, the project's contribution would not be
2 considerable.

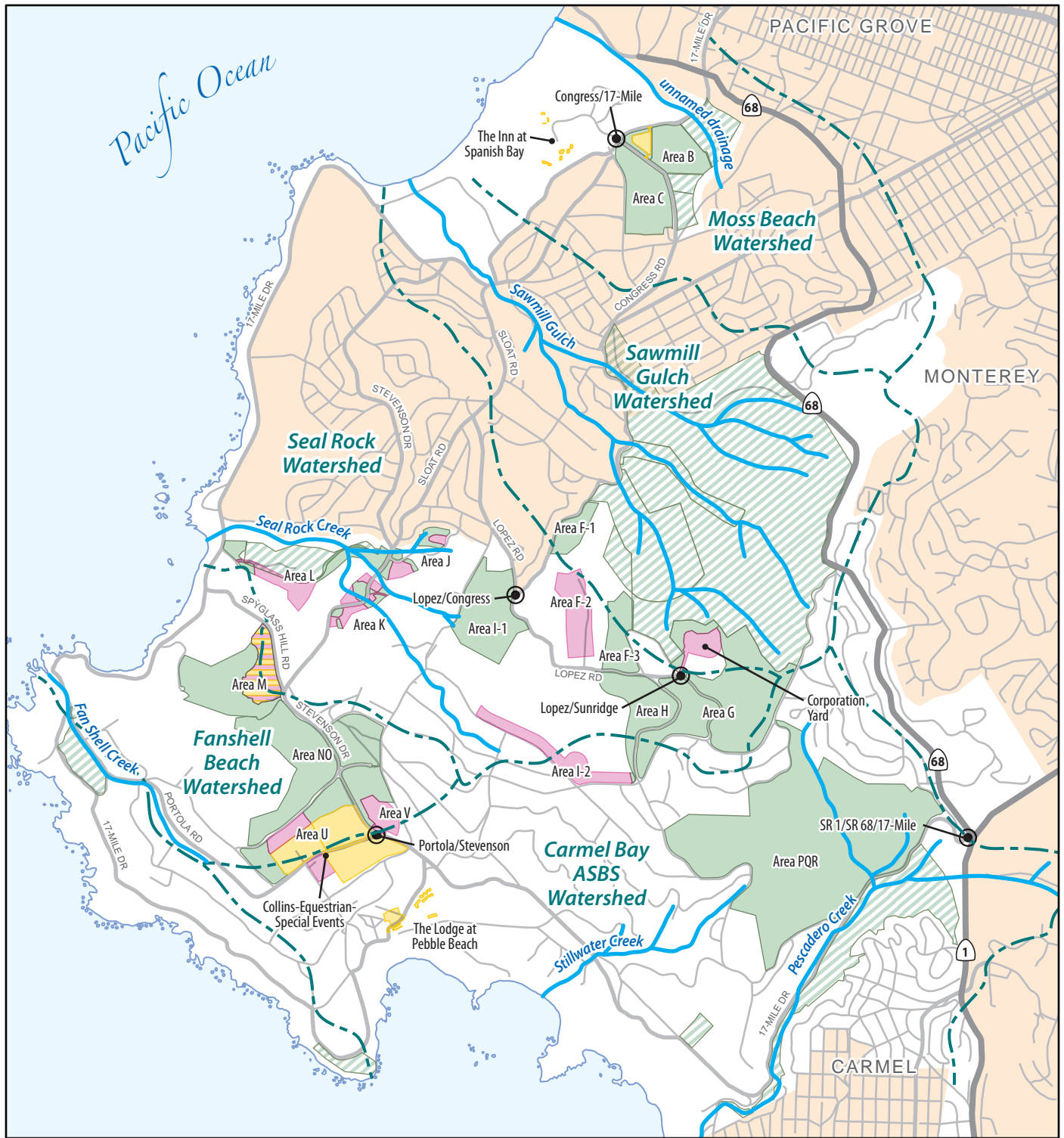
3 **C. Water Quality**

4 **Impact HYD-C1(C). Cumulative development on the Monterey Peninsula and beyond could**
5 **degrade onshore and offshore water quality, but the proposed project's contribution would**
6 **be reduced to a less-than-significant level with mitigation.**

7 Cumulative development in the Monterey Peninsula and beyond, including the proposed project,
8 could result in increases to pollutant loads due to drainages within Del Monte Forest and in marine
9 waters offshore due to new paved surfaces and related urban run-off, vehicle fluid spills and run-off,
10 and increased pesticide, herbicide, and fertilizer use. Within Del Monte Forest, development of up to
11 105 new dwelling units⁶ would contribute to impacts on water quality in local drainages and
12 wetlands. On the Monterey Peninsula and beyond, new development would contribute to impacts on
13 water quality in Carmel Bay and Monterey Bay and marine waters outside the two bays. New
14 construction would be required to comply with site-specific hydrology/water quality
15 recommendations/measures as required by the County Water Resources Agency (in County areas)
16 or local jurisdictions (in incorporated cities), as well as state water quality requirements.

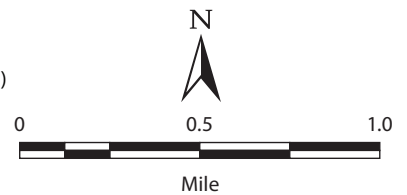
17 The proposed project could have both construction impacts (related to clearing of vegetation and
18 grading, construction, paving, and landscaping) as well as operational impacts (increases in run-off,
19 residential/commercial use) on water quality. Implementation of Mitigation Measures HYD-A1,
20 HYD-A2, HYD-C1, HYD-C2, HYD-C3, GSS-C1, and GSS-D1 would reduce potential water quality
21 impacts to a less-than-significant level. These measures include, but are not limited to, preparation
22 of a SWPPP, installation of oil/grease separators, and regular inspections/implementation of
23 operational BMPs. Therefore, although cumulative development impacts related to water quality are
24 considered to be potentially significant, the project's contribution would not be considerable.
25

⁶ As described in Table 3-2 in the introduction to Chapter 3, there are 96 undeveloped (vacant) existing residential lots, 8 new lots allowed in Area X based on County-issued certificates of compliance, and 1 new lot allowed in Area Y based on the presumption that the presence of ESHA may prevent further subdivision—thus the potential for up to 105 new dwelling units.



Legend

- Preservation Area
- Existing Preservation Area
- Roadway Intersection Improvement
- Residential Lot Subdivision
- Visitor-Serving/Recreation
- Area M Spyglass Hill—Option 1: Visitor-Serving; Option 2: Residential Lot Subdivision
- Coastal Zone (white)/Not Coastal Zone (shaded)
- Watershed Boundary
- Creek or Drainage



Graphics ... 0010611 (10-11)

Figure 3.7-1
Creeks and Drainages in the Del Monte Forest

Section 3.8
Land Use and Recreation

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Section 3.8 Land Use and Recreation

This section discusses the applicable regulatory and environmental setting for land use and recreation, existing physical land uses and recreational facilities, the proposed project’s consistency with key regulatory requirements (primarily the Coastal Act), and the proposed project’s physical impacts on land uses and recreational facilities. The analysis in this chapter is based on the project application materials and plans (WWD Corporation 2011); review of the applicable sections of the Monterey County 1982 General Plan and the Coastal Act; aerial photos of the Pebble Beach area; and a site visit to the areas proposed for development. Identified impacts resulting from the proposed project are summarized in Table 3.8-1.

With the proposed LCP Amendment, the evaluation of consistency with the applicable local land use plan is a little different than other projects under CEQA. As noted briefly below, the proposed project is not consistent with portions of the existing LCP. For example, the existing LCP does not allow any additional visitor-serving units at The Lodge at Pebble Beach Lodge or The Inn at Spanish Bay, and many of the proposed preservation areas are designated for residential development at present. The LCP Amendment must be approved prior to the County approving the proposed project itself. As such, there is no need to analyze the proposed project’s consistency with the existing LCP on a policy by policy basis, because the proposed project’s approval will depend on its consistency with the LCP Amendment, if approved.

The proposed project’s consistency with the Coastal Act is analyzed in this section because the LCP Amendment must be consistent with the Coastal Act in order for it to be approved by the CCC and by Monterey County. As described in Chapter 2, Project Description, the LCP Amendment anticipates and allows for the proposed project to occur and thus in relation to new allowable development, the LCP Amendment and the proposed project are the same in their effect on the environment for the project locations. Also as described in Chapter 2, for areas not included in the proposed project, the LCP Amendment would not result in an increase in physical impacts on the environment compared to the existing LCP nor a relaxing of environmental protection requirements.

While the LCP Amendment is discussed in this section because of its relation to the project, as identified in Chapter 2, Project Description, the LCP is not part of the “project” being analyzed under CEQA in this EIR. The LCP Amendment is being separately processed under the requirements of the CCC’s certified regulatory program which is the functional equivalent of CEQA.

1 **Table 3.8-1. Summary of Project Impacts on Land Use and Recreation**

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Land Use Compatibility										
LU-A1. The proposed project could introduce new land uses that could be incompatible with surrounding land uses or with the general character of the area.	○	○	○	○	○	●	○	○	—	—
Mitigation Measures:	AQ-E1. Prepare and implement a manure management plan.									
B. Plan/Policy Consistency										
LU-B1. While the project is inconsistent with the existing LCP, the proposed project is consistent with the proposed LCP Amendment which is consistent with the Coastal Act and which would need to be approved prior to any project approval.	○ (Applies to proposed project as a whole)									○
C. Recreational Demand										
LU-C1. The proposed project would add new recreation trails and would increase the use of existing parks and recreation facilities, but would not require the construction or expansion of recreational facilities not included in the proposed project that might have an adverse physical effect on the environment.	○	○	○	○	○	○	—	—	—	—
D. Open Space Quality and Quantity										
LU-D1. The proposed project would not diminish the quality and quantity of open space used for recreation	—	—	—	—	—	○	—	—	—	—
<p>Notes:</p> <p>● = Significant unavoidable impact.</p> <p>⊙ = Significant impact that can be mitigated to less than significant.</p> <p>○ = Less-than-significant impact.</p> <p>— = No impact or not applicable to the development site.</p> <p>PBL – The Lodge at Pebble Beach; SBI – The Inn at Spanish Bay; COL-EQC – Collins Field–Equestrian Center–Special Events Area; MH – Area M Spyglass Hill—New Resort Hotel (Option 1); MR – Area M Spyglass Hill—New Residential Lots (Option 2); RES SUB – Residential Lot Subdivisions; RD – Roadway Improvements; TRA – Trail Improvements; INF – Infrastructure Improvements; Cumulative – Proposed Project’s Contribution to Cumulative Impacts</p>										

1 **Regulatory Setting**

2 California planning law requires each city and county in the state to adopt a general plan for its
3 future development. In addition, the California Coastal Act requires cities and counties within the
4 Coastal Zone to adopt a local coastal program.

5 These plans identify the allowable uses of land within their boundaries and establish policies both
6 for development and for the protection of resources. They form the foundation for zoning and
7 coastal implementation plan ordinances that establish regulatory standards for development and
8 resource protection. As described in the following sections, the LCP and its constituent plans
9 provide a regulatory framework for the proposed project.

10 **Planning Overview**

11 **California Coastal Act**

12 Land use along California's coast is regulated under the California Coastal Act (Public Resources
13 Code Section 30,000 et seq.). The California Coastal Act established the CCC and set out policies for
14 the planning and protection of the coast. The CCC is responsible for protecting coastal resources and
15 regulating land uses within the Coastal Zone either directly, through the Coastal Development
16 Permit (CDP) process, or in an oversight capacity where local governments, such as Monterey
17 County, have had an LCP certified by the CCC.

18 Every city and county containing lands within the Coastal Zone may prepare an LCP and submit that
19 plan to the CCC for consideration and certification. An LCP must contain both an LUP and a CIP that
20 together advance the policies of the California Coastal Act. The CCC reviews each proposed LCP for
21 consistency with the California Coastal Act. If the Commission finds that the LCP conforms with all
22 policies of the California Coastal Act, it will certify the plan. This certification allows the city or
23 county to issue CDPs authorizing development projects within the Coastal Zone. Local CDPs are
24 subject to appeal to the CCC in certain cases. Amendments to a certified LCP must be reviewed and
25 certified by the CCC before they may take effect. In reviewing proposed amendments, the CCC may
26 approve, approve with modifications, or deny the proposal.

27 **Monterey County General Plan (1982/2010)**

28 The current applicable General Plan for the coastal portion of Del Monte Forest was originally
29 adopted in 1982. The General Plan update of October 2010 applies to only the inland area; the
30 coastal zone was not affected. Thus, the applicable General Plan for most of the proposed project
31 development is the 1982 General Plan. However, the 2010 General Plan does contain policies for
32 transportation that apply to inland roadways that might be affected by project-generated traffic.

33 Only those policies of the 1982 General Plan not superseded in the LUP are applicable in the coastal
34 portion of the project area. The overall intent of these policies is to beneficially guide development
35 within the County, taking into account the needs of County residents and the preservation of natural
36 resources.

37 The 2010 General Plan applies within the inland areas. The 2010 General Plan policies apply to
38 inland roadways (where the proposed project would contribute traffic).

1 Monterey County Local Coastal Program

2 The Coastal Zone of the County is divided into four areas governed by LUPs and CIPs, which together
 3 comprise the LCP for Monterey County. The four certified LUPs function as the General Plan (GP), as
 4 supplemented by the 1982 GP for matters not addressed by the LUP. The project area is within the
 5 Del Monte Forest area (coastal portion). Land use within the Coastal Zone in the project area is
 6 governed by the Del Monte Forest LUP, the CIP, and the coastal zoning ordinance (Title 20 of the
 7 County Code). There are several planning areas within the Del Monte Forest LUP. Elements of the
 8 proposed project are located within the Pebble Beach, Spanish Bay, Spyglass Cypress, Gowen
 9 Cypress, Middlefork, Huckleberry Hill, and Pescadero Planning Areas.

10 The existing LCP was certified by the CCC in 1987. This certification enables the County to consider
 11 and issue CDPs for projects that are consistent with the certified LCP.

12 The following LUP and CIP designations in Table 3.8-2 are pertinent to all project elements except
 13 the SR 1/SR 68/17-Mile Drive Intersection Reconfiguration, which is partially inside the Del Monte
 14 Forest LUP and partially within the California Department Transportation (Caltrans) right-of-way
 15 (ROW).

16 **Table 3.8-2. Existing and Proposed Land Use Designations in the Project Areas**

Proposed Development	Del Monte Forest Land Use Plan		
	Planning Area	Current Designation	Designation with LCP Amendment
The Lodge at Pebble Beach			
Meeting Facility Expansion	Pebble Beach	CGC	CGC
New Colton Building	Pebble Beach	VSC	VSC
Fairway One Reconstruction	Pebble Beach	CGC & LDR	VSC
Parking and Circulation Reconstruction	Pebble Beach	CGC	CGC
The Inn at Spanish Bay			
Conference Center Expansion	Spanish Bay	VSC	VSC
New Guest Cottages	Spanish Bay	OR & VSC	VSC
New Employee Parking	Spanish Bay	MDR & OF	VSC & OF
Collins Field–Equestrian Center–Special Events Area			
Pebble Beach Driving Range Relocation from Area V to Collins Field	Pebble Beach	MDR & OR	OR
Equestrian Center Reconstruction	Pebble Beach	OR	OR
Special Events Staging Area Grading and Expansion	Pebble Beach	OR	OR
Area M Spyglass Hill			
New Resort Hotel (Option 1)	Spyglass Cypress	MDR, OF, OR, and OS	VSC, OR, OS
New Residential Lots (Option 2)	Spyglass Cypress	MDR, OF, OR, and OS	LDR, OR, OS, and an Unclassified road and utility parcel

Del Monte Forest Land Use Plan			
Proposed Development	Planning Area	Current Designation	Designation with LCP Amendment
Residential Lot Subdivisions			
Area F-2	Gowen Cypress	MDR	LDR and an Unclassified road and utility parcel
Area I-2	Middle Fork	MDR	LDR and an Unclassified road and utility parcel
Area J	Spyglass Cypress	MDR	MDR
Area K	Spyglass Cypress	MDR	MDR, and Unclassified road and utility parcels
Area L	Spyglass Cypress	MDR	MDR, and an Unclassified road and utility parcel
Area U	Pebble Beach	LDR	MDR
Area V	Pebble Beach	MDR	MDR, OR and an Unclassified road and utility parcel
Collins Residence	Pebble Beach	LDR	MDR and two Unclassified road and utility parcels
Corporation Yard	Huckleberry Hill	CGC, IC	OR, MDR, and IC
Preservation Areas			
Area B	Spanish Bay	MDR, OF	OF
Area C	Spanish Bay	MDR, OF	OF
Area F-1	Gowen Cypress	MDR, OF	OF
Area F-3	Gowen Cypress	MDR	OF
Area G	Huckleberry Hill	MDR, OF	OF
Area H	Middle Fork	MDR, OF	OF
Area I-1	Middle Fork	LDR, MDR, OF	OF
Area I-2	Middle Fork	OF	OF
Area J	Spyglass Cypress	MDR	OF
Area K	Spyglass Cypress	MDR	OF
Area L	Spyglass Cypress	MDR	OF
Area MNOUV	Spyglass Cypress Pebble Beach	LDR, MDR, OF, OS	OF, OS
Area PQR	Pescadero	LDR, OF	OF
Corporation Yard	Huckleberry Hill	OF	OF
Roadway Improvements			
SR 1/SR 68/17-Mile Drive Intersection Reconstruction	Partially within Del Monte Forest, designated for transportation. Also within Caltrans ROW for SR 1 and SR 68		
Congress Road/17-Mile Drive Intersection Improvements	Spanish Bay		

Del Monte Forest Land Use Plan		
Proposed Development	Planning Area	Current Designation
Designation with LCP Amendment		
Congress Road/Lopez Road Intersection Improvements	Gowen Cypress, Middle Fork	
Lopez Road/Sunridge Road Intersection Improvements	Gowen Cypress, Middle Fork, Huckleberry Hill	
Portola Road/Stevenson Drive Intersection Improvements	Pebble Beach	
Trail Improvements		
Area F-2	Gowen Cypress, Area F	
Area I-2	Middle Fork, Area I	
Area J	Spyglass Cypress, Area J	
Area K	Spyglass Cypress, Area K	
Area PQR	Pescadero, Area PQR	
Corporation Yard	Huckleberry Hill	
Huckleberry Hill Natural Habitat Area	Huckleberry Hill	
Portions of 17-Mile Drive, Spyglass Road and Stevenson Drive	Various	
Infrastructure Improvements		
Infrastructure including water lines, sewer lines, reclaimed water lines, and storm drains would be installed to support the proposed development.		
Source: Pebble Beach Company 2011		
Notes:		
NA = Not Applicable		
LDR = Low Density Residential		
MDR = Medium Density Residential		
CGC = Coastal General Commercial		
IC = Institutional Commercial		
VSC = Visitor Serving Commercial		
OF = Open Space Forest		
OR = Open Space Recreation		
OS = Open Space Shoreline		

1

2 **Residential Designations**

3 Residential land uses are described in terms of low-density residential and medium-density
 4 residential under the current LUP as follows:

- 5 • **Low Density Residential (LDR)** (maximum density of 1 dwelling unit (du)/acre): This
 6 designation includes a specific density of 1 unit/1.5 acres, 1 unit/2 acres, 1 unit/4 acres or a
 7 specific density that is assigned to an area.
- 8 • **Medium Density Residential (MDR)** (maximum of 4 du/acre): This designation includes a
 9 specific density of either 2 units/acre, 4 units/acre, or a site-specific assigned density that is
 10 assigned to an area.

1 Note: Caretaker units, servant quarters, and other separate houses, but not senior citizen units, are
2 considered units of residential development for the purpose of calculating density per the current
3 LUP.

4 Golf courses can be allowed as a conditional use in the Low-Density Residential (LDR) and Medium
5 Density Residential (MDR) land use designations of Del Monte Forest per the current LUP.

6 **Commercial Designations**

7 Commercial designations include visitor-serving commercial, coastal general commercial, and
8 institutional commercial.

- 9 • **Visitor-Serving Commercial (VSC).** This category allows for uses providing basic support
10 services and visitor needs associated with coastal recreation and travel. Major hotel or inn
11 accommodations and support commercial facilities are principal uses. Residential uses
12 consistent with LUP land use maps and intensities may be permitted as secondary uses under
13 this category at the density specified.
- 14 • **Coastal General Commercial (CGC).** This category provides for commercial-use areas to
15 support community needs. Future uses will be required to be compatible with the general
16 retailing and community service character of this designation, as well as community services
17 and storage facilities.
- 18 • **Institutional Commercial (IC).** This designation is applied to a variety of uses, including the
19 Community Hospital of the Monterey Peninsula, Robert Louis Stevenson School, firehouses, and
20 a utility substation. The area of the PBC Corporation Yard immediately south of the proposed
21 employee housing is also designated institutional.

22 **Open Space Designations**

23 Three classes of open space are applicable to the proposed project:

- 24 • **Open Space Recreational (OR).** This category permits golf courses, the Beach & Tennis Club,
25 and the existing Equestrian Center, as well as necessary support and maintenance facilities such
26 as the pro shops, cart shops, parking areas, stables, and barns.
- 27 • **Open Space Forest (OF).** This category includes the SFB Morse Botanical Reserve riparian
28 corridors, rare plants and specimen trees, and geological hazard areas. Permitted developments
29 are trails, low-intensity recreational facilities, tree cutting, and public works only if consistent
30 with all other plan policies.
- 31 • **Open Space Shoreline (OS).** This category includes sandy beaches, rocky shorelines and
32 tidepools, and remnant sand dunes. Permitted uses are associated support areas for public
33 access, such as parking turnouts, trails, vista points, and related facilities, consistent with all
34 other plan policies.

35 **Proposed Local Coastal Program Amendment**

36 The Monterey County LUP was originally certified in 1984 and has subsequently been amended
37 multiple times. In 2001, the voters of Monterey County approved an amendment to the LCP
38 (Measure A) that proposed a new golf course, driving range, equestrian center, resort facility
39 expansions, guest rooms, single-family residences, employee housing units, and conservation
40 easement over 448 acres of sensitive habitat in Del Monte Forest. Because CCC approval is required

1 for all LCP amendments, the CCC reviewed Measure A in 2006 and 2007 and decided to deny the
2 amendment in June 2007. While acknowledging Measure A's proposed protected areas, the CCC
3 found that Measure A was inconsistent with the Coastal Act principally in relation to impacts on
4 environmentally sensitive habitat (including Monterey pine forest, the endangered Yadon's piperia,
5 and maritime chaparral); and was inconsistent with prior scenic easements and prior CDPs for the
6 Sawmill Gulch area, among other concerns.

7 Since 2007, PBC and CCC staff worked together to identify an amendment to the LCP and a project
8 that would allow some existing property that is owned by PBC and is adjacent to existing
9 development to be developed; would not include substantial new development (e.g., new golf
10 course, new driving range and new equestrian facility) in undeveloped and sensitive areas, thus
11 reducing impacts to sensitive habitat areas; and would preserve a substantial amount of
12 undeveloped land. The proposed LCP Amendment, which covers all remaining undeveloped Pebble
13 Beach Company-owned lands in the Del Monterey Forest coastal zone, would transfer and
14 concentrate this development potential in and adjacent to existing developed areas in Del Monte
15 Forest.

16 In 2009, the CCC staff and Pebble Beach Company agreed in principal to the LCP Amendment and
17 proposed project to allow new visitor-serving development including guest rooms, meeting rooms,
18 and parking; new single-family residential lot subdivisions; and preservation of 635 acres of
19 sensitive habitat (Pebble Beach Company 2009). While agreed upon by CCC staff, the LCP
20 Amendment and proposed project is subject to approval by Monterey County and the CCC to move
21 forward, and in no way binds the CCC itself, which must separately review and approve the LCP
22 Amendment for it to take effect.

23 The LCP Amendment would change the designated land uses within the proposed project areas as
24 indicated in Table 3.8-2. Relative to land use designations, the LCP Amendment includes a new
25 category – high density residential - referring to densities greater than 4 units/acre up to 15
26 units/acre. This designation is only applied to already developed areas with these higher densities
27 and does not designate new high-density residential areas that do not already exist. The proposed
28 LCP Amendment would also prohibit residential uses within Visitor-Serving Commercial (VSC)-
29 designated areas and would add driving ranges, clubhouses, trails, and neighborhood parks as
30 specifically allowable uses to the Open Space Recreation designation. For a summary of other key
31 proposed changes see Chapter 2, Project Description, and the proposed LUP and CIP included in
32 Appendix D.

33 Environmental Setting

34 Regional Conditions

35 Del Monte Forest is located on California's Pacific Coast and is bounded by the Pacific Ocean to the
36 west and the cities of Pacific Grove, Monterey, and Carmel-by-the-Sea to the north, east, and south,
37 respectively (Figure 2-1). The Del Monte Forest area includes residential areas, three resort hotels
38 (The Lodge at Pebble Beach, The Inn at Spanish Bay, and Casa Palmero), a small commercial center
39 (at The Lodge at Pebble Beach), seven 18-hole golf courses including clubhouses, one 9-hole
40 executive course, SFB Morse Botanical Reserve, HHNHA, Forest Lake Reservoir, Robert Louis

1 Stevenson School, Pebble Beach Equestrian Center, trails, and roads. PBC offices, the PBCSD, and
2 CAL FIRE local offices are also located within Del Monte Forest.

3 **Development Sites**

4 The existing conditions at the sites proposed for development are described below. Existing and
5 proposed land use designations are listed in Table 3.8-2.

6 Throughout this section, *resource constraints overlay* refers to the B-8 (building site) overlay on the
7 current LUP map that was originally applied due to prior water supply and sewer capacity
8 constraints and due to a prior lack of the adoption of highway capacity and circulation solutions. As
9 described in Section 3.10, Public Services and Utilities; Section 3.11, Transportation and Circulation;
10 and Section 3.12, Water Supply and Demand, the wastewater collection and treatment system has
11 been expanded to include adequate capacity for handling sewage; transportation improvements
12 both inside Del Monte Forest and to adjacent portions of SR 68 have been agreed upon (i.e., included
13 in relevant planning documents); and water supply has been provided for the proposed project
14 areas due to an entitlement derived from construction and operation of the PBC-funded water
15 recycling plant.

16 **The Lodge at Pebble Beach**

17 Existing land uses at The Lodge at Pebble Beach include hotel accommodations (161 rooms), a
18 restaurant, a commercial/retail area, two banks, offices, a tennis facility, and parking. Guest
19 accommodations are contained in The Lodge and a number of freestanding buildings (e.g., Flavin,
20 Morse, Jeffers, and McComas buildings) within the overall complex. The complex adjoins the Pebble
21 Beach Golf Links and low-density residential development (LDR—1 unit/1.5 acres development).

22 There are four development sites at The Lodge at Pebble Beach. A CDP and amendments to the
23 General Development Plan (GDP) would be required for all four project elements at The Lodge at
24 Pebble Beach (Figure 2-3).

25 **Meeting Facility Expansion**

26 The existing 5,000 sf meeting facility is within an approximately 33,000 sf, two-story structure with
27 meeting rooms located over retail shops. Adjacent land uses include a restaurant and retail shops to
28 the east and offices and retail shops to the west. Additionally, there is a pro shop, more retail shops,
29 a putting green, and The Lodge in the immediate vicinity. The proposed project would renovate and
30 expand the existing meeting facility at The Lodge at Pebble Beach by adding 2,100 sf of meeting
31 space and 2,900 sf of additional support/circulation areas along the north and west sides of the
32 building (refer to existing Building 2 in Figure 2-4). This area is currently designated Coastal General
33 Commercial (CGC) in the LUP, and the designation would not change with the LCP Amendment.

34 **New Colton Building**

35 Existing land uses at this development site is a 32-space parking lot, situated between existing guest
36 units (Morse Building and Flavin Building) and the first fairway of Pebble Beach Golf Links. The
37 proposed project would construct a new 20-unit guest room building (with parking in the
38 basement) on the site (Figure 2-5). This area is currently designated Visitor-Serving Commercial
39 (VSC) in the LUP, and the designation would not change with the LCP Amendment.

1 **Fairway One Reconstruction**

2 The existing land uses at this development site are the Fairway One complex, which has five guest
3 rooms, and the Bierne residence, which is vacant. Both properties are owned by the applicant.
4 Adjacent land uses include a private residence to the east of the first fairway of Pebble Beach Golf
5 Links to the south and the pro shop to the west. The proposed project would demolish the existing
6 Fairway One complex and Bierne residential structures and construct a new Fairway One complex
7 with 40 guest rooms in five cottages and a hospitality facility (Figure 2-6). In addition to the CDP and
8 amendments to the GDP, this component of the proposed project would require a lot line adjustment
9 and rezone to merge the current Fairway One complex lot and the Bierne Residence lot into one
10 parcel. This area is currently designated coastal general commercial and low density residential
11 (Coastal General Commercial [CGC] and Low-Density Residential [LDR]—1 unit/1.5 acres) in the
12 LUP, and the designation would be changed to Visitor-Serving Commercial (VSC) with the LCP
13 Amendment.

14 **Parking and Circulation Reconstruction**

15 The existing surface parking lot has 113 spaces and walkways connecting to the surrounding
16 buildings. Under the proposed project, the existing parking lot would be demolished, and the
17 parking lot and circulation pattern would be realigned as shown in Figure 2-7. A new two-level 224-
18 space parking facility, as well as a 23-space short-term parking lot, for guests, visitors, and
19 employees, would be constructed.

20 This area is currently designated Coastal General Commercial (CGC) in the LUP, and the designation
21 would not change with the LCP Amendment.

22 **The Inn at Spanish Bay**

23 The Inn at Spanish Bay is located in the northern portion of Pebble Beach (Figure 2-8). Existing land
24 uses at The Inn at Spanish Bay include a clubhouse, tennis courts, hotel accommodations (269
25 rooms and suites), and a conference center. Nearby land uses include The Links at Spanish Bay to
26 the west and southwest, townhouses north of the Inn, remnant Monterey pine forest within
27 development areas, Monterey pine forest and open space to the southeast (Areas B and C), and Low-
28 Density Residential (LDR) development to the south (in Del Monte Forest) and northeast (in Pacific
29 Grove).

30 The Inn at Spanish Bay site is designated Visitor-Serving Commercial (VSC) with a resource
31 constraints overlay, with the area to the north of The Inn designated for medium-density residential
32 development (MDR—4 units/acre) with a resource constraints overlay. The adjacent golf course is
33 designated Open Space Recreational (OR) with a resource constraints overlay.

34 There are three development sites at The Inn at Spanish Bay. A CDP and amendments to the General
35 Development Plan would be required for all three project elements at The Inn at Spanish Bay. Each
36 of the various project components planned to occur at The Inn at Spanish Bay are described below.

37 **Conference Center Expansion**

38 Existing land uses at this development site are the conference center building itself and the paved
39 area around it. Adjacent land uses include retail shops and the first fairway of the Spanish Bay Golf
40 Links. The proposed project would expand the existing ballroom and reception area outward by

1 expanding the outside walls of the existing building onto area that is already paved (Figure 2-9).
2 Through this expansion, 4,155 sf of support and circulation area would be added. In addition, 4,660
3 sf of new meeting space would be added to the backside of The Inn along the fairway level and first
4 floor. This area is currently designated Visitor-Serving Commercial (VSC) with a resource
5 constraints overlay by the LUP. The designation would not change with the LCP Amendment, but the
6 resource constraints overlay would be removed.

7 **New Guest Cottages**

8 Existing land uses at this development site include the parking lot for adjacent guest units and an
9 undeveloped forest buffer between the parking lot and the 11th fairway of the Spanish Bay Golf
10 Links. The proposed project would construct 40 new guest rooms in two-story buildings fronting
11 the 11th fairway of the Spanish Bay Golf Links and a hospitality facility in the middle (Figure 2-10).
12 In addition, a new 285-space surface parking facility would be created across from the main
13 entrance of The Inn, and the intersection at the main entry would be improved to accommodate
14 pedestrian traffic from the parking lot (described below). In addition to the CDP and amendments to
15 the General Development Plan, this project component would require a rezone and lot line
16 adjustment.

17 Currently, this development area is designated Open Space Recreational (OR) and Visitor-Serving
18 Commercial (VSC) with a resource constraints overlay by the LUP; the designation would be
19 changed to Visitor-Serving Commercial (VSC) only and the resource constraints overlay would be
20 removed with the LCP Amendment.

21 **New Employee Parking**

22 Currently, Area B is primarily undeveloped Monterey pine forest. A portion of the area, set back
23 from the adjoining roads, is devoid of trees and vacant. The proposed project would construct a new
24 285-space surface parking lot at the intersection of 17-Mile Drive and Congress Road across from
25 the main entry to The Inn at Spanish Bay (Figure 2-11). In addition, a new pedestrian trail
26 (approximately 200 feet long) would be constructed to connect the new parking lot with the main
27 facility. The remainder of Area B would be left as open space and preservation. In addition to the
28 CDP and amendments to the GDP, this project component would require a rezone and subdivision.

29 This portion of Area B is currently designated Medium Density Residential (MDR) and Open Space
30 Forest (OF) with a resource constraints overlay. The designation would be changed to Visitor-
31 Serving Commercial (VSC) and Open Space Forest (for the area outside the parking lot), and the
32 resource constraints overlay would be removed with the LCP Amendment.

33 **Collins Field–Equestrian Center–Special Events Area**

34 The Collins Field–Equestrian Center–Special Events Area is located north of The Lodge at Pebble
35 Beach (Figure 2-12). There are three development sites in this area. All three would require a GDP
36 and CDP.

37 **Pebble Beach Driving Range Relocation**

38 The proposed project would relocate the Pebble Beach Driving Range from its current location in
39 Area V to the nearby area known locally as Collins Field, which is southwest of Area V. Collins Field
40 is approximately 16 acres and is an open field currently used for special events. Additionally,

1 Stevenson High School, located in Pebble Beach, has informally used Collins Field for sports.
2 Surrounding land uses include low density residential development to the east and south and the
3 Equestrian Center and Special Events Area to the north.

4 The proposed project includes constructing the driving range, tee box hitting stations, a 26-space
5 surface parking lot, ball machine, restroom, and golf academy (Figure 2-13). Construction of this
6 project component would require rezoning and a lot line adjustment (merge).

7 Currently, this area is designated Medium Density Residential (MDR) with a resource constraints
8 overlay, and Open Space Recreation (OR). With the LCP Amendment, this development area would
9 be designated Open Space Recreation (OR) only, and the resource constraints overlay would be
10 removed.

11 **Equestrian Center Reconstruction**

12 The existing Equestrian Center is located on approximately 12 acres, and the existing facilities
13 include barns and stalls, corrals, employee housing, vehicle storage, interior roadway, parking, and
14 accessory structures. Surrounding land uses include the Special Events Area to the east,
15 undeveloped forest area to the west, and low density residential development and Collins Field to
16 the south and southeast, respectively.

17 The proposed project would demolish the existing Equestrian Center and rebuild it at its current
18 location to consolidate existing uses (Figure 2-14). The rebuild would result in a minor capacity
19 reduction, and a new covered arena would be added. Construction of this project component would
20 require a minor subdivision. This area is currently designated Open Space Recreation (OR) by the
21 LUP, and the designation would not change with the LCP Amendment.

22 **Special Events Area**

23 The existing Special Events Area is approximately 14 acres. The adjacent land uses include the
24 Equestrian Center to the west, undeveloped forested land to the north, the existing Pebble Beach
25 Driving Range to the east, and Collins Field to the south. The proposed project would grade and
26 expand the existing Special Events Area slightly northward (Figure 2-15). Construction of this
27 project component would require a subdivision. This area is currently designated Open Space
28 Recreation (OR) by the LUP, and the designation would not change with the LCP Amendment.

29 **Area M Spyglass Hill**

30 Area M Spyglass Hill is located across from Spyglass Hill Golf Course at the Spyglass Hill
31 Road/Stevenson Drive intersection (Figure 2-16). The development site consists of an undeveloped
32 former quarry that closed in the 1960s, as well as undeveloped forest land and sand dunes. Adjacent
33 land uses include sand dunes to the west, sand dunes and undeveloped forest to the south,
34 undeveloped forest and the Spyglass Hill Golf Course to the east, and the Spyglass Hill Golf Course to
35 the north. Two development options are being considered at this site: New Resort Hotel (Option 1)
36 and New Residential Lots (Option 2).

37 **New Resort Hotel (Option 1)**

38 Under Option 1, a new resort hotel would be constructed with 100 guest rooms, a 6,677 sf
39 restaurant/lounge, 5,120 sf meeting space, and three-level parking facility (one surface and two

1 underground levels) that would accommodate 301 vehicles. In addition, a 17,000 sf spa with a 41-
2 space surface parking lot would be constructed. The resort would be constructed on an
3 approximately 16 acre lot, and guest rooms would be constructed in approximately 10 separate
4 single-story buildings that are terraced so all guest rooms have ocean views. See Figure 2-17 for a
5 visual depiction of proposed development. This project component would require rezoning,
6 subdivision, a CDP, and a new General Development Plan for Spyglass Hill.

7 This development area is currently designated Medium Density Residential (MDR) with a resource
8 constraints overlay and the adjacent proposed preservation area is designated Open Space Forest
9 (OF) and Open Space Shoreline (OS). With the LCP Amendment, the designations would be Visitor-
10 Serving Commercial (VSC), Open Space Forest (OF), and Open Space Shoreline (OS); and the
11 resource constraints overlay would be removed.

12 **New Residential Lots (Option 2)**

13 Under this design option, up to 10 single-family lots would be constructed in the same footprint as
14 described above for the New Resort Hotel (Option 1) (Figure 2-18). This project component would
15 require rezoning and a subdivision.

16 This existing land use designations are described above. With the LCP Amendment, this area would
17 be designated Low Density Residential (LDR) for the development area and Open Space Forest (OF)
18 and Open Space Shoreline (OS) for preservation area, and an Unclassified road and utility parcel. In
19 addition, the resource constraints overlay would be removed.

20 **Residential Lot Subdivisions**

21 The proposed project includes creating new residential lot subdivisions, which are described below
22 and shown in Figures 2-19 through 2-27. The proposed residential lot subdivisions are located in
23 nine areas within or adjacent to existing golf courses or other development.

24 **Area F-2**

25 Area F-2 is currently an undeveloped, forested area surrounded by the Poppy Hills Golf Course. The
26 proposed project would construct 16 residential lots on a 19.5-acre parcel located in the Gowen
27 Cypress Planning Area and surrounded by the Poppy Hills Golf Course on the north, east, and west.
28 In addition, the existing trail on the site would be relocated and extended. Development in Area F-2
29 would require rezoning, a CDP, and a subdivision (16 residential lots).

30 Currently, this area is designated Medium Density Residential (MDR) with a resource constraints
31 overlay. The LCP Amendment would change this designation to Low Density Residential (LDR), and
32 an Unclassified road and utility parcel and would remove the resource constraints overlay.

33 **Area I-2**

34 Area I-2 is currently an undeveloped, forested area between the Poppy Hills Golf Course and
35 Viscaino and Ronda Roads. Adjoining lands on the south side of Viscaino and Ronda Roads are
36 developed with residences zoned Low Density Residential (LDR).

37 The proposed project would construct 16 residential lots on an 18.74-acre parcel located within the
38 Middle Fork Planning Area and surrounded by Poppy Hills Golf Course to the north and west and
39 Viscaino and Lisbon Roads on the south. The existing trail on the site would be relocated and

1 extended. Development in Area I-2 would require rezoning, a CDP, and a subdivision (16 residential
2 lots).

3 The development area is currently designated by the LUP as Medium Density Residential (MDR)
4 with a resource constraint overlay and Open Space Forest (OF). With the LCP Amendment, the site
5 would be designated Low Density Residential (LDR) for the development area, Open Space Forest
6 (OF) for the small (0.28 acre) proposed preservation area, and an Unclassified road and utility
7 parcel; and the resource constraints overlay would be removed.

8 **Area J**

9 Currently, Area J consists of three, undeveloped, forested areas that adjoin Spyglass Hill Golf Course
10 and Medium Density Residential (MDR) development. The proposed project would develop 5
11 residential lots on two parcels, totaling 9.38 acres, located within the Spyglass Cypress Planning
12 Area with frontage on Spyglass Woods Drive. Three of the proposed lots front the 11th Fairway of
13 Spyglass Hill Golf Course. In addition, 5.58 acres would be dedicated to open space. Development in
14 Area J would require rezoning, a CDP, and a subdivision.

15 Area J is currently designated Medium Density Residential (MDR) with a resource constraints
16 overlay: with the LCP Amendment, Area J would be designated Medium Density Residential (MDR)
17 for the development area and Open Space Forest (OF) for the preservation area, and the resource
18 constraints overlay would be removed.

19 **Area K**

20 Area K consists of undeveloped, forested land between Stevenson Drive and the Spyglass Hill Golf
21 Course, both east and west of Stevenson Drive. The proposed project would develop the site with 8
22 residential lots on two parcels totaling 10.62 acres within the Spyglass-Cypress Planning Area. The
23 site is divided by Stevenson Drive with 3.94 acres to the west (3 residential lots) and 6.68 acres to
24 the east (5 residential lots). Development in Area K also includes 5.78 acres of land to be dedicated
25 to open space.

26 Area K is currently designated Medium Density Residential (MDR) with a resource constraints
27 overlay. With the LCP Amendment, the development site would be designated Medium Density
28 Residential (MDR) for the development area, Open Space Forest (OF) for the preservation area, and
29 Unclassified road and utility parcels; the resource constraints overlay would be removed.

30 **Area L**

31 Area L consists of undeveloped, forested land between Spyglass Hill Golf Course and the Indian
32 Village preserve area. Indian Village is a 21-acre parcel of Monterey pine forest with a park-like
33 clearing and picnic facilities that can be rented from the Del Monte Forest Foundation, and an
34 existing hiking trail extends through Indian Village on the north side of the access road. The
35 proposed project would develop 10 residential lots on a 20.92-acre area located within the Spyglass-
36 Cypress Planning Area with access off 17-Mile Drive, and the new lots would be on the south side of
37 the existing road that extends to the Indian Village preserve area. Lot development would require
38 road expansion to access the new units. Proposed development would also include 9.25 acres of
39 open space. Development in Area L would require rezoning, a CDP, and a subdivision.

1 Area L is currently designated Medium Density Residential (MDR) with a resource constraints
2 overlay. With the LCP Amendment, Area L would be designated Medium Density Residential (MDR)
3 for the development area, Open Space Forest (OF) for the preservation area, and an Unclassified
4 road and utility parcel; the resource constraints overlay would be removed.

5 **Area U**

6 Area U consists of undeveloped, partially degraded and partially forested land between Drake Road
7 and the Equestrian Center, which is also part of Area U. A forested area north of Drake Road adjoins
8 proposed residential development and the Cypress Point Golf Course. The proposed project would
9 subdivide an area totaling 22.28 acres in the Pebble Beach Planning Area to provide seven
10 residential lots. The new residential lots would be located on the south side of and fronting Drake
11 Road, with the Equestrian Center to the south and open space preserve areas to the east and west
12 (also in Area U) and across Drake Road to the north (in Area N). Open space would total 16.69 acres.
13 Proposed development would require rezoning, a CDP, and a subdivision.

14 The portion of Area U to be developed with residential lots is currently designated Low Density
15 Residential (LDR) with a resource constraints overlay. With the LCP Amendment, the development
16 area would be designated Medium Density Residential (MDR) for the development area and Open
17 Space Forest (OF) for the preservation area, and the resource constraints overlay would be
18 removed.

19 **Area V**

20 Currently, Area V is partially developed with the Pebble Beach Driving Range. The area east of
21 Forest Lake Road is developed with Low Density Residential (LDR), and the area west of Stevenson
22 Drive is the Special Events Area. The proposed project would develop 14 residential lots on a 23.06-
23 acre parcel located within the Pebble Beach Planning Area with frontage on Stevenson Road (near
24 Portola Road). The driving range, which is undersized by modern standards, would be relocated to
25 Collins Field (discussed above). Two parcels around the south, southeast, and southwest of the
26 proposed residential lots would be dedicated to open space, totaling 15.47 acres, and a 12.56-acre
27 parcel to the north would be dedicated to preservation. Proposed development would require
28 rezoning, a CDP, and a subdivision.

29 The development area is currently designated Medium Density Residential (MDR) with a resource
30 constraints overlay. With the LCP Amendment, the development area would be designated Medium
31 Density Residential (MDR) for the residential area, Open Space Forest (OF) for the preservation
32 area, Open Space Recreational (OR), and an Unclassified road and utility parcel; the resource
33 constraints overlay would be removed.

34 **Collins Residence**

35 Currently, the site is developed with one residence built in the 1970s (a second residence, the
36 Collins Studio, was previously destroyed in a storm and subsequently demolished and removed).
37 The extant residential structures are adjacent to Low Density Residential (LDR) development to the
38 west and south, Collins Field to the east, and the Equestrian Center and Special Events Area to the
39 north. The proposed project would create 4 single-family residential lots out of 2 existing residential
40 lots totaling 3.85 acres located within the Pebble Beach Planning Area with frontage on Alva Lane.
41 The proposed changes would require rezoning, CDPs, and a single subdivision on two parcels. Both
42 existing lots would be reconfigured to accommodate four new lots.

1 The site is currently designated Low Density Residential (LDR) and would be designated Medium
2 Density Residential (MDR) and two Unclassified road and utility parcels with the LCP Amendment.

3 **Corporation Yard**

4 The proposed development site is a 22.46-acre parcel at the PBC Corporation Yard site and is
5 developed with Pebble Beach Company offices, maintenance facilities and outdoor stockpiles
6 (greenwaste, composting, recycling), and a former quarry site (opened in 1969, closed in 2007). The
7 site is adjacent to the HHNHA. The proposed project would create a 10-lot residential subdivision.
8 The portion of the parcel along the northwestern edge adjacent to the HHNHA would remain open
9 space (1.45 acres). This open space would be used for low-impact passive recreation (e.g., playing
10 Frisbee, walking dogs) and would have no formal recreation structures (e.g., no playground,
11 basketball courts, etc.).

12 Trails would be created on existing dirt roads, connecting the subdivision to the existing trail system
13 in the HHNHA. The PBC offices to the south would remain in use. Maintenance activities would
14 continue to occur, but the activities and stockpiles would be relocated from the site to an area east of
15 the offices. A landscaped berm would be installed along the south side of the residential
16 development to provide a buffer from activity in the Corporation Yard. Proposed development at the
17 site would require rezoning, a CDP, and a subdivision.

18 The proposed development site is currently designated Coastal General Commercial (CGC) and
19 Institutional Commercial (IC) with a resource constraints overlay and Open Space Forest. With the
20 LCP Amendment, the site would be designated Open Space Recreational (OR), Medium Density
21 Residential (MDR), and Institutional Commercial (IC) and the resource constraints overlays would
22 be removed for the development area and Open Space Forest for the preservation area.

23 **Roadway Improvements**

24 Improvements to existing intersections are included in the proposed project to facilitate traffic flow.
25 See Section 3.11, Transportation and Circulation, for a discussion of transportation impacts and
26 mitigation measures for the proposed project. The intersection locations and a description of
27 proposed improvements are provided below and shown in Figure 2-28.

28 **State Route 1/State Route 68/17-Mile Drive Intersection**

29 A portion of this intersection (southbound off-ramp) is outside the Del Monte Forest Planning Area
30 boundary and is located within the Caltrans ROW. The proposed project would reconfigure the
31 existing intersection by demolishing the median, widening and modifying on-ramps and off-ramps,
32 constructing a retaining wall, and modifying signals. This proposed use is consistent with the
33 fundamental purpose of the ROW.

34 **Congress Road/17-Mile Drive Intersection**

35 This intersection is in the Spanish Bay Planning Area. The proposed project would improve the
36 intersection by adding a left-turn lane, restriping to incorporate crosswalks, and adding wheelchair
37 accessible ramps at crosswalks.

1 **Congress Road/Lopez Road Intersection**

2 This intersection is adjacent to both the Gowen Cypress and Middle Fork Planning Areas. The
3 proposed project would improve the existing intersection by providing a left-turn channel and
4 realigning to eliminate the intersecting angle and improve sight distance.

5 **Lopez Road/Sunridge Road Intersection**

6 This intersection is adjacent to the Gowen Cypress, Middle Fork, and Huckleberry Hill Planning
7 Areas. The proposed project would improve the intersection by adding lane channelization and
8 realigning to improve sight distance.

9 **Portola Road/Stevenson Drive Intersection**

10 This intersection is in the Pebble Beach Planning Area. The proposed project would improve the
11 intersection by adding lane channelization and realigning the intersection to eliminate the existing
12 acute angle and to improve sight distance.

13 **Trails**

14 There are approximately 31.5 miles of existing hiking and equestrian trails within Del Monte Forest.
15 The proposed project would add 2.4 miles of trails, for a total of 33.9 miles. There would be 2.35
16 miles of new trails, and the balance of 0.05 mile would result from relocating existing trails to
17 nearby adjacent alignments currently occupied by undeveloped forest adjacent to existing golf
18 courses. The areas of existing, relocated, and new trails are described in Chapter 2, Project
19 Description, under Trail Improvements and shown in Figure 2-30.

20 **Recreation**

21 Del Monte Forest contains several recreational facilities. These include: seven 18-hole golf courses,
22 one 9-hole golf course, the SFB Morse Botanical Reserve, HHNHA, Pebble Beach Equestrian Center
23 and Collins Field, beach access, and several equestrian, bike, and hiking trails (Figure 2-30).
24 Additionally, as described under Residential Lot Subdivisions in Area L, Indian Village is a 21-acre
25 parcel of Monterey pine forest with a park-like clearing and picnic facilities that can be rented from
26 the Del Monte Forest Foundation.

27 Golf is the predominant recreational activity in Del Monte Forest. The area is renowned for its
28 championship quality golf courses, which host Professional Golf Association (PGA) tournaments as
29 well as major amateur and professional-amateur tournaments. The applicant owns and manages
30 four golf courses in Del Monte Forest: Pebble Beach Golf Links, The Links at Spanish Bay, Spyglass
31 Hill Golf Course, and Peter Hay Golf Course (nine-hole, par-three course), all of which are open to the
32 public. Non-applicant owned and managed golf courses located within Del Monte Forest include
33 Cypress Point Golf Course, Poppy Hills Golf Course, and the Monterey Peninsula Country Club Dunes
34 and Shore Golf Courses.

35 As part of the proposed project, the Pebble Beach Driving Range would be relocated from its current
36 location in Area V to a larger area at the nearby Collins Field. Collins Field is currently used by PBC
37 for special events and by Stevenson High School for sports. Collins Field is adequate size to
38 accommodate the proposed driving range and support facilities (Figure 2-13). Relocation of the
39 driving range would require rezoning and a lot line adjustment (merge). Currently, the proposed

1 development area is designated Medium Density Residential (MDR) with a resource constraints
2 overlay and Open Space Recreational (OR). With the LCP Amendment, this development area would
3 be designated Open Space Recreational (OR) only, and the resource constraints overlay would be
4 removed.

5 **Preservation Areas**

6 Under the proposed project, the applicant would formally preserve 635 acres of land, composed of
7 Monterey pine forest and other native habitat, within Del Monte Forest, as described in Table 2-4.
8 Preservation of these lands is proposed to be accomplished through amendments to the LCP to
9 change land uses and densities, dedication of conservation easements to the Del Monte Forest
10 Foundation, and management of the newly dedicated lands by PBC. Areas of preservation, current
11 land use designations under the existing LUP, and proposed land use designations with the LCP
12 Amendment are described in Table 3.8-2 and shown in Figure 2-31. The amendment would
13 designate all preservation areas Open Space Forest (OF) and remove the resource constraints
14 overlay.

15 **Impacts Analysis**

16 **Methodology**

17 **Approach**

18 In order to evaluate potential impacts on land use and recreation resulting from the proposed
19 project, the project elements were evaluated against the criteria for determining significance. Some
20 of the project elements increase the intensity of land uses and demand for recreation because they
21 generate additional visitors, employees, and permanent residents in the Pebble Beach area. Table
22 3.10-4 in Section 3.10, Public Services and Utilities, includes the estimated daily population increase
23 from the proposed project.

24 Potential constraints related to water, sewer, and traffic are discussed in Section 3.10, Public
25 Services and Utilities Other than Water; Section 3.11, Transportation and Circulation; and 3.12,
26 Water Supply and Demand.

27 **Criteria for Determining Significance**

28 In accordance with CEQA, the State CEQA Guidelines, Monterey County plans and policies, and
29 agency and professional standards, a project impact would be considered significant if the project
30 would:

31 **A. Land Use Compatibility**

- 32 • Introduce new land uses into an area that could be considered incompatible with the
33 surrounding land uses or with the general character of the area, including disruption to and/or
34 division of the physical arrangement of an established community.

1 **B. Plan/Policy Consistency**

- 2 • Conflict with the applicable land use plan or applicable land use policies adopted for the purpose
3 of avoiding or mitigating an environmental effect.¹

4 **C. Recreational Demand**

- 5 • Increase the use of existing neighborhood and regional parks or other recreational facilities such
6 that substantial physical deterioration of the facility would occur or be accelerated and/or
7 expansion of facilities would be required.

8 **D. Open Space Quality and Quantity**

- 9 • Diminish the quality or quantity of open space areas.

10 The proposed project would not conflict with any applicable HCP or NCCP because the project area
11 is not located within an HCP or NCCP; therefore, this topic is not addressed further.

12 **Project Impacts and Mitigation Measures**

13 **A. Land Use Compatibility**

14 **Impact LU-A1: The proposed project could introduce new land uses that could be**
15 **incompatible with surrounding land uses or with the general character of the area. (Less than**
16 **significant with mitigation)**

17 Current land uses within and adjacent to the project area include golf courses with associated
18 clusters of resort and clubhouse facilities; dispersed low-and medium-density residential
19 development within the setting of the coast, forest; and undeveloped open space that is
20 predominately forest and dune. A discussion of compatibility and consistency of proposed land uses
21 at the specific development sites with adjacent land uses and the surrounding environment is
22 provided below.

23 **Proposed Visitor-Serving/Commercial Uses**

24 **The Lodge at Pebble Beach.** The proposed Meeting Facility Expansion, New Colton Building,
25 Fairway One Reconstruction, and Parking and Circulation Reconstruction would be within an
26 existing developed area and adjacent to existing visitor-serving facilities and golf course. Although
27 the intensity of the land uses at The Lodge would increase with the proposed project, the increase
28 would not be substantial, and it would be consistent and compatible with the existing and
29 surrounding visitor-serving uses.

30 **The Inn at Spanish Bay.** The proposed Conference Center Expansion and New Guest Cottages
31 would be within an existing developed area and adjacent to existing visitor-serving facilities and golf
32 course. The New Employee Parking would be adjacent to The Inn at Spanish Bay entrance, across
33 the street (17-Mile Drive) from the developed portion of The Inn and the golf course, and it would be

¹ It should be noted that a mere inconsistency with a land use policy, plan, or regulation does not necessarily result in a significant impact. The inconsistency must be related to a direct or indirect physical impact on the environment and result in a significant level of impact (as determined by application of significance criteria in this EIR for the affected resource) in order to be identified as a significant impact related to plan/policy consistency.

1 between 17-Mile Drive and Congress Road. The New Guest Cottages and New Employee Parking
2 would require tree removal, which is addressed in Section 3.3, Biological Resources. Overall, the
3 proposed development would increase the intensity of the land uses at The Inn, yet the increase
4 would not be substantial, and would be consistent and compatible with existing visitor-serving uses
5 at The Inn.

6 **Collins Field–Equestrian Center–Special Events Area.** The proposed Relocation of Pebble Beach
7 Driving Range, Equestrian Center Reconstruction and Special Events Area Grading and Expansion
8 would result in the same or similar uses at these development sites in this area. Relocating the
9 driving range would intensify recreation use of Collins Field, but it is considered compatible with
10 surrounding land uses. Additionally, as discussed in Section 3.1, Aesthetics (under Impacts AES-A1
11 and AES-B1), the proposed project would not significantly alter the existing visual character of the
12 area. As discussed in Section 3.9, Noise and Vibration (Impact NOI-A1), outdoor noise levels for
13 noise-sensitive uses would be well below Monterey County standards.

14 Relocating the driving range to Collins Field would displace existing informal recreational uses of
15 Collins Field, including sports, intramural games, and other recreation activities. Existing equestrian
16 uses would be accommodated at the Equestrian Center and Special Events Area. Stevenson High
17 School, which is located nearby in Pebble Beach, has been informally using Collins Field for lacrosse
18 and soccer during a portion of the school year. However, the high school has plans to develop their
19 upper field area for athletic use and can accommodate the activities that have been occurring at
20 Collins Field on the school campus. Both county and coastal approvals for the upper field project
21 have been obtained, and the project is expected to be constructed in the 2012–2013 timeframe. The
22 school does not anticipate any hiatus between availability of its new upper field area and the
23 conversion of Collins Field to the driving range (Wandke pers. comm.).

24 Collins Field is a private facility owned by the applicant and used by local residents with the
25 permission of the owner. It is not a public facility that the public has an implicit right to use. Del
26 Monte Forest has local beaches, dozens of miles of trails, four golf courses open to the public, and
27 hundreds of acres of open space. As described in Chapter 2, Project Description, there are currently
28 685 acres of undeveloped open space that is formally preserved (either in fee title or easement)
29 and 31.5 miles of existing hiking and equestrian trails. The proposed project would result in
30 additional 635 acres of preserved open space and additional 2.4 miles of designated trails, and it
31 would retain an equestrian center within Del Monte Forest. In this context, the loss of Collins Field is
32 not considered a significant impact on recreation. Therefore, the proposed project elements in this
33 area would be considered compatible and consistent with existing land uses.

34 **Area M Spyglass Hill.** The development site is currently undeveloped land near the intersection of
35 Stevenson Drive and Spyglass Hill Road. Most of the approximately 16-acre development site is a
36 former quarry, and other portions of the site are dunes and fragmented forest. The site is adjacent to
37 dunes, forest, and the Spyglass Hill Golf Course resort and fairways. Under Option 1, there would be
38 a New Resort Hotel and more intensive use of the site than under Option 2 which would result in 10
39 new residential lots. Under both options, new land use(s) would be introduced to an undeveloped
40 area adjacent to undeveloped forest and open space preserve with dunes to the south and west,
41 respectively.

42 The development site is located at the intersection of Stevenson Drive and Spyglass Hill Road, with
43 most of the site extending along Spyglass Hill Road. The Spyglass Hill Golf Course clubhouse is
44 situated on the other side of the Stevenson Road/Spyglass Hill Road intersection. The Spyglass Hill

1 Golf Course fairways are located approximately 500 feet to the north and east, with some parts of
2 the fairway adjacent to the development site or right across Spyglass Hill Road. The Cypress Point
3 Golf Course is located approximately 700 feet to the southwest, on the other side of the dune/forest
4 buffer. In the context of the surrounding area and Del Monte Forest as a whole, the proposed
5 development would adjoin the Spyglass Hill Golf Course to the west with open space areas to the
6 east, which is consistent with existing development patterns in Del Monte Forest. The new land uses
7 would be considered compatible with adjacent and nearby visitor-serving recreation uses.

8 Additionally, as described in Chapter 2, the resort hotel buildings would be designed to be single
9 story with a low profile, and building materials would include stone veneer and cedar board siding
10 to be compatible with the surrounding natural environment. For the new residential development, a
11 design approval application is required prior to the issuance of planning permits for construction of
12 any proposed residential structures to ensure compatibility of design and scale, because the LUP
13 designates all of Del Monte Forest within a Design Control District (D District, Section 20.44 of the
14 CIP—Title 20). Due to this review process, neither the new resort hotel (Option 1) or new
15 residences (Option 2) would be considered to be incompatible with the surrounding land uses or
16 with the general character of the area, nor would either option disrupt and/or divide the physical
17 arrangement of an established community. Therefore, this impact is considered to be less than
18 significant.

19 Residential Lot Subdivisions

20 There are nine areas proposed for residential lot subdivisions, and all nine areas are proposed
21 within or adjacent to existing development. Areas F-2, I-2, J, K, and L would be located adjacent to
22 existing golf courses. Areas I-2, J, V, and the Collins Residence would be located adjacent to existing
23 residential development of similar density. The residential lot subdivision at the Corporation Yard
24 would be located adjacent to the existing Corporation Yard where the PBC offices are located and
25 some maintenance activities would continue. With the exception of the Corporation Yard, these land
26 use relationships are typical of existing developments within the proposed project area and are
27 found throughout Del Monte Forest.

28 The LUP designates the entire Del Monte Forest Coastal Zone as a Design Control District (D District,
29 Section 20.44 of the CIP—Title 20). To ensure compatibility of design and scale, a design approval
30 application is required prior to the issuance of planning permits for construction of any proposed
31 residential structures.

32 Two residential development sites (Area F-2 and I-2) would displace existing recreation trails. As
33 part of the proposed project, the trails would be relocated before any homes are constructed, so
34 there would be no temporary disruption of trail use during trail relocation. This issue is addressed
35 further below (see Trail Improvements).

36 The following residential development sites could be perceived to have potential incompatibility
37 with existing or proposed land use and therefore are addressed in greater detail below.

38 **Area L (10 Lots).** This linear residential lot subdivision would be situated between the Cypress Hills
39 Golf Course and the Indian Village preserve area, which has an existing trail extending through it.
40 Indian Village is a 21-acre preserve area of Monterey pine forest with a park-like clearing and picnic
41 facilities that can be rented from the Del Monte Forest Foundation. The proposed residential
42 development would be situated between the improved access road and the golf course, and would
43 not disrupt Indian Village. The addition of 10 homes in the area would add a small amount of

1 residential traffic and noise, but not to the extent that it would be incompatible with the Indian
2 Village preserve and picnic area, which is situated approximately 400 feet north of the proposed
3 residential area with a forested buffer in between. Therefore, this residential development is
4 considered compatible with surrounding land uses.

5 **Area U (7 lots).** This residential lot subdivision would be adjacent to the existing Equestrian Center
6 which is proposed for reconstruction and would continue as an equestrian center. The Equestrian
7 Center is an established land use, and future residences would be aware of its proximity.
8 Nonetheless, the residents could be exposed to nuisance odors, and this exposure could be
9 perceived as an incompatible land use. To provide a conservative assessment of this potential
10 incompatibility, this impact is considered significant but would be reduced to a less-than-significant
11 level with implementation of Mitigation Measures AQ-E1, which requires manure management at
12 the Equestrian Center.

13 **Mitigation Measure AQ-E1: Prepare and implement a manure management plan.**

14 Prior to issuance of a building permit for the Equestrian Center reconstruction, the applicant
15 will prepare a manure management plan and submit it to the Monterey County Health
16 Department EHB for review and approval. The plan will require daily management of liquid and
17 solid wastes, and disposal of these wastes off the site at least twice weekly or as required by
18 EHB. In accordance with EHSP04—Manure Management Plan, the Plan will include:

- 19 ● The volume of waste generated, method and time frame of continual disposal off-site, and
20 necessary controls for vector, odor, and waste run-off.
- 21 ● A detailed timeline to provide evidence to EHB that the plan is being implemented and the
22 methods in place are controlling vectors, odor, and waste run-off.
- 23 ● An appropriate mechanism to allow for public comment of neighbors to assess compliance
24 of the plan.

25 Additionally, the plan will include the following measures.

- 26 ● **Odor complaint tracking and abatement program.** The applicant will design and
27 implement an odor complaint tracking and abatement program to address and respond to
28 odor complaints for the Equestrian Center. The program will require the project applicant to
29 post a telephone number and contact person at the project site where odor complaints may
30 be made. The program will detail how, upon receipt of an odor complaint, the project
31 applicant will evaluate facility operations to ensure that odor complaints are tracked,
32 investigated, and minimized. The program will be developed after the Equestrian Center is
33 reconstructed and before residential lots in Area U are prepared for development
34 (whichever occurs first), and the program will be developed in coordination with and
35 approved by the County.
- 36 ● **Place manure and waste receptacles as far as possible from sensitive receptors.** The
37 applicant will locate manure and waste receptacles as far as possible from sensitive
38 receptors to reduce the potential for exposure of sensitive receptors to odors from animal
39 waste. The location will be included in the final design plans, which will be approved by the
40 County.
- 41 ● **Include additives and supplements to feedstock to help reduce manure odors.** Various
42 feedstock additives and supplements are available that will help minimize odor-generating

1 microorganisms and compounds. The applicant will make available additives and
2 supplements to animals housed or using the Equestrian Center at cost to help reduce odors
3 from animal waste.

4 The approved manure management plan will be on file at EHB, File Number APN008-313-
5 001/000/008-991-001-000 and available to the public upon request. The applicant will operate the
6 Equestrian Center in a manner consistent with the plan and any additional requirements set forth by
7 EHB.

8 **Area V (14 lots).** This residential lot subdivision would be near the Special Events Area located
9 across Stevenson Drive. Constructing residences adjacent to the Special Events Area could result in
10 nuisance noise impacts on future residents; but as stated in Impact NOI-A1 of Section 3.9, Noise and
11 Vibration, noise from the remodeled Equestrian Center and associated Special Events Area would
12 not be expected to increase noise levels in excess of applicable noise standards or result in a
13 significant noise impact because these sources are part of the existing noise environment, and noise
14 sources are not expected to change with project implementation. Therefore, this residential
15 development is considered compatible with surrounding land uses.

16 **Collins Residence (4 lots).** This residential lot subdivision would be located adjacent to the
17 proposed Pebble Beach Driving Range, which would be relocated from Area V to Collins Field. This
18 could potentially result in an incompatible land use because of noise generated by activities at the
19 proposed Driving Range, but (as stated in Impact NOI-A1 of Section 3.9, Noise and Vibration) noise
20 resulting from the proposed Driving Range would not result in a significant noise impact on new or
21 existing residents. Therefore, this residential development is considered compatible with
22 surrounding land uses.

23 **Corporation Yard (10 lots).** This residential lot subdivision would be north of the Corporation
24 Yard, and the northern boundary of the subdivision would be adjacent to the HHNHA. It is consistent
25 with existing development patterns in Del Monte Forest to place residential uses adjacent to open
26 space areas. Trails within the HHNHA extend from the Corporation Yard site, and it is anticipated
27 that the proposed residential development may increase the use of existing trails in the HHNHA, but
28 this is considered a compatible land use. The trails are buffered from residential noise with distance,
29 topography and forest buffer.

30 At the Corporation Yard site, current maintenance would continue to occur in an area east of the
31 PBC office. This could result in an incompatible land use because residents of the new subdivision
32 could be exposed to nuisance noise, truck traffic and associated adverse visual effects associated
33 with the continued maintenance activities at the Corporation Yard. As described in Chapter 2,
34 Project Description, the activities and stockpiles would be relocated to an area east of the PBC
35 offices, further away from the proposed residential lots. As stated in Impact NOI-A1 of Section 3.9,
36 Noise and Vibration, activities at the Corporation Yard would not result in a significant noise impact
37 on future residents. The proposed roadway improvements at the Sunridge Road/Lopez Road
38 intersection include lane channelization and minor realignment to improve sight distance and
39 turning radii and to more clearly delineate the intersection which would improve traffic flow. The
40 maintenance vehicles would enter the active Corporation Yard area before entering the residential
41 area. As described in Chapter 2, Project Description, a landscaped berm, to be installed along the
42 south side of the residential subdivision, would minimize adverse noise and visual effects.
43 Therefore, potential noise, traffic, and visual impacts occurring at the Corporation Yard would not
44 create a land use incompatibility.

1 **Roadway Improvements**

2 The proposed roadway improvements would occur at existing intersections and would not result in
3 incompatible land uses. Increased noise from additional traffic generated by the proposed project
4 would result in increased traffic noise on internal roadways and SR 68. This impact was determined
5 to be less than significant (refer to Impact NOI-A1 in Section 3.9, Noise and Vibration). Therefore,
6 the roadway improvements are considered compatible with surrounding land uses.

7 **Trail Improvements**

8 The proposed project would result in 2.4 miles of new trails as described below and shown in Figure
9 2-30.

- 10 ● **Area F-2:** Relocate existing trail so it extends between new residential development and golf
11 course for a net increase of 20 linear feet.
- 12 ● **Area I-2:** Relocate existing trail to the north so it extends between new residential development
13 and golf course for a net increase of 70 linear feet.
- 14 ● **Area J:** Relocate existing trail adjacent to new residential development for a net increase of 130
15 linear feet.
- 16 ● **Area K:** Relocate existing trail adjacent to new residential development for a net increase of 56
17 linear feet net increase in trail.
- 18 ● **Area PQR:** Create 1.36 miles of new trails in the Pescadero planning area, primarily along
19 existing dirt and fire roads with a 0.25-mile new trail connection between fire road #20 and fire
20 road #21.
- 21 ● **Corporation Yard Area:** Create 0.40 mile of new trails with 0.15 mile on existing dirt fire roads
22 and 0.25 mile of new connector trails to connect the proposed residential lot subdivision to the
23 network of trails in the HHNHA and SFB Morse Botanical Reserve.
- 24 ● **HHNHA:** Create 0.59 mile of new trails following the existing Haul Road.

25 Potential impacts on biological resources from new trails are addressed in Section 3.3, Biological
26 Resources; proposed mitigation ensures that new trails avoid tree removal and direct impacts on
27 special-status plant species and waterways. Potential impacts relative to trail crossings at roadways
28 are addressed in Section 3.11, Transportation and Circulation (Impact TRA-H2). The trail crossings
29 at forest roads would be designed based on the guidance in the Del Monte Forest Transportation
30 Policy Agreement. The PBC is working with the Pebble Beach Riding and Trails Association to
31 incorporate proposed trails into the monthly trail day activities to maintain and improve the trails,
32 and with the CCC to incorporate design elements from the California Coastal Trail network into the
33 Del Monte Forest network. The proposed trail improvements are considered compatible with
34 surrounding land uses. Therefore, this impact is considered to be less than significant.

35 **Infrastructure Improvements**

36 Infrastructure improvements would occur within existing roadways, disturbed areas, and areas
37 planned for development to provide public service and utilities. Construction-related impacts
38 associated with potential service disruption, construction-related noise, air quality, and traffic are
39 addressed in Section 3.10, Public Services and Utilities; Section 3.9, Noise and Vibration; Section 3.2,
40 Air Quality; and Section 3.11, Transportation and Circulation, respectively. The proposed

1 infrastructure is considered a compatible land use within the development sites. Therefore, this
2 residential development is considered compatible with surrounding land uses.

3 In summary, the Residential Lot Subdivision in Area U is the only project element that could be
4 perceived as an incompatible land use with the adjacent Equestrian Center because it could expose
5 residents to nuisance odors. This impact is considered to be less than significant with
6 implementation of Mitigation Measures AQ-E1 to AQ-E3.

7 **B. Plan/Policy Consistency**

8 **Impact LU-B1: While the project is inconsistent with the existing LCP, the proposed project is**
9 **consistent with the proposed LCP Amendment which is consistent with the Coastal Act and**
10 **which would need to be approved prior to any project approval (less than significant).**

11 Two land use plans or regulations are applicable to the proposed project: (1) the Del Monte Forest
12 LCP and (2) the Coastal Act Area. The Del Monte Forest Area segment of the Monterey County LCP is
13 composed of the LUP and the CIP, which is codified in Title 20 of the County Code (coastal zoning
14 ordinance).

15 The proposed project is not consistent with the existing LUP and CIP. Among other elements, the
16 proposed development would be inconsistent with current LCP provisions related to biological
17 resources and potentially with certain policies related to forest resources. In addition, as noted
18 above, the current LCP does not allow additional visitor-serving units at The Lodge at Pebble Beach
19 or The Inn at Spanish Bay and designates most of the proposed preservation areas for residential
20 development.

21 With the LCP Amendment, the evaluation of consistency with the applicable local land use plan is
22 different from other projects under CEQA that do not always include an amendment of the
23 applicable land use plan. The LCP Amendment must be approved prior to the County being able to
24 approve the proposed project itself. As such, there is no need to analyze the proposed project's
25 consistency with the existing LCP on a policy-by-policy basis because the proposed project's
26 approval will depend on its consistency with the LCP Amendment, if approved.

27 As described in Chapter 2, Project Description, the LCP Amendment includes the proposed project
28 specifically and anticipates and facilitates the proposed project to occur. Thus, by definition, the
29 proposed project is consistent with the LCP Amendment.

30 As noted above, the LCP is being processed separately through the certified regulatory program
31 under the CCC and is exempt from CEQA. The following discussion of consistency with the Coastal
32 Act is provided for background disclosure purposes only.

33 The standard of review for the LCP Amendment is the Coastal Act itself. The standard of review for
34 proposed modifications to the CIP/Title 20 is that they must be consistent with and adequate to
35 carry out the policies of the LUP. In general, Coastal Act policies set broad statewide directions that
36 are generally refined by local government LUP policies, giving local guidance regarding the kinds,
37 locations, and intensities of coastal development. Typically, CIP and zoning standards then further
38 refine LUP policies to provide guidance.

39 As described in the proposed LCP Amendment, the PBC Concept Plan (which is equivalent to the
40 proposed project described in this EIR), provides a plan for a majority of the remaining development

1 potential in Del Monte Forest. The Concept Plan is intended to balance development potential with
2 protection of resources by:

- 3 • **Reducing and locating lands designated for development to areas where there are fewer**
4 **resources (e.g. degraded areas near existing development).** The Concept Plan proposes
5 visitor-serving and recreational development to be focused at existing areas of development
6 (The Lodge at Pebble Beach, The Inn at Spanish Bay, the former sand quarry in Area M,
7 Equestrian Center, and Collins Field). Concept Plan residential subdivisions reduce density and
8 are generally located in degraded areas within or adjacent to existing golf courses or other
9 development.
- 10 • **Dedicating large areas of contiguous forest/habitat for permanent preservation.** The
11 Concept Plan proposes dedication to the Del Monte Forest Foundation of approximately 635
12 acres in areas B, C, F-1, F-3, G, H, I-1, J, K, L, M, N, O, U, V, PQR, and the Corporation Yard,
13 including contiguous areas with sensitive habitat. These large undeveloped tracts of forested
14 open space were previously planned for residential development. The Concept Plan will also
15 require management of the newly dedicated lands for the benefit of biological resources.
16 Approximately 350 acres (the proposed preservation/conservation areas in Areas F-3, G, H,
17 PQR, and at the Corporation Yard) are located contiguous with the existing 550 open space
18 forest acres within the HHNHA, SFB Morse Botanical Reserve, and Pescadero Canyon watershed.
19 The Concept Plan will maintain contiguous areas of undisturbed land in open space uses that
20 will protect wildlife values, including those of ESHA contained within their boundaries.

21 The Concept Plan has been designed so that its implementation is consistent with the proposed LCP
22 Amendment. Overall, the proposed LCP Amendment is more protective of the natural, cultural, and
23 visual resources of Del Monte Forest than the existing LCP (i.e., the LCP Amendment formally
24 preserves large undeveloped tracts of forested open space previously planned for residential
25 development); provides management prescriptions to the preserve areas to enhance
26 habitat/resource values); preserves and enhances public access and recreation opportunities;
27 enhances visitor-serving uses; and ensures a planned and balanced approach to development
28 (visitor-serving commercial, recreation, and residential) and preservation within Del Monte Forest,
29 specifically with regard to the buildout of remaining undeveloped properties.

30 The following provides a consistency analysis of the Concept Plan and LCP Amendment overall with
31 the Coastal Act:

- 32 • Coastal Act, Chapter 3, Article 2, Public Access: “Development does not interfere with the
33 public’s access to the sea.” Consistent: Proposed LUP access policies provide equal or greater
34 protection for continued public access to the sea or access areas than the existing LUP policies.
35 The Concept Plan development areas are not located along the shoreline and would not block
36 any access to the shoreline. The Concept Plan visitor-serving areas will allow more visitors to
37 visit and stay within Del Monte Forest. Additional trails are being provided within Del Monte
38 Forest to allow more outdoor use of the existing and planned open space areas.
- 39 • Coastal Act, Chapter 3, Article 3, Recreation: “Coastal areas suited for recreation shall be
40 protected.” Consistent: The proposed LCP Amendment includes land use map changes that
41 increase the amount of land designated for preservation and open space recreational use by
42 approximately 635 acres. Implementation of the Concept Plan would retain and enhance
43 existing recreational uses (e.g. equestrian center, trails, and golf courses). Also see the
44 discussion above for consistency with Article 2.

- 1 • Coastal Act, Chapter 3, Article 4, Marine Environment: “Marine resources shall be maintained,
2 enhanced and restored.” Consistent: LUP policies relative to the protection of marine resources
3 are not significantly affected by the LUP amendments, which update the policies with language
4 related to today’s standards related to the protection of water quality. The Concept Plan reduces
5 the potential development footprint within the Del Monte Forest marine environment and
6 focuses potential development in areas where forest resources are currently degraded.
- 7 • Coastal Act, Chapter 3, Article 5, Land Resources: “Environmentally sensitive habitat shall be
8 protected.” Partially Inconsistent: The Concept Plan and the LCP Amendment would partially
9 conflict with the Coastal Act and applicable land use plans and policies. The Concept Plan would
10 concentrate existing residential development potential and new visitor-serving development
11 adjacent to existing developed areas of Del Monte Forest that are able to accommodate such
12 development in a manner that would reduce impacts to ESHA, but it would still allow some non-
13 resource-dependent development in ESHA, which is prohibited under the Coastal Act and LUP,
14 particularly in relation to residential development. The proposed LCP Amendment is designed
15 to accommodate the proposed Concept Plan, but it also includes clarification and amplification
16 of policies that protect environmentally sensitive habitat areas (ESHA) and includes the
17 permanent preservation and conservation of approximately 635 acres of ESHA (e.g., Monterey
18 pine forest habitat and remnant sand dune habitat).
- 19 • Coastal Act, Chapter 3, Article 6, Development: “New development shall be located within or
20 near existing developed areas. Scenic resources are to be preserved.” Consistent: The LCP
21 Amendment reduces overall development potential and density allowed by the current LCP
22 within Del Monte Forest by re-designating residentially designated land to open space and
23 preservation, and enhancing LUP policies relative to the protection of scenic and visual
24 resources. The Concept Plan ensures a planned and balanced approach to development (visitor-
25 serving commercial, recreation, and residential) and preservation within Del Monte Forest,
26 specifically with regard to the buildout of remaining undeveloped properties.

27 Where conflicts between different parts of the Coastal Act occur in application to a local coastal plan,
28 Coastal Act Section 30007.5 directs that such conflicts be resolved in a manner that is, on balance,
29 most protective of significant resources: “The Legislature further finds and recognizes that conflicts
30 may occur between one or more policies of the division. The Legislature therefore declares that in
31 carrying out the provisions of this division such conflicts be resolved in a manner which on balance
32 is the most protective of significant coastal resources. In this context, the Legislature declares that
33 broader policies which, for example, serve to concentrate development in close proximity to urban
34 and employment centers may be more protective, overall, than specific wildlife habitat and other
35 similar resource policies.”

36 The County views the LCP Amendment as balanced under the Coastal Act conflict resolution section
37 requirements, which results in an overall determination of consistent. On balance, the preservation
38 and conservation of 635 acres of contiguous forest and dune areas added to existing forest and dune
39 preservation areas, and relocating potential development to areas where habitat has been degraded
40 would be more protective of coastal resources than would be development under the existing LCP.

41 A portion of the SR 1/SR 68/17-Mile Drive improvement is outside Del Monte Forest and is within
42 the Caltrans ROW. The purpose of the Caltrans ROW is transportation and the roadways are
43 designated for transportation in the LCP. As such, the proposed improvements are consistent with
44 the LCP (both existing and proposed) and the purposes of the Caltrans ROW.

1 C. Recreational Demand

2 **Impact LU-C1. The proposed project would add new recreational trails and would increase**
3 **the use of existing parks and recreation facilities, but would not require the construction or**
4 **expansion of recreational facilities not included in the proposed project that might have an**
5 **adverse physical effect on the environment. (Less than significant)**

6 **Construction**

7 As described in Chapter 2, Project Description, development at The Inn at Spanish Bay would
8 involve screening and fencing along the 11th Fairway of The Links at Spanish Bay Golf Course, and
9 use of this area for storage of materials and construction staging for approximately 16 months in
10 2017–2018. During this time, the course and the 11th Fairway at The Links at Spanish Bay Golf
11 Course would remain open and playable using local rules (PGA of America). Because the course
12 would remain open for use during construction and there are other golf courses available, impacts
13 related to use of recreational facilities would be temporary and potential deterioration of other
14 recreational facilities used during this period would be negligible. Therefore, this impact would be
15 less than significant.

16 **Operation**

17 The proposed project would result in an estimated 190 to 211 new residents in Del Monte Forest
18 with development of the residential lot subdivisions, depending on whether Option 1 or 2 is selected
19 for Area M Spyglass Hill. Under Option 1 (New Resort Hotel), there would be an increase of
20 approximately 190 residents in Del Monte Forest. Under Option 2 (New Residential Lots), there
21 would be an increase of approximately 211 residents because of the 10 additional single-family
22 homes, instead of a resort hotel (Table 3.10-4 in Section 3.10, Public Services and Utilities). The
23 increased population would potentially create an increase in demand for active recreation facilities.

24 In particular, the residential lot subdivision at the Corporation Yard would increase use of and
25 potential impacts to existing and proposed trails in the HHNHA because of its proximity to HHNHA
26 and the two proposed trails connecting to the Corporation Yard residential lot subdivision with the
27 existing trail system in HHNHA, as described under Trail Improvements. This subdivision would
28 generate an estimated 21 residents (Table 3.10-4 in Section 3.10, Public Services and Utilities), and
29 it is expected that residents from other areas would use these trails. The increased use of these trails
30 would not result in substantial physical deterioration of existing trails or require the expansion of
31 trails beyond what is proposed as part of the proposed project.

32 Although there could be an increased demand for recreational facilities by visitors and residents, the
33 wide variety of existing and proposed recreational facilities located throughout Del Monte Forest, as
34 well as Monterey County as a whole, would accommodate the small increase in demand. According
35 to the 2010 Monterey County General Plan, almost 14% of Monterey County's land is devoted to
36 parks and recreational facilities, 10% of which is comprised of County parks (Monterey County
37 2007:PS-2). In addition, as discussed previously, golf is the predominant recreational activity in Del
38 Monte Forest, and eight golf courses within Del Monte Forest accommodate residents and visitors.

39 Additional recreation facilities that would be provided as part of the proposed project include 2.4
40 miles of new recreation trails and 4.7 miles of new dedicated bicycle lanes in each direction (Figure
41 2-30). From north to south, the new bicycle lanes begin on and follow 17-Mile Drive, turn up

1 Spyglass Hill Road, continue south along Stevenson Drive, and end at the Stevenson Drive/17-Mile
2 Drive intersection.

3 The expanded trail system is an important recreational link from neighborhoods to more active
4 recreational opportunities. Figure 3.8-1 shows the proposed Residential Lot Subdivisions in relation
5 to the larger trail network. The proposed project would result in the reduction of some specific
6 recreation opportunities. As described above for Impact LU-A1, the proposed project would relocate
7 the Pebble Beach Driving Range from its current location in Area V to Collins Field because it is a
8 larger area that can accommodate the driving range and support facilities (e.g., golf training facility)
9 on one site. However, relocation of the Pebble Beach Driving Range would displace existing informal
10 recreational uses of Collins Field, including sports, intramural games, and other recreation activities.
11 Existing equestrian uses would be accommodated in the Equestrian Center and Special Events Area.
12 Stevenson High School, which is located nearby in Pebble Beach, has been informally using the field
13 area for sports; however, the high school will be renovating and expanding its sports field and can
14 accommodate the activities on the Stevenson campus; therefore, they do not need to use Collins
15 Field (Wandke pers. comm.). Further, Collins Field is a private facility owned by the applicant and
16 used by local residents with the permission of the owner, not a public facility that the public has an
17 implicit right to use. Therefore, this is not considered a substantial loss of recreation facilities.

18 As described for Impact LU-A1, portions of existing trails in Residential Lot Subdivision Areas F-2
19 and I-2 would be displaced by the residential lots and relocated slightly eastward and northward of
20 their existing locations, respectively, to nearby adjacent alignments. This relocation would occur
21 well before any homes are constructed, so there would be no temporary disruption of trail use
22 during trail relocation. The connection points of relocated segments to existing trails would not
23 change, and the relocation of these trails would result in a net increase in 20 linear feet of trail in
24 Area F-2 and 70 linear feet of trail in Area I-2. Therefore, this is not considered a loss of recreation
25 facilities.

26 In addition, the proposed project would preserve approximately 635 acres of open space for passive
27 recreational use. All recreational facilities in Del Monte Forest have been planned for and are
28 maintained to accommodate a high degree of recreational usage, so they can accommodate the
29 expected increase in demand.

30 In summary, the increased usage of and changes to existing park and recreation facilities is not
31 anticipated to create or accelerate substantial physical deterioration of existing facilities or create a
32 demand for new or expanded facilities because of the small number of new residents and visitors
33 likely to use existing recreation facilities, the high number of recreational facilities in the area that
34 are maintained to be visitor serving, and the increase in recreational facilities and dedicated open
35 space. Therefore, this impact would be less than significant.

36 **D. Open Space Quality and Quantity**

37 **Impact LU-D1. The proposed project would not diminish the quality and quantity of open** 38 **space used for recreation (Less than significant).**

39 Proposed development would remove portions of undeveloped open space (currently designated
40 for residential use) in Del Monte Forest in Area B (for new employee parking); Areas F-2, I-2, J, K, L,
41 U, and V (for residential development); Area M (for resort hotel or residential development); and
42 Collins Field (for relocation of the driving range).

1 Recreational trails for hiking and equestrian use exist in several of the areas proposed for
2 development (Areas F-2, I-2, J and K). There would also be new recreation trails connecting the
3 Corporation Yard area with the existing trail system in HHNHA and SFB Morse Botanical Reserve
4 and in Area PQR. The existing trails within development Areas F-2, I-2, J and K that would be
5 relocated would be relocated to nearby adjacent alignments before residential development would
6 occur, so there would be no disruption to actual trail use. Proposed trails would accommodate
7 increased recreational activity within or adjacent to open space areas. Neither the proposed trails
8 nor the new residential development would diminish the quality or quantity of open space areas
9 because new residential development is situated within and adjacent to existing developed areas
10 and all affected existing trails would be relocated to continue to provide recreational amenities.

11 The proposed project includes dedication of 635 acres of open space areas and would increase the
12 amount of dedicated open space in Del Monte Forest.

13 Under the proposed project, existing hiking and equestrian trails would remain unchanged or
14 relocated (resulting in a minor net increase of trail length), new trails would be added, and 635
15 acres of land within Del Monte Forest would be preserved permanently for passive recreational use.
16 For these reasons, implementation of the proposed project would not diminish the quantity and
17 quality of open space, from a recreational point of view. Therefore, this impact on open space used
18 for recreation is considered to be less than significant.

19 Cumulative Impacts and Mitigation Measures

20 The impact zone for analysis of cumulative land use impact is Del Monte Forest because this impact
21 concerns consistency with the existing LCP and impacts on local recreational demand. The
22 methodology for determining cumulative impacts is described under Analysis of Cumulative Impacts
23 at the beginning of Chapter 3.

24 A. Land Use Compatibility

25 **Impact LU-A1(C). Cumulative development in Del Monte Forest would be compatible with**
26 **adjacent land uses. No cumulative impact is identified.**

27 Although both the proposed project and development of up to 105 other new single-family
28 residential_ units² in Del Monte Forest would introduce new land uses to the area, they would be
29 compatible with surrounding land uses and with the general character of the area. Thus, cumulative
30 land use-compatible impacts are considered to be less than significant.

² As described in Table 3-2 in the introduction to Chapter 3, there are 96 undeveloped (vacant) existing residential lots, 8 new lots allowed in Area X based on County-issued certificates of compliance, and 1 new lot allowed in Area Y based on the presumption that presence of environmentally sensitive habitat area (ESHA) may prevent further subdivision – thus the potential for up to 105 new dwelling units.

1 **B. Plan/Policy Consistency**

2 **Impact LU-B1(C). Cumulative development in Del Monte Forest, including the proposed**
3 **project, might conflict with the applicable land use plans or land use policies adopted for the**
4 **purpose of avoiding or mitigating an environmental effect but the project is consistent with**
5 **the proposed LCP amendment and would not considerably contribute to this impact.**

6 As described above, the proposed project is inconsistent with the existing land use plan for the Del
7 Monte Forest. The LCP would need to be amended before the proposed project could be approved.
8 The proposed project is consistent with the proposed LCP Amendment, and the LCP amendment is
9 consistent overall with the Coastal Act (which it must be in order to be approved by the CCC). Thus if
10 the LCP Amendment is approved, the proposed project would be consistent with the applicable land
11 use plan at that time. As described above, the County has determined that the LCP Amendment is
12 consistent with the Coastal Act overall. Because the proposed project would be consistent with the
13 applicable land use plan and policies (which would be the LCP Amendment), it would not contribute
14 to any future cumulative conflict with applicable land use plans or policies.

15 **C. Recreational Demand**

16 **Impact LU-C1(C). Cumulative development in Del Monte Forest is limited and would not**
17 **result in a recreational demand that would result in the need for new recreational facilities,**
18 **and the proposed project would increase recreational opportunities in the form of new trails.**

19 Other than the proposed project, up to 105 new single-family dwelling units could be built in Del
20 Monte Forest. Population generated by new units would also use existing parks and recreational
21 facilities. However, cumulative growth would be within projections anticipated by the LUP, there are
22 extensive recreational opportunities at present, and cumulative growth is not anticipated to result in
23 a substantial increase in overall demand that might result in the need for new recreational facilities.
24 Therefore, cumulative impacts related to recreational demand are considered to be less than
25 significant. Implementation of the proposed project would include 2.4 miles of new recreational
26 trails and 4.7 miles of new dedicated bicycle lanes and would increase recreational facilities.

27 **D. Open Space Quality and Quantity**






28 **Impact LU-D1(C). Cumulative development in Del Monte Forest would not have a significant**
29 **impact on open space quantity but could contribute to resource impacts along existing Del**
30 **Monte Forest trails, but the proposed project's contribution to trail impacts would be less**
31 **than significant with mitigation.**

32 As previously discussed, other than the proposed project, 105 new dwelling units could be
33 developed with single-family residential uses in Del Monte Forest. Population generated by these
34 new units would likely also use existing open space for recreation. However, the growth is within
35 projections anticipated by the LUP and is not anticipated to result in a substantial increase in overall
36 demand that would result in the need for additional open space. However, additional residents and
37 visitors in Del Monte Forest would increase impacts on biological resources along existing and
38 proposed trails. As discussed in the cumulative analysis of biological resources in Section 3.3,
39 Biological Resources, this is considered a potentially significant impact and the proposed project
40 would contribute considerably by facilitating new residents and visitors. The proposed project's
41 contribution to this cumulative impact would be reduced by implementation of Mitigation Measures

1 BIO-B3 and BIO-G1, discussed under Project Impacts and Mitigation Measures, which would require
2 measures to avoid and reduce indirect trail use impacts on sensitive biological resources.
3

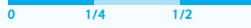
Del Monte Forest Hiking and Equestrian Trails








LEGEND

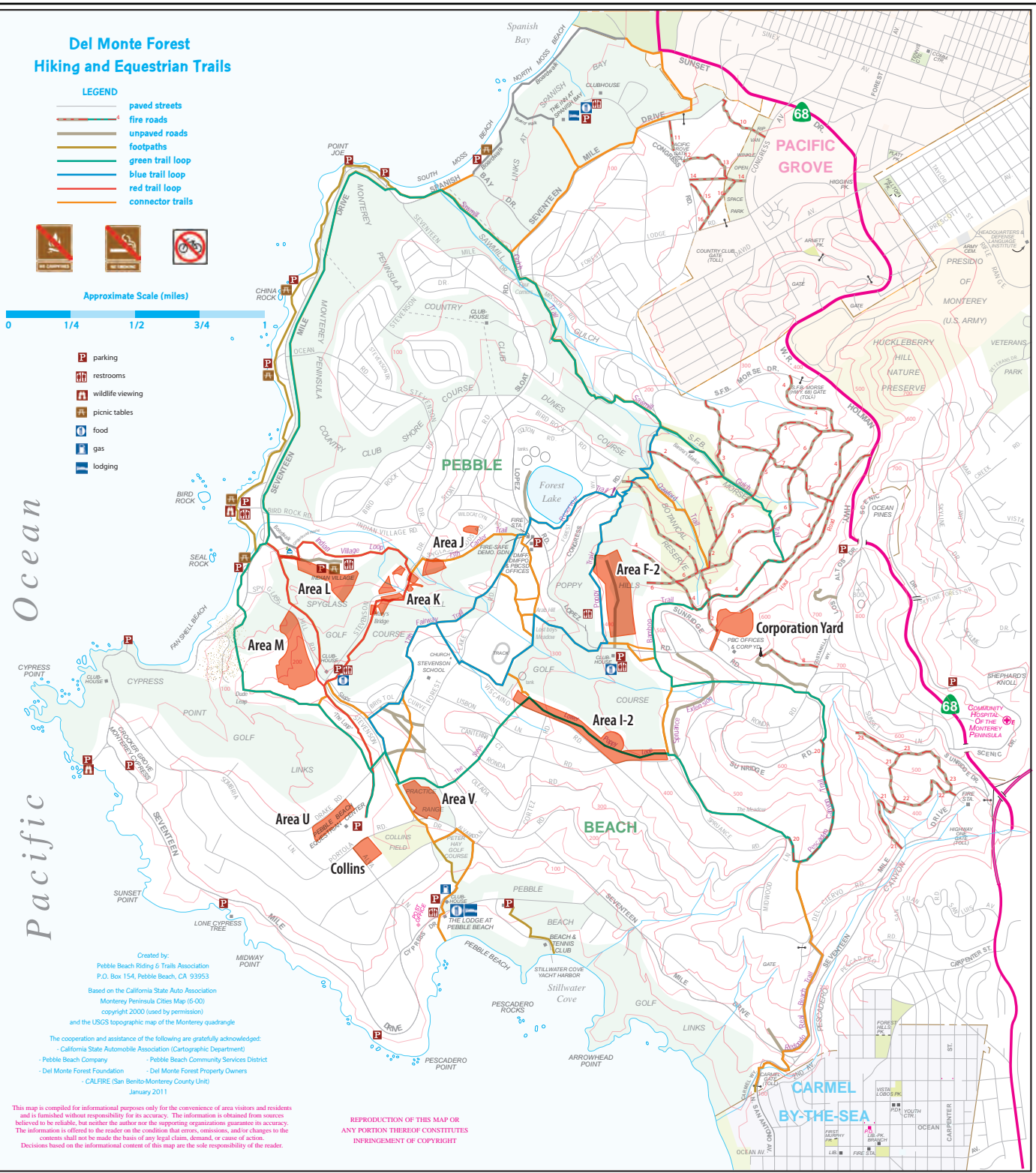
-  paved streets
-  fire roads
-  unpaved roads
-  footpaths
-  green trail loop
-  blue trail loop
-  red trail loop
-  connector trails



Approximate Scale (miles)



-  parking
-  restrooms
-  wildlife viewing
-  picnic tables
-  food
-  gas
-  lodging




Created by:
 Pebble Beach Riding & Trails Association
 P.O. Box 154, Pebble Beach, CA 93953
 Based on the California State Auto Association
 Monterey Peninsula Cities Map (6-00)
 copyright 2000 (used by permission)
 and the USGS topographic map of the Monterey quadrangle

The cooperation and assistance of the following are gratefully acknowledged:
 - California State Automobile Association (Cartographic Department)
 - Pebble Beach Company - Pebble Beach Community Services District
 - Del Monte Forest Foundation - Del Monte Forest Property Owners
 - CALFIRE (San Benito/Monterey County Unit)
 January 2011

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Legend

-  New Residential Lot Subdivisions

Notes:

- Residential lot boundaries are approximate.
- Area M Spyglass Hill is Visitor-Serving in Option 1 and Residential Lot Subdivision in Option 2.
- Base map source: Pebble Beach Riding and Trails Association, 2011.

Figure 3.8-1
New Residential Lot Subdivisions on
Del Monte Forest Hiking and Equestrian Trails Map

Section 3.9
Noise and Vibration

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Section 3.9 Noise and Vibration

This section presents a discussion of existing noise and vibration conditions in the project area in a regional and site-specific context. Potential impacts of the proposed project related to noise and vibration are also considered, and applicable mitigation is proposed.

This section is based on a review of previous noise and environmental studies performed in and immediately adjacent to the project area, including Brown-Buntin Associates (2001, 2011) and LSA Associates (2001). Noise levels resulting from project-related activities were predicted and compared to the established significance criteria. Significant noise impacts were found in instances where project-related noise levels were predicted to exceed these criteria. The assessment of potential construction noise impacts was conducted using methodology developed by the Federal Transit Administration (Federal Transit Administration 2006). Table 3.9-1 summarizes identified project impacts related to noise.

1 **Table 3.9-1. Summary of Project Impacts Related to Noise**

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Permanent Increase in Noise due to Project Operations										
NOI-A1. The proposed project could result in exposure of persons to noise levels in excess of standards established in the County's Land Use Compatibility for Community Noise chart from operation of ventilation fans for underground parking structure at The Lodge at Pebble Beach, but not from operation of other project elements.	⊙	○	○	○	○	○	○	○	○	⊙
Mitigation Measures:	NOI-A1. Employ noise-reducing treatments on parking structure fan systems.									
B. Short-Term Noise Increases due to Construction										
NOI-B1. The proposed project would result in exposure of outdoor activity areas of noise-sensitive land uses to construction noise greater than 85 dB at a distance of 50 feet during construction.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	NOI-B1. Limit hours of construction activities. NOI-B2. Locate equipment as far from noise-sensitive receptors as practicable. NOI-B3. Use sound-control devices on combustion-powered construction equipment. NOI-B4. Shield/shroud any impact tools used during construction. NOI-B5. Shut off machinery when not in use during construction. NOI-B6. Use shortest practicable traveling routes during construction. NOI-B7. Disseminate essential information to residences and implement a complaint response/tracking program during construction. NOI-B8. Implement additional mitigation measures, as needed, to reduce exposure of outdoor activity areas of noise-sensitive land uses to sustained construction noise levels greater than 85 dBA during construction.									
C. Construction-Related Vibration										
NOI-C1. The proposed project could result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels during construction at The Lodge at Pebble Beach and Area M Spyglass Hill Option 1 (New Resort Hotel).	⊙	○	○	○	○	○	○	○	○	—

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
Mitigation Measures:	NOI-C1. Limit construction activities that result in vibration to specified times, provide advance notice to adjacent residents of such schedules, and temporarily relocate residents if requested and if vibration testing demonstrates that levels exceed Federal Transit Administration vibration thresholds.									
<p>Notes:</p> <ul style="list-style-type: none"> ● = Significant unavoidable impact. ⊙ = Significant impact that can be reduced to less than significant. ○ = Less-than-significant impact. — = No impact or not applicable to the development site. <p>PBL – The Lodge at Pebble Beach; SBI – The Inn at Spanish Bay; COL-EQC – Collins Field–Equestrian Center–Special Events Area; MH – Area M Spyglass Hill—New Resort Hotel (Option 1); MR – Area M Spyglass Hill—New Residential Lots (Option 2); RES SUB – Residential Lot Subdivisions; RD – Roadway Improvements; TRA – Trail Improvements; INF – Infrastructure Improvements; Cumulative – Proposed Project’s Contribution to Cumulative Impacts</p>										

1

2 Regulatory Setting

3 Federal

4 There are no federal regulations applicable to the proposed project concerning noise.

5 State

6 California requires each local government entity to implement a noise element as part of its general
 7 plan. California Code of Regulations, Title 24 (also known as the California Building Standards Code),
 8 has guidelines for evaluating the compatibility of various land uses as a function of community noise
 9 exposure. The County of Monterey has developed noise compatibility standards based on these
 10 guidelines. The County’s standards are addressed below.

11 Local

12 County of Monterey General Plan Noise Element and Noise

13 The proposed project lies within Monterey County. The County has established policies and
 14 regulations concerning the generation and control of noise that could adversely affect its citizens
 15 and noise-sensitive land uses. The 1982 Monterey County General Plan (General Plan), required by
 16 state law, serves as the jurisdiction’s “blueprint” for land use and development. The plan is a
 17 comprehensive, long-term document that provides details for the physical development of the
 18 jurisdiction, sets forth policies, and identifies ways to put the policies into action. It provides an
 19 overall framework for development in the jurisdiction and protection of its natural and cultural
 20 resources. The General Plan’s Noise Element contains planning guidelines relating to noise. It
 21 identifies goals and policies to support achievement of those goals, but is not legally enforceable.

1 The goals and policies contained in the General Plan apply throughout the jurisdiction. The
 2 Monterey County Noise Ordinance, part of the Monterey County Code, is legally enforceable. The
 3 following is a brief discussion of the General Plan policies and Noise Ordinance regulations
 4 implemented by the County in the project area to protect its citizens from the adverse impacts of
 5 noise.

6 Policy 22.2.1 of the Noise Element addresses land use compatibility for new developments. New
 7 developments must conform to the noise parameters established in Table 6 of the General Plan. The
 8 County’s land use compatibility guidelines established in Table 6 of the General Plan are
 9 summarized in Table 3.9-2.

10 **Table 3.9-2. Land Use Compatibility for Exterior Community Noise**

Land Use Category	Noise Ranges, L _{dn} or CNEL (dB) ^{a, b}			
	I	II	III	IV
Passively used open spaces	50	50-55	55-70	70+
Auditoriums, concert halls, amphitheaters	45-50	50-65	65-70	70+
Residential—low-density single-family, duplexes, mobile homes	50-55	50-70	70-75	75+
Residential—multifamily	50-60	60-70	70-75	75+
Transient lodging—motels, hotels	50-60	60-70	70-80	80+
Schools, libraries, churches, hospitals, nursing homes	50-60	60-70	70-80	80+
Actively used open spaces—playgrounds, neighborhood parks	50-67	-	67-73	73+
Golf courses, riding stables, water recreation, cemeteries	50-70	-	70-80	80+
Office buildings, business commercial and professional	50-67	67-75	75+	-
Industrial, manufacturing, utilities, agriculture	50-70	70-75	75+	-

Source:
 County of Monterey 1982.

Notes:

^a L_{dn} = day-night level; CNEL = community noise equivalent level; dB = decibels

^b Noise Ranges I to IV are defined as follows:

Noise Range I—Normally Acceptable. Specified land use is satisfactory, based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Noise Range II—Conditionally Acceptable. New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Noise Range III—Normally Unacceptable. New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Noise Range IV—Clearly Unacceptable. New construction or development should generally not be undertaken.

11
 12 In addition to the County’s land use compatibility guidelines summarized above, the Monterey
 13 County Planning Department has established 60 decibels (dB) as the maximum acceptable noise
 14 level for residential uses (Monterey County 2005).

1 County of Monterey Health and Safety Noise Control Ordinance

2 Chapter 10.60.030 prohibits the operation of “any machine, mechanism, device, or contrivance
3 which produces a noise level exceeding 85 dBA [A-weighted decibels], measured fifty feet [ft]” from
4 the noise source. This ordinance is only applicable to noise generated within 2,500 feet of any
5 occupied dwelling unit. For the purposes of this analysis, this standard is interpreted as applying to
6 noise generated by construction equipment and activities.

7 Local Coastal Plan

8 In general, the existing LUP and CIP do not have specific requirements concerning noise. Noise is not
9 mentioned specifically in the existing LUP. Section 20.147.130 of the existing CIP requires
10 consideration of noise when analyzing new coastal accessways.

11 Environmental Setting

12 Terminology

13 The following is a brief background discussion of noise terminology:

- 14 • **Sound.** A vibratory disturbance created by a vibrating object that, when transmitted by pressure
15 waves through a medium such as air, is capable of being detected by a receiving mechanism,
16 such as the human ear or a microphone.
- 17 • **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- 18 • **Decibel (dB).** A unitless measure of sound on a logarithmic scale, which indicates the squared
19 ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference
20 pressure is 20 micropascals.
- 21 • **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that
22 approximates the frequency response of the human ear.
- 23 • **Maximum Sound Level (L_{max}).** The maximum sound level measured during the measurement
24 period.
- 25 • **Minimum Sound Level (L_{min}).** The minimum sound level measured during the measurement
26 period.
- 27 • **Equivalent Sound Level (L_{eq}).** The equivalent steady-state sound level that, in a stated period
28 of time, would contain the same acoustical energy.
- 29 • **Percentile-Exceeded Sound Level (L_{xx}).** The sound level exceeded “x” percent of a specific
30 time period. For instance, L_{10} is the sound level exceeded 10% of the time.
- 31 • **Day-Night Level (L_{dn}).** The energy average of the A-weighted sound levels occurring during a
32 24-hour period, with 10 dB added to the A-weighted sound levels occurring from 10 p.m. to
33 7 a.m.
- 34 • **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound
35 levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels
36 occurring from 7 p.m. to 10 p.m. and 10 dB added from 10 p.m. to 7 a.m.

1 L_{dn} and CNEL values rarely differ by more than 1 dB. As a matter of practice, they are considered
2 equivalent and are treated as such in this assessment. Human sound perception is generally such
3 that a change in sound level of 3 dB is just noticeable, a change of 5 dB is clearly noticeable, and a
4 change of 10 dB is perceived as doubling or halving the sound level. The County's exterior
5 community noise standards are expressed as " L_{dn} or CNEL." In this report, references to these
6 standards use the term L_{dn} .

7 **Background Noise Level Measurements**

8 Noise sources in the project area include recreation activities on golf course property, golf course
9 maintenance activities, traffic from vehicles entering parking lots or access roads, and occasional
10 aircraft overflights. The most significant and common source of noise in the project area is vehicles
11 traveling on local roadways.

12 Background noise level measurements were conducted in the project area at four locations in June
13 1994 and one location in July 2010 to characterize the typical ambient noise levels in areas of
14 Del Monte Forest where noise-sensitive uses are located. Typical noise sources in Del Monte Forest
15 include local and distant traffic, wind in the trees, surf, birds overhead, dogs barking, landscape/golf
16 course maintenance, construction activities, and occasional aircraft overflights. In general,
17 development and the existing noise environment in Del Monte Forest have not changed significantly
18 since the 1994 measurements were taken. It is assumed that ambient noise levels have not changed
19 significantly since the 1994 measurements were taken. As described below, current traffic noise
20 levels were modeled using existing traffic volumes for the purpose of impact assessment.

21 Monitoring equipment used to assess noise for the study consisted of a Larson-Davis Laboratories
22 Model 820 sound level meter equipped with a Bruel & Kjaer Type 4176 microphone at locations
23 where ambient noise levels from a combination of nearby and distant sources could be monitored.
24 Noise level monitoring was conducted over a period of 5 days (Thursday through Monday), with the
25 meters running continuously (24 hours per day) for the duration of monitoring. The additional noise
26 monitoring conducted at the Spyglass Hotel Site in 2010 was conducted on a Saturday. Figure 3.9-1
27 shows the areas where 24-hour ambient noise level measurements have been conducted. The
28 results of the ambient noise level measurements are presented in Table 3.9-3.

1 **Table 3.9-3. Summary of Ambient Noise Survey Results within Del Monte Forest**

Site	Site Description	Dates	Range (dBA)	Daily L _{dn} Values (dBA) ^a
K	Near 16th Green at Spyglass	June 2–6, 1994 ^b	29–75	49.9–51.2
N	Near Stevenson Drive and Drake Road	June 2–6, 1994	18–69	42.7–45.7
I-2	Near Lisbon Lane and Viscaino Road	June 2–6, 1994	29–72	43.6–46.3
G	Above PBC Corporation Yard	June 2–6, 1994	20–74	41.4–46.5
M	Spyglass Hotel Site	July 17, 2010 ^c	33–67	45.7

Source:

Brown-Buntin Associates 2001, 2011.

Notes:

^a From midnight to midnight.^b June 2–6, 1994 was Thursday through Monday.^c July 17, 2010 was a Saturday.

2

3 **Existing Traffic Noise Levels Near SR 1/SR 68 Interchange**

4 Traffic noise level measurements were conducted within the project area at eight locations in
5 August 1998 to characterize the traffic noise levels near the SR 1/SR 68 interchange where noise-
6 sensitive uses are located. In general, the existing noise environment at this location has not
7 significantly changed since the 1998 measurements were taken as explained here. Caltrans
8 monitoring data for the segment of SR 68 west of SR 1 indicates that traffic peak hour volumes are
9 the same in 2010 as they were in 1998 (2,300 vehicles) and average daily traffic is similar (28,000
10 vehicles in 1998 and 25,400 vehicles in 2010) (Caltrans 2011). Peak hour volumes along SR 68 west
11 of SR 1 from 2006 to 2010 varied from 2,200 to 2,300 vehicles per hour (Caltrans 2011). Since
12 traffic volumes are currently similar to those of 1998 for the roadway segment where noise
13 monitoring was conducted, the prior monitoring data is considered representative of current
14 conditions.

15 Monitoring equipment used to assess noise for the study consisted of a Larson-Davis Laboratories
16 Model 700 sound level meter. Noise level monitoring was conducted over a period of 2 days
17 (Thursday and Friday) adjacent to SR 68 near the community hospital entrance. Readings on
18 1 hour's duration in the afternoon peak period (3 p.m. to 7 p.m.) were monitored at three residences
19 on the south side of SR 68, with one of these locations also monitored for a 20-minute duration in
20 the evening between 7 p.m. and 10 p.m. Five other locations were monitored for a 20-minute
21 duration in the afternoon hours between 12 p.m. and 7 p.m.: Beverly Manor, two residences on the
22 south side of SR 68, the Community Hospital of the Monterey Peninsula, and an old fire station on
23 the north side of SR 68. Noise monitoring locations are presented in Figure 3.9-2, and the results of
24 the traffic noise monitoring are presented in Table 3.9-4.

1 **Table 3.9-4. Summary of Traffic Noise Survey Results near SR 1/SR 68 Interchange^a**

Location	Start Time	Duration (minutes)	Sound Level (dBA L_{eq})	Noise Sources
NR-1	5:55 p.m.	60:00	68.1	NR-1 was approximately 10 feet above SR 68 with a clear line of sight. SR 68 traffic was stop-and-go eastbound and fast-moving westbound, with some construction trucks.
NR-2	1:20 p.m.	20:00	63.9	NR-2 was located at private fence with very dense vegetation between fence and SR 68. Fast moving traffic on SR 68 was approximately 40 miles per hour (mph).
NR-3	4:46 p.m.	60:00	67.7	There was thick vegetation between SR 68 and NR-3, but with clear line of sight to intersection traffic from NR-3. There was traffic in and out of Community Hospital of the Monterey Peninsula. SR 68 traffic was stop-and-go eastbound and fast-moving westbound with some trucks in both directions.
NR-4	3:10 p.m.	60:00	70.3	NR-4 was approximately 5 feet elevated from SR 68. There was very little vegetation between SR 68 and NR-4 with clear line of sight to SR 68 traffic from NR-4. SR 68 traffic was stop-and-go eastbound and fast-moving westbound with some trucks in both directions.
NR-4	8:12 p.m.	20:00	64.5	NR-4 was approximately 5 feet elevated from SR 68. There was fast-moving light traffic from SR 68, approximately one car pass-by per 3 to 5 minutes, with no trucks observed.
NR-5	2:15 p.m.	20:00	68.4	NR-5 was on top of Scenic Drive Bridge with no direct line of sight to SR 68. Traffic was very light on Scenic Drive. There was slow-moving and stop-and-go eastbound traffic on SR 68 and faster traffic (approximately 40 mph) on westbound SR 68.
NR-6	1:50 p.m.	20:00	64.0	NR-6 was at Community Hospital of Monterey Peninsula parking lot approximately 10 feet lower in elevation than SR 68. There was thick vegetation between NR-6 and SR 68. Noise was from vehicles moving through parking lot and traffic on SR 68. Parking lot noise dominates all sound. There were some construction trucks on SR 68.
NR-7	2:40 p.m.	20:00	68.7	NR-7 was near an old fire station site with clear line of sight to SR 68 traffic. Noise was from braking noise from trucks and cars stacking along SR 68, slow-moving SR 68 traffic eastbound, faster-moving SR 68 traffic on westbound SR 68, and some construction noise.
NR-8	4:15 p.m.	20:00	68.7	NR-8 was elevated above SR 68. Traffic on SR 68 is the dominant source.

Location	Start Time	Duration (minutes)	Sound Level (dBA L _{eq})	Noise Sources
Source: LSA Associates 2001.				
Note: ^a Noise measurements were taken on August 6 and 7, 1998, at or near the right-of-way boundary because of private property accessibility issues. All locations are west of the proposed SR 1/SR 68/17-Mile Drive Intersection Reconfiguration.				

1

2 Sensitive Receptors

3 Noise-sensitive land uses are generally defined as locations where people reside or where the
 4 presence of unwanted sound could adversely affect the use of the land. Noise-sensitive land uses
 5 typically include residences, hospitals, schools, guest lodgings, libraries and certain types of passive
 6 recreational uses, such as parks to be used for reading, conversation, meditation, and similar uses
 7 (Federal Transit Administration 2006). As a matter of practice, frequent human use is considered to
 8 occur at exterior locations where people are exposed to roadway noise for at least one hour on a
 9 regular basis (noise-sensitive land uses in the vicinity of the project area are discussed in Project
 10 Impacts and Mitigation Measures, below).

11 Trail and open space use in the project area are primarily used for active recreation (hiking,
 12 equestrian use, etc.). Recreationalists in these areas are not considered noise sensitive receptors for
 13 this analysis because they are mobile through the open space or along trails and would thus be
 14 exposed to noise levels only from project sources or roadways for a short duration of time in any
 15 one location, and then would have attenuated noise levels as they moved away from the noise
 16 source location.

17 Impacts Analysis

18 Methodology

19 Approach

20 This analysis evaluates noise and vibration impacts at the sensitive receptors from the short-term
 21 construction and long-term operation of multiple elements in the project area. These impacts are
 22 determined through comparison to the significance criteria in the following section. Where impacts
 23 are identified, appropriate mitigation measures are provided to reduce them to be less than
 24 significant.

25 For the noise analysis, traffic noise impacts were evaluated using existing and predicted traffic
 26 volumes provided by the project traffic engineers (Fehr & Peers 2011) and a spreadsheet model
 27 based on the FHWA’s Traffic Noise Model. Noise impacts associated with facility operations, such as
 28 the parking lots, driving range, and equestrian center were evaluated qualitatively, while
 29 maintenance equipment, ventilation noise and the Corporation Yard were evaluated based on
 30 measured noise levels associated with existing activities.

1 For the vibration analysis, vibration levels associated with excavation of the subterranean parking
2 garages were evaluated using FTA guidance and methodology (Federal Transit Administration
3 2006). There are no commonly accepted thresholds for acceptable levels of ground vibration.
4 However, the U.S. Department of Transportation suggests vibration damage thresholds of 0.20 inch
5 per second for fragile buildings and 0.12 inch per second for extremely fragile historic buildings.
6 Vibration annoyance thresholds are expressed as vibration noise levels (L_v), which are measured in
7 vibration decibels (VdB). FTA thresholds are categorized by land use and frequency of events.
8 Construction activities such as bulldozing and grading would be considered frequent events (more
9 than 70 vibration events per day). FTA's annoyance threshold for frequent events for Category 2
10 land uses (residences and buildings where people normally sleep, such as homes, hospitals, and
11 hotels) is 72 VdB, and its threshold for Category 3 land uses (institutional land uses such as schools,
12 libraries, and churches) is 75 VdB (Federal Transit Administration 2006). For the purposes of this
13 assessment, exposure of fragile or historic buildings to ground vibration in excess of 0.20 inch per
14 second, exposure of other building structures to ground vibration in excess of 0.5 inch per second, or
15 violation of the annoyance thresholds discussed above would result in a significant impact.

16 **Criteria for Determining Significance**

17 In accordance with CEQA, the State CEQA Guidelines, Monterey County plans and policies, and
18 agency and professional standards, a project impact would be considered significant if the project
19 would:

20 **Long-Term Noise Increases**

- 21 • Expose persons to or generate noise levels in excess of standards established in the County's
22 Land Use Compatibility for Exterior Community Noise chart **and** result in a significant increase
23 in noise levels over existing noise levels (i.e., >5-dB increase in noise where existing noise levels
24 are less than 60 dBA L_{dn} , >3-dB increase in noise where existing noise levels are between 60 and
25 65 dBA L_{dn} , or a >1.5-dB increase in noise where existing noise levels are more than 65 dBA L_{dn}).
- 26 • The proposed project is considered to adversely contribute to a significant impact only if one of
27 the above criteria is satisfied, and the proposed project contributes 1 dB or more increase to the
28 impact. 1 dB is the limit of measurement for noise modeling and thus represents the smallest
29 increment of change that can be reliably predicted.

30 **Short-Term Noise Increases**

- 31 • Expose outdoor activity areas of noise-sensitive land uses to construction noise of more than
32 85 dB at 50 feet.

33 **Vibration**

- 34 • Expose persons to or generate excessive groundborne vibration or groundborne noise levels.

35 **Project Impacts and Mitigation Measures**

36 **A. Long-Term Noise Increases**

37 **Impact NOI-A1: The proposed project could result in exposure of persons to noise levels in**
38 **excess of standards established in the County's Land Use Compatibility for Community Noise**

1 **chart from operation of ventilation fans for underground parking structure at The Lodge at**
2 **Pebble Beach, but not from operation of other project elements. (Less than significant with**
3 **mitigation)**

4 **Traffic Noise**

5 Traffic noise levels for existing (2011) and future (2015) conditions have been modeled for
6 receivers at various locations in the project area using the FHWA Traffic Noise Model. This model
7 calculates an L_{dn} value based on the daily traffic volume that is predicted to occur. The traffic data
8 used in this analysis (vehicle volume, truck mix, vehicle speed, and day/night traffic distribution)
9 were based on data provided by the project traffic consultant (Fehr & Peers 2011) and PBC. Noise
10 exposure at 50 and 100 feet from roadway centerlines was calculated for existing (2011) and the
11 first operational year (2015) conditions. The results of noise modeling are presented in Table 3.9-5.

12 The results in Table 3.9-5 indicate that traffic noise levels with the proposed project in 2015 are
13 expected to increase between 1 and 5 dB over existing (2011) conditions, with the largest project-
14 related noise increases expected to occur on Spyglass Hill Road from proposed development in Area
15 M Spyglass Hill¹. Table 3.9-5 also indicates that the proposed project's contribution to noise level
16 increases (i.e., changes in noise levels between 2015 with and without the project) are between 0
17 and 4 dB, with the largest project-related noise contribution expected to occur on Spyglass Hill
18 Road. Table 3.9-2 shows the standards for exterior noise exposure in the Noise Element. The
19 SR 1/SR 68/17-Mile Drive Intersection Reconfiguration would assist in improving the level of
20 service in the project area, accommodate growth up to 2035, and help eliminate traffic safety issues.
21 The results of prior noise monitoring conducted near this intersection are summarized above in
22 Table 3.9-4, and monitoring locations are shown in Figure 3.9-2. Sensitive noise receptors near the
23 intersection include 12 existing residences along the south side of SR 68, west of the intersection
24 between the intersection and the Community Hospital of the Monterey Peninsula. The Community
25 Hospital of the Monterey Peninsula and Beverly Manor (a convalescent home) are located along the
26 north side of SR 68, west of the intersection. However, there are no noise-sensitive land uses directly
27 adjacent to the SR 1/SR 68/17-Mile Drive intersection.

28 The reconfiguration is an intersection improvement project, and future increases in traffic volumes
29 are not expected to result from the roadway improvement itself. Therefore, no project-related noise
30 impacts are anticipated as a result of the improvement. Changes in roadway configuration caused by
31 the improvement could affect noise exposure along the roadway. The roadway configuration
32 changes are all east of the Scenic Drive overcrossing and all the noise-sensitive land uses are west of
33 the overcrossing; as a result, no noise impacts are expected due to the roadway improvement (LSA
34 Associates 2001). Therefore, traffic noise impacts from the SR 1/SR 68/17-Mile Drive Intersection
35 Reconfiguration are considered less than significant.

36 The overall project will also contribute limited traffic along SR 68 where existing hourly noise levels
37 at residential fence lines along the south side of SR 68 range from 64 to 70 dBA L_{eq} based on baseline
38 monitoring. Modeling of the existing (2011) and 2015 with-project noise levels indicates that the
39 increase of L_{dn} noise levels along SR 68 would be approximately 1 dB, with the modeled L_{dn} of 67–68
40 dBA at 50 feet from SR 68 for both existing (2011) and 2015 with-project conditions, which is a less

¹ This impact was evaluated with Option 1 (Area M Spyglass Hill New Resort Hotel) because Option 1 would generate more trips than Option 2 (Area M Spyglass Hill New Residential Lots).

1 than significant impact per the significance criteria (< 1.5 dBA increase when existing noise levels
2 are > 65 dBA).

3 As shown in Table 3.9-5, some of the traffic levels adjacent to open space areas will exceed the
4 normally and conditionally acceptable ranges for passive open space (50–55 dBA) shown in Table
5 3.9-2 within 50 feet of the roadways but none of the with-project increases exceed 5 dBA change
6 above existing levels. In three locations (along SR 68, along David Avenue between Congress Road
7 and SR 68, and 17-Mile Drive between Stevenson Drive and Palmero Way) there would be noise
8 levels of more than 55 dBA at 100 feet from the roadway. There are no existing or planned trails
9 within 100 feet of David Avenue between Congress Road and SR 68. The only trail on the west side
10 of SR 68 in Del Monte Forest is Haul Road, south of the SFB Morse Gate, which is within designated
11 open space.

12 A foot path from The Lodge at Pebble Beach crosses 17-Mile Drive at the intersection with
13 Stevenson Drive and then follows Stevenson Drive, but this trail is not located in an open space
14 forest area and the application of an open space noise criterion is not appropriate. Thus, along some
15 trails in open space areas in Del Monte Forest, recreationalists would experience noise above 55
16 dBA for a distance of no more than 100 feet, except for the last portion of the new trail along Haul
17 Road where noise will exceed 55 dBA for more than 100 feet (but the proposed project's
18 contribution to noise levels along SR 68 at 100 feet from the roadway is minimal and less than the
19 significance criteria, as shown in Table 3.9-5). Overall, recreationalists would experience noise
20 above the 55 dBA standard for only the immediate adjacent area to certain roadways and then
21 would have noise levels that meet the conditionally allowable standard for the remainder of their
22 trail transit through open space. Due to the limited duration of noise exposure and the limited area
23 affected, this is considered a less-than-significant impact.

24 All predicted noise levels identified in Table 3.9-5 are within the normally and conditionally
25 acceptable ranges established in the Noise Element² (Table 3.9-2), for defined noise-sensitive uses.
26 As a result, the impacts related to traffic noise are considered less than significant.

27 **Parking Lot Noise**

28 The proposed project includes reconfiguring the existing parking facility at The Lodge at Pebble
29 Beach, a new employee parking lot at The Inn at Spanish Bay, and parking associated with new guest
30 units at The Lodge at Pebble Beach and The Inn at Spanish Bay. Noise from vehicles entering and
31 exiting parking lots would also be audible at homes adjacent to the lots. However, noise from vehicle
32 parking lot use is anticipated to be less than the noise produced by passing vehicles traveling at
33 higher speeds on the surrounding roadways, and generally would not be audible over traffic noise
34 from the nearby surrounding roadways. Therefore, noise from parking lot use is considered less
35 than significant.

² Parks, trails, and other open spaces are excluded because these locations are primarily used for active recreation and thus are not considered noise sensitive for the analysis; frequent human use would not occur at these locations. Frequent human use is considered to occur at exterior locations where people are exposed to roadway noise for at least one hour on a regular basis.

1 **Table 3.9-5. Traffic Noise Exposure at Typical Residential Setbacks, Existing (2011) and 2015 Conditions**

Roadway	Segment Location	Existing Noise (2011) (dB L _{dn})		2015 Noise (dB L _{dn})				Change		Project Contribution	
		Existing 50 feet	Existing 100 feet	No Project		With Project ^a		2015 With Project minus Existing		2015 With Project minus 2015 No Project	
				50 feet	100 feet	50 feet	100 feet	50 feet	100 feet	50 feet	100 feet
17-Mile Drive	Congress Road–SR 68	56	51	57	51	58	52	2	1	1	1
17-Mile Drive	West of Congress Road	57	51	57	52	58	53	1	2	1	1
17-Mile Drive	Forest Lodge Road–Spanish Bay Road	55	49	55	50	57	51	2	2	2	1
Forest Lodge Road	17-Mile Drive–Congress Road	58	53	59	53	59	53	1	0	0	0
Forest Lodge Road	Congress Road–Congress Avenue	59	53	60	54	60	54	1	1	0	0
David Avenue	Congress Avenue–SR 68	61	55	61	56	61	56	0	1	0	0
Congress Road	SFB Morse Drive–Forest Lodge Road	54	49	55	49	55	50	1	1	0	1
Sloat Road	Lopez Road–Forest Lodge Road	59	53	59	53	60	54	1	1	1	1
SFB Morse Drive	Congress Road–SR 68	57	52	58	52	58	52	1	0	0	0
Congress Road	Bird Rock Road–SFB Morse Drive	55	49	56	50	56	50	1	1	0	0
Lopez Road	South of Sloat Road	57	51	58	52	58	53	1	2	0	1
Sloat Road	Stevenson Road–Lopez Road	52	46	54	48	55	50	3	4	1	2
Sunridge Road	Constanilla Way–Scenic Drive	58	52	59	53	59	53	1	1	0	0
17-Mile Drive	At SR 1 Gate	60	54	60	54	60	55	0	1	0	1
Spyglass Hill Road	West of Stevenson Drive	51	45	52	46	56	50	5	5	4	4
Stevenson Drive	North of Spyglass Hill Road	53	48	54	49	56	50	3	2	2	1
Stevenson Drive	Spyglass Hill Road–Forest Lake Road	55	49	56	50	57	51	2	2	1	1
Forest Lake Road	North of Stevenson Drive	56	50	57	51	57	51	1	1	0	0
17-Mile Drive	South of Stevenson Drive	58	52	58	53	59	53	1	1	1	0
Cortez Road	North of Stevenson Drive/17-Mile Drive	50	44	52	46	53	47	3	3	1	1
17-Mile Drive	Stevenson Drive–Palmero Way	60	54	60	55	61	55	1	1	1	0
17-Mile Drive	East of Palmero Way	61	55	61	55	62	56	1	1	1	1
San Antonio Road	North of Ocean Avenue	57	51	57	52	58	52	1	1	1	0
SR 68	South of Skyline Forest Drive	68	62	68	62	68	62	0	0	0	0
SR 68	North of David Avenue	67	60	67	61	67	61	0	1	0	0

Note:

^a This impact was evaluated with Option 1 (Area M Spyglass Hill New Resort Hotel) because Option 1 would generate more trips than Option 2 (Area M Spyglass Hill New Residential Lots).

1 **Corporation Yard Noise**

2 The proposed residential lot subdivision at the Corporation Yard would locate 10 residential
 3 housing units in the general vicinity of the Corporation Yard, more than 100 feet from the main
 4 access road to the Corporation Yard area (Figure 2-27). Corporation Yard activities would include
 5 the use of trucks and equipment associated with green waste, composting and recycling and general
 6 maintenance as it occurs today.

7 Noise measurements were conducted at 50 feet from the center of Haul Road passing the existing
 8 wood processing yard on March 6, 1996³ to quantify noise from Corporation Yard passby activities
 9 without implementation of the proposed project. Current equipment and activities at the
 10 Corporation Yard are similar to those analyzed in the 1996 and 2001 noise measurements.
 11 Therefore, these noise measurements are considered representative of the current Corporation Yard
 12 area. The measurement site afforded an unobstructed view of the roadway, and vehicles or
 13 equipment were operated in the same manner as if they were being operated on the main
 14 Corporation Yard access road. The L_{max} during passbys was measured, along with the sound
 15 exposure level (SEL) of individual passbys. Table 3.9-6 summarizes measured values. Although not
 16 all vehicles or equipment that enter or exit the Corporation Yard were monitored, a representative
 17 sample of such vehicles or equipment was obtained.

18 **Table 3.9-6. Measured Noise Levels from Service and Construction/Maintenance Vehicle or**
 19 **Equipment Passbys at PBC Corporation Yard Access Road (March 6, 1996)**

Description	Measured at 50 feet from Haul Road ^a	
	Maximum Level (dBA)	SEL (dBA) ^b
Caterpillar 928F loader ^c	74	84.0
Diesel truck (six-cylinder Ford with turbocharger)	72	82.8
Diesel truck (six-cylinder Ford with turbocharger)	74	81.5
Diesel truck (six-cylinder Ford with turbocharger)	70	79.1
Pickup (Dodge)	59	64.9
Pickup (Dodge)	61	69.5

Source:
 Brown-Buntin Associates 2001.

- Notes:
- ^a The noise levels measured at this location are representative of the noise levels that would occur at 50 feet from the Corporation Yard access road in an open area.
 - ^b The SEL represents the total acoustical energy generated during a noise event such as a vehicle passby or aircraft overflight. The SEL is not actually “heard,” but is used in the L_{dn} calculation.
 - ^c The Caterpillar (CAT) 928F loader replaced a noisier Clark loader in 1997. Noise levels from the CAT 928F were measured by PBC on April 11, 2001.

20
 21 To estimate noise from passby operations at the Corporation Yard with the proposed project, L_{dn}
 22 values for equipment that would be used is based on the monitored SEL data summarized in Table

³ Noise level measurements were conducted by PBC on April 11, 2001 for the Caterpillar (CAT) 928F loader that replaced a noisier Clark loader in 1997. The CAT 928F produces maximum noise levels of 68 to 74 dBA at a distance of 50 feet. The estimated sound exposure level for a typical passby by the CAT 928F is 84 dBA.

1 3.9-6. These assumed L_{dn} calculations are representative of a worse-case condition and are
 2 presented in Table 3.9-7.

3 **Table 3.9-7. Summary of L_{dn} Calculations for Vehicle/Equipment Passbys at 50 Feet from PBC**
 4 **Corporation Yard Access Road**

Description	Passbys/Day	Measured SEL (dBA) ^a	Calculated L_{dn} (dBA)
Caterpillar 928F loader	4	84.0	40.6
Five 10-yard diesel dump trucks (similar to buses and delivery trucks)	12	82.8	44.2
Miscellaneous vehicles (automobiles, pickups, jeeps, etc.)	200	69.5	43.1
Total L_{dn} from vehicle/equipment passbys = 47.6 dB at 50 feet			

Source:

Brown-Buntin Associates 2001.

Note:

^a Highest SEL values from Table 3.9-6.

5
 6 As indicated in Table 3.9-7, activities from the passby operations at the Corporation Yard are
 7 anticipated to be below the County’s standard of 60 dBA L_{dn} and would not represent a significant
 8 change in outdoor noise levels for noise-sensitive uses. Therefore, noise impacts from passby
 9 operations at the Corporation Yard are considered less than significant.

10 Operations that would occur within the Corporation Yard include the use of trucks and equipment
 11 as it occurs today except the activities would be relocated to the back side of the PBC offices onsite,
 12 further away from the proposed residential lots. The area of the Corporation Yard where such
 13 activities would be concentrated is between 300 and 400 feet from the southern boundary of the
 14 proposed housing area, behind a row of buildings. These structures provide some acoustical
 15 shielding of potential noise sources. The estimate of noise associated with operations at the
 16 Corporation Yard is based on the monitored SEL data summarized in Table 3.9-6. These assumed L_{dn}
 17 calculations are representative of a worst-case condition and are presented in Table 3.9-7.

18 During the noise survey conducted on March 6, 1996, only the movement of the Clark loader around
 19 the Corporation Yard was audible and measurable at the location of the proposed housing area. As
 20 noted above, the Clark loader has been replaced by a quieter CAT 928F loader. The other potential
 21 sources of noise are primarily located inside buildings or are acoustically shielded from the
 22 proposed housing area by intervening buildings. Such sources of noise may be occasionally audible
 23 at the housing area, but would not result in a significant noise impact because of the noise
 24 attenuation over distance and relatively low noise generation levels (Table 3.9-7). Additionally, as
 25 described in Chapter 2, Project Description, a landscaped berm would be installed along the south
 26 side of the residential development to provide a buffer from activity in the Corporation Yard.
 27 Therefore, noise from operations within the Corporation Yard is considered less than significant.

28 **Driving Range Noise**

29 The proposed project would relocate the Pebble Beach Driving Range from Area V to Collins Field
 30 (Figure 2-13). Noise-generating activities resulting from driving range operations would include
 31 persons using the driving range, traffic from vehicles entering parking lots or access roads, and

1 driving range maintenance activities. These activities are intermittent; therefore, the cumulative
 2 noise levels resulting from these activities are generally very low. Driving range maintenance
 3 activities are expected to generate the most noise. Noise from persons playing on driving ranges and
 4 putting greens would be limited primarily to noise from audible voices and conversation. Golfing
 5 activities are not typically associated with noise and are not noise-generating activities. Voices
 6 would be occasionally audible at the closest residences to the east and south of the driving range.
 7 However, noise levels from audible voices would be well below the County’s standard and would not
 8 represent a significant change in outdoor noise levels for noise-sensitive uses. Collins Field is
 9 currently used for a variety of events, including high school activities and special events. Therefore,
 10 noise from driving range activities is considered less than significant.

11 **Equestrian Center Noise**

12 The existing Equestrian Center would be removed and replaced by similar buildings and facilities
 13 (e.g., barns, clubhouse, staff housing) within the current Equestrian Center site (Figure 2-12). The
 14 closest existing residences would be to the southwest, across Portola Road, and the closest proposed
 15 residences would be to the north along Drake Road (Area U residential lot subdivision). Noise from
 16 the Equestrian Center activities would result primarily from vehicles (including trucks and vehicles
 17 hauling trailers) entering the facility, crowd activity, animals, and public address systems used
 18 during special events. These are all existing sources associated with the existing facility. The
 19 remodeled Equestrian Center would not be expected to increase noise levels in excess of applicable
 20 noise standards or result in a significant noise impact.

21 **Maintenance Equipment Noise**

22 The proposed project includes several residential lot subdivisions near and adjacent to existing golf
 23 course facilities that are regularly maintained. Noise measurements were conducted within The
 24 Links at Spanish Bay maintenance area and at the course itself on June 2, 1994, to quantify noise
 25 levels generated by typical golf course maintenance activities. The results of golf course
 26 maintenance equipment monitoring are presented in Table 3.9-8.

27 **Table 3.9-8. Summary of Golf Course Maintenance Noise Level Measurements^a**

Equipment	Measured Noise Level at 50 feet (dBA L _{eq})
Stiner riding mower (84-inch)	61-69
Toro Groundsmaster mower (92-inch)	67-75
Shindaiwa EB 45 blower	65-73
Toro Reelmaster 5100 D mower	67-76
Ford wheel tractor model 2810	59-73

Source:

Brown-Buntin Associates 2001.

Note:

^a Noise level measurements were taken at The Links at Spanish Bay, June 2, 1994, to establish typical golf course maintenance noise.

28
 29 As shown in Table 3.9-8, typical golf course maintenance equipment produces noise levels between
 30 59 and 76 dBA at a distance of 50 feet. Because the equipment is used intermittently, the noise
 31 exposure resulting from golf course maintenance activities would be well below 60 dBA L_{dn} and

1 would not represent a significant change in outdoor noise levels for noise-sensitive uses. Therefore,
2 noise impacts from maintenance equipment are considered less than significant.

3 **Ventilation Noise**

4 The proposed project includes underground parking structures at The Lodge at Pebble Beach and
5 the Area M Spyglass Hill (Option 1 New Resort Hotel). The mechanical ventilation equipment
6 associated with the underground parking structures is the only long-term aspect of the proposed
7 project anticipated to potentially generate noise levels approaching the County's exterior standard
8 of 60 dBA L_{dn} . Because of the relatively large distances between the proposed Area M Spyglass Hill
9 New Resort Hotel and the closest noise-sensitive uses, noise from the operation of the proposed
10 hotel would not be expected to exceed applicable noise standards or result in a significant noise
11 impact.

12 At The Lodge at Pebble Beach, new ventilation fans could be located in the basement parking
13 proposed at New Colton Building. Transient lodging is located within about 100 feet from the
14 proposed parking structure site. No ventilation fans are currently planned for Parking and
15 Circulation Reconstruction across from The Lodge meeting facility because of the open-air nature of
16 the lowest parking level. If ventilation fans were to be required in the final design they have the
17 potential to produce audible noise at the closest existing homes to the northwest.

18 To estimate the noise generated, noise measurements were conducted at the existing Casa Palmero
19 underground parking garage, which is larger than either of the facilities proposed at The Lodge at
20 Pebble Beach. These measurements indicate that an exhaust fan generates a noise level of 62.4 dBA
21 L_{dn} at 50 feet from the fan outlet, while the supply fan generates 55.4 dBA L_{dn} at 50 feet from the
22 inlet vent. It is anticipated that operation of both fans concurrently would generate a combined
23 noise level of 63 dBA L_{dn} at a distance of 50 feet. Point-source attenuation of 6 dB per doubling of
24 distance, molecular absorption of 0.7 dB per 1,000 feet, and anomalous excess attenuation of 1 dB
25 per 1,000 feet are assumed (Hoover and Keith 1996). With ambient noise levels in the range of 41 to
26 51 dB L_{dn} , there is potential for constant noise from the fans to be more than 5 dB greater than the
27 ambient noise level at nearby noise-sensitive residential uses. Therefore, the noise impact of fan
28 operation is considered potentially significant. Implementation of the following mitigation measure
29 would reduce this impact to a less-than-significant level.

30 **Mitigation Measure NOI-A1: Employ noise-reducing treatments on parking structure fan** 31 **systems.**

32 The applicant will employ noise-reducing treatments on parking structure fan systems such that
33 noise from the fans does not increase the ambient noise level by more than 5 dB at the nearest
34 residences.

35 Noise from the fans and the ambient noise level will be expressed in terms of L_{dn} . Treatments
36 may include (but are not limited to):

- 37 ● Use of acoustical louvers for the supply and exhaust air vent openings.
- 38 ● Acoustically lining the ductwork between the inlets and outlets of the fans.
- 39 ● Acoustically shielding the fan inlets and outlets from the closest noise-sensitive receivers.

1 The applicant will submit a report to the County detailing the noise control design of the fan
2 systems and how the appropriate noise reduction will be achieved prior to issuance of building
3 permits for the parking facility.

4 **B. Short-Term Noise Increases**

5 **Impact NOI-B1: The proposed project would result in exposure of outdoor activity areas of**
6 **noise-sensitive land uses to construction noise greater than 85 dB at a distance of 50 feet**
7 **during construction. (Less than significant with mitigation)**

8 Potential noise impacts resulting from construction of the proposed project were evaluated by
9 estimating the amount of noise generated on the theoretical worst-case day of construction activity.
10 A detailed inventory of construction equipment that would be used for the proposed project is not
11 available at this time; therefore, this noise analysis is based on construction equipment anticipated
12 to be used during construction activities.

13 Table 3.9-9 lists the noise generation levels for various types of equipment typically used on
14 construction projects. The list, compiled by FTA (2006), was used in this analysis to estimate
15 construction noise. The magnitude of construction noise impacts was assumed to depend on the
16 type of construction activity, noise level generated by various pieces of construction equipment,
17 duration of the activity, distance between the activity and noise-sensitive receivers, and any
18 shielding effects that might result from local barriers, including topography.

1 **Table 3.9-9. Construction Equipment Noise Emission Levels**

Equipment	Typical Noise Level at 50 feet from Source (dBA)
Air compressor	81
Backhoe	80
Compactor	82
Concrete mixer	85
Concrete pump	82
Concrete vibrator	76
Crane, derrick	88
Crane, mobile	83
Dozer	85
Generator	81
Grader	85
Jackhammer	88
Loader	85
Paver	89
Pneumatic tool	85
Pump	76
Roller/sheep's foot	74
Saw	76
Scraper	89
Shovel	82
Truck	88

Source:

Federal Transit Administration 2006.

Note:

Equipment identified in boldface text exceeds 85 dB at 50 feet.

2
 3 A worst-case assumption is that the three loudest pieces of equipment would operate
 4 simultaneously and continuously over at least a 1-hour period, which would result in a combined
 5 noise level. Based on the noise levels summarized in Table 3.9-9, Table 3.9-10 presents the
 6 estimated sound levels from construction activities as a function of distance. Simultaneous
 7 operation of a paver, scraper, and truck, for a combined noise level of 93 dBA at 50 feet is assumed.
 8 Point-source attenuation of 6 dB per doubling of distance, molecular absorption of 0.7 dB per
 9 1,000 feet, and anomalous excess attenuation of 1 dB per 1,000 feet are assumed (Hoover and Keith
 10 1996).

11 Table 3.9-10 indicates that the construction significance criteria of 85 dBA would be exceeded at a
 12 distance of 125 feet or less from construction activities.

1 **Table 3.9-10. Estimated Construction Noise in the Vicinity of an Active Construction Site**

Distance to Receptor (feet)	Sound Level at Receptor (dBA)
50	93
100	87
125	85
400	74
600	70
800	68
1,000	65
1,500	61
2,000	58
2,500	55
3,000	52
4,000	48
5,280	44
7,500	37

Sources:

Noise levels summarized in Table 3.9-9.

Assumptions based on Hoover and Keith 1996.

Notes:

Equipment identified in boldface text exceeds 85 dB at 50 feet.

The following assumptions were made:

- Basic sound level dropoff rate: 6.0 dB per doubling of distance.
- Molecular absorption coefficient: 0.7 dB per 1,000 feet.
- Anomalous excess attenuation: 1.0 dB per 1,000 feet.
- Reference sound level: 93 dBA.
- Distance for reference sound level: 50 feet.

This calculation does not include the effects, if any, of local shielding, which may reduce sound levels further. Estimates are based on a combined noise source of a paver, scraper, and truck.

2

3 Table 3.9-11 summarizes anticipated construction-related noise levels at active construction sites

4 where distances to noise-sensitive receptors are known. Where distances to noise-sensitive

5 receptors are unknown (areas marked "NA"), any noise-sensitive land uses that may be located

6 within 125 feet of active construction activities could be exposed to noise levels above the

7 significance criteria of 85 dBA and could experience a significant noise impact. Therefore, this

8 impact is considered significant, but would be reduced to less than significant with implementation

9 of the following mitigation measures.

1 **Table 3.9-11. Construction Noise Levels at Noise-Sensitive Land Uses in the Project Area**

Project Development Areas	Distance of Noise-Sensitive Land Uses from Proposed Construction Activities	Construction Noise Level (dBA)
The Lodge at Pebble Beach	Private residences approximately 250 feet across Fairway One Reconstruction	79
	Transient lodging facilities adjacent to New Colton Building	NA ^a
	Pebble Beach townhouses near Parking and Circulation Reconstruction	NA ^a
The Inn at Spanish Bay	Existing transient lodging facilities at the Inn	87
Collins Field-Equestrian Center-Special Events Area	Residences approximately 100 feet to the southwest, directly across Sombria Lane/Portola Road	87
	Residences approximately 100 feet to the southwest, directly across Alva Lane	87
	Residences approximately 100 feet to the southeast, directly across Ondulado Road	87
Area M Spyglass Hill	In preserve, no noise-sensitive land uses in the area	NA ^b
Residential Lot Subdivisions		
F-2	No noise-sensitive land uses in or adjacent to the area	NA ^b
I-2	Residential developments/subdivisions located across Viscaino Road and Ronda Road	NA ^a
J	Residences located across Spyglass Woods Drive	NA ^a
K	No noise-sensitive land uses in or adjacent to the area	NA ^b
L	No noise-sensitive land uses in or adjacent to the area	NA ^b
U	Residence located along south border on Portola Road	NA ^a
V	Residences located across Forest Lake Road	NA ^a
Collins Residence	Residences located along south border and across Alva Lane	NA ^a
Corporation Yard	No noise-sensitive land uses in the area	NA ^b
Roadway Improvements		
SR 1/SR 68/17-Mile Drive	Residences along the south side of SR 68 west of the intersection reconfiguration area between the development site and the Community Hospital of the Monterey Peninsula	79–91
17-Mile Drive/Congress Road	Residences to north across golf links and to south/southwest	NA ^a
Lopez Road/Congress Road	No residences	NA ^b
Lopez Road/Sunridge Road	Residences located to the northwest, 250 feet away	79
Portola Road/Stevenson Drive	No residences	NA ^b
^a Distance to noise-sensitive land use is unknown. Residences within 125 feet of an active construction site could have noise levels that exceed the significance criterion of 85 dBA (Table 3.9-10) and could experience a significant noise impact. ^b There are no known noise-sensitive land uses in the general area.		

1 **Mitigation Measure NOI-B1: Limit hours of construction activities.**

2 The applicant will ensure the construction specifications limit activities to the hours between
3 8 a.m. and 6 p.m. on weekdays and between 9 a.m. and 5 p.m. on Saturdays. Construction will
4 not be allowed on Sundays or national holidays. These requirements will be included in all
5 relevant construction contracts and shown on construction plans.

6 **Mitigation Measure NOI-B2: Locate construction equipment as far from noise-sensitive
7 receptors as practicable.**

8 The applicant will ensure the construction specifications locate all stationary noise-generating
9 equipment, such as pumps and generators, as far as possible from nearby noise-sensitive
10 receptors, as practicable. Where possible, noise-generating equipment will be shielded from
11 nearby noise-sensitive receptors by noise-attenuating buffers such as structures or haul truck
12 trailers. Stationary noise sources located closer than 500 feet from noise-sensitive receptors will
13 be equipped with noise-reducing engine housings. Portable acoustic barriers will be placed
14 around noise-generating equipment located within 200 feet of residences. Water tanks and
15 equipment storage, staging, and warm-up areas would be located as far from noise-sensitive
16 receptors as possible. These requirements will be included in all relevant construction contracts
17 and shown on construction plans.

18 **Mitigation Measure NOI-B3: Use sound-control devices on combustion-powered
19 construction equipment.**

20 The applicant will ensure the construction specifications specify all construction equipment
21 powered by gasoline or diesel engines has sound-control devices at least as effective as those
22 originally provided by the manufacturer. No equipment would be permitted to have an
23 unmuffled exhaust. These requirements will be included in all relevant construction contracts
24 and shown on construction plans.

25 **Mitigation Measure NOI-B4: Shield/shroud any impact tools used during construction.**

26 The applicant will ensure the construction specifications specify that any impact tools used
27 during demolition of existing infrastructure are shrouded or shielded. These requirements will
28 be included in all relevant construction contracts and shown on construction plans.

29 **Mitigation Measure NOI-B5: Shut off machinery when not in use during construction.**

30 The applicant will ensure the construction specifications specify that any mobile noise-
31 generating equipment or machinery is shut off when not in use. These requirements will be
32 included in all relevant construction contracts and shown on construction plans.

33 **Mitigation Measure NOI-B6: Use shortest practicable traveling routes during
34 construction.**

35 The applicant will ensure the construction specifications specify that construction vehicles
36 accessing the site use the shortest possible route to and from local freeways, provided the routes
37 do not expose additional receptors to noise. The applicant will ensure that all planned routes are
38 reviewed and approved by the Monterey County Public Works Department. These requirements
39 will be included in all relevant construction contracts and shown on construction plans.

1 **Mitigation Measure NOI-B7: Disseminate essential information to residences and**
2 **implement a complaint response/tracking program during construction.**

3 The applicant and the construction contractor will ensure that residents within 500 feet of the
4 construction area are notified of the construction schedule in writing before construction
5 begins. The project applicant and construction contractor will designate a noise disturbance
6 coordinator who is responsible for responding to complaints regarding construction noise. The
7 coordinator will determine the cause of any complaint and ensure that reasonable measures are
8 implemented to correct the problem. A contact telephone number for the noise disturbance
9 coordinator will be posted conspicuously on construction site fences and will be included in the
10 written notification of the construction schedule sent to nearby residents. These requirements
11 will be included in all relevant construction contracts and shown on construction plans.

12 **Mitigation Measure NOI-B8: Implement additional mitigation measures, as needed, to**
13 **reduce exposure of outdoor activity areas of noise-sensitive land uses to sustained**
14 **construction noise levels greater than 85 dBA during construction.**

15 Throughout the construction period, the contractor will implement additional noise mitigation
16 measures at the request of the County, as needed, such that construction noise levels do not
17 exceed 85 dBA (at the nearest outdoor activity area of a noise-sensitive land use). Additional
18 measures might include changing the location of stationary noise-generating equipment,
19 shutting off idling equipment, rescheduling construction activity, installing acoustic barriers
20 around stationary sources of construction noise, temporarily relocating residents where
21 practicable, using alternative equipment or construction methods that produce less noise, and
22 other site-specific measures as appropriate. These requirements will be included in all relevant
23 construction contracts and shown on construction plans

24 **C. Vibration**

25 **Impact NOI-C1: The proposed project could result in exposure of persons to or generation of**
26 **excessive groundborne vibration or groundborne noise levels during construction at The**
27 **Lodge at Pebble Beach and Area M Spyglass Hill Option 1 (New Resort Hotel). (Less than**
28 **significant with mitigation)**

29 Because of its intrusive nature, excavation of the subterranean parking garages would create seismic
30 waves that radiate along the ground surface and downward into the earth. These surface waves can
31 be felt as ground vibration. Varying geology and distance will result in different vibration levels
32 containing different frequencies and displacements. In all cases, vibration amplitudes will decrease
33 with increasing distance.

34 As seismic waves travel outward from a source, they excite the particles of rock and soil through
35 which they pass and cause them to oscillate. The actual distance that these particles move is usually
36 only a few ten-thousandths to a few thousandths of an inch. The peak rate or velocity (in inches per
37 second) at which these particles move is the commonly accepted descriptor of the vibration
38 amplitude and is referred to as the peak particle velocity (PPV).

39 General construction activities are not anticipated to generate significant levels of groundborne
40 vibration or groundborne noise. However, construction activities at the subterranean parking
41 garages that would be located at The Lodge at Pebble Beach and Area M Spyglass Hill New Resort
42 Hotel are anticipated to generate groundborne vibration. Because of the relatively large distances

1 between the proposed Area M Spyglass Hill New Resort Hotel and the closest noise-sensitive uses,
2 groundborne noise and vibration from the construction of proposed Spyglass Hill Hotel would not
3 be expected to exceed the FTA's vibration threshold of or result in a significant vibration impact.

4 At The Lodge at Pebble Beach site, the nearest sensitive receptors are located approximately 25 feet
5 from where the subterranean parking garage would be excavated. Project-specific data regarding
6 particular equipment that would be used during excavation and construction of the subterranean
7 parking garages is not available at this time. Therefore, it was assumed that excavation would
8 include the use of a bulldozer, which has a base PPV of 0.089 inch per second at 25 feet and an L_V of
9 87 VdB at 25 feet (Federal Transit Administration 2006). The construction-related PPV is below the
10 USDOT's suggested vibration damage threshold of 0.12 inch per second for extremely fragile historic
11 buildings; therefore, the construction-related vibration is not expected to damage building
12 structures adjacent to the construction site. However, the vibration noise levels exceed the FTA
13 annoyance vibration criterion of 72 VdB for a Category 2 land use. The groundborne vibration
14 impact related to human annoyance is considered potentially significant. Implementation of
15 Mitigation Measure NOI-C1 would reduce this impact to a less-than-significant level.

16 **Mitigation Measure NOI-C1. Limit construction activities that result in vibration to**
17 **specified times, provide advance notice to adjacent residents of such schedules, and**
18 **temporarily relocate residents if requested and if vibration testing demonstrates that**
19 **levels exceed Federal Transit Administration vibration thresholds.**

20 The applicant and construction contractor will ensure that construction scheduling identifies
21 the times and duration of vibration-causing effects due to construction of underground parking
22 garages. These construction activities will be limited to a specified period during the day, as
23 determined by the applicant and construction contractor with approval from the Monterey
24 County Planning Department, with advance notice given to adjacent residents. The project
25 applicant will offer residents who will be exposed to vibration levels exceeding threshold levels
26 temporary relocation offsite during subterranean parking garage construction and excavation
27 activities. These requirements will be included in all relevant construction contracts and shown
28 on construction plans.

29 Cumulative Impacts and Mitigation Measures

30 Noise

31 The impact zone for noise is 1) Del Monte Forest for stationary noise sources because it is the area
32 in which the proposed project could substantially contribute stationary sources of noise, and 2) Del
33 Monte Forest and SR 68 for traffic noise because it is the location where the proposed project could
34 substantially contribute noise. Traffic contributions along other regional roadways, other than
35 SR 68, are more limited and thus analysis of noise contributions in these locations was not required
36 or completed.

37 The methodology for determining cumulative impacts is described under Analysis of Cumulative
38 Impacts at the beginning of Chapter 3. Cumulative noise impact is evaluated for the traffic noise that
39 would result from the cumulative traffic growth in the project area and on SR 68.

1 **A. Permanent Increases in Noise due to Project Operations**

2 **Impact NOI-A1(C). Cumulative development might result in exposure of persons to noise**
3 **levels in excess of standards established in the County's Land Use Compatibility for**
4 **Community Noise chart within Del Monte Forest or along SR 68, but the proposed project's**
5 **contribution would be less than significant with mitigation.**

6 Cumulative development could contribute stationary sources of noise as well as increase resulting
7 traffic noise within Del Monte Forest and along SR 68.

8 Within Del Monte Forest, cumulative development other than the proposed project would be limited
9 to residential development, which is not expected to result in significant operational noise impacts
10 at the residential sites themselves (traffic noise discussed separately below). The proposed project
11 would have significant operational stationary noise impacts related to ventilation noise associated
12 with the underground parking structure, which could increase noise levels by more than 5 dB.
13 However, this increase in noise can be addressed by implementation of Mitigation Measure NOI-A1
14 (see Project Impacts and Mitigation Measures), which would employ noise-reducing treatments on
15 the parking structure fan systems. There are no cumulative operational noise contributors at the
16 location of this parking structure.

17 Traffic noise levels for existing (2011) and 2030 conditions have been modeled for receivers at
18 various locations in the project area using the FHWA Traffic Noise Model. This model calculates an
19 L_{dn} value based on the daily traffic volume that is predicted to occur. The traffic data used in this
20 analysis (vehicle volume, truck mix, vehicle speed, and day/night traffic distribution) were based on
21 data provided by the project traffic consultant (Fehr & Peers 2011) and PBC. Noise exposure at 50
22 and 100 feet from roadway centerlines was calculated for existing (2011) and cumulative (2030)
23 conditions. The results of noise modeling are presented in Table 3.9-12.

1 **Table 3.9-12. Traffic Noise Exposure at Typical Residential Setbacks, Existing (2011) and 2030 Conditions**

Roadway	Segment Location	Existing Noise (dB L _{dn})		Estimated Noise in 2030 (dB L _{dn})				Change		Project Contribution	
				No Project		With Project ^a		2030 With Project minus Existing		2030 With Project minus 2030 No Project	
		50 feet	100 feet	50 feet	100 feet	50 feet	100 feet	50 feet	100 feet	50 feet	100 feet
17-Mile Drive	Congress Road–SR 68	56	51	58	52	58	52	2	1	0	1
17-Mile Drive	West of Congress Road	57	51	58	52	59	53	2	2	1	1
17-Mile Drive	Forest Lodge Road–Spanish Bay Road	55	49	55	50	57	51	2	2	2	1
Forest Lodge Road	17-Mile Drive–Congress Road	58	53	59	53	59	53	1	0	0	0
Forest Lodge Road	Congress Road–Congress Avenue	59	53	60	54	60	54	1	1	0	0
David Avenue	Congress Avenue–SR 68	61	55	62	56	62	56	1	1	0	0
Congress Road	SFB Morse Drive–Forest Lodge Road	54	49	55	49	56	50	2	1	1	1
Sloat Road	Lopez Road–Forest Lodge Road	59	53	59	54	60	54	1	1	1	0
SFB Morse Drive	Congress Road–SR 68	57	52	58	52	58	53	1	1	0	1
Congress Road	Bird Rock Road–SFB Morse Drive	55	49	56	50	56	51	1	2	0	1
Lopez Road	South of Sloat Road	57	51	58	52	59	53	2	2	1	1
Sloat Road	Stevenson Road–Lopez Road	52	46	54	48	55	50	3	4	1	2
Sunridge Road	Constanilla Way–Scenic Drive	58	52	59	53	59	53	1	1	0	0
17-Mile Drive	At SR 1 Gate	60	54	60	55	61	55	1	1	1	0
Spyglass Hill Road	West of Stevenson Drive	51	45	52	46	56	50	5	5	4	4
Stevenson Drive	North of Spyglass Hill Road	53	48	55	49	56	50	3	2	1	1
Stevenson Drive	Spyglass Hill Road–Forest Lake Road	55	49	56	50	57	52	2	3	1	2
Forest Lake Road	North of Stevenson Drive	56	50	57	51	57	51	1	1	0	0
17-Mile Drive	South of Stevenson Drive	58	52	59	53	59	53	1	1	0	0
Cortez Road	North of Stevenson Drive/17-Mile Drive	50	44	52	46	53	47	3	3	1	1
17-Mile Drive	Stevenson Drive–Palmero Way	60	54	61	55	61	55	1	2	0	1
17-Mile Drive	East of Palmero Way	61	55	62	56	62	56	1	1	0	0
San Antonio Road	North of Ocean Avenue	57	51	58	52	58	52	1	1	0	0

Roadway	Segment Location	Existing Noise (dB L _{dn})		Estimated Noise in 2030 (dB L _{dn})				Change		Project Contribution	
		Existing		No Project		With Project ^a		2030 With Project minus Existing		2030 With Project minus 2030 No Project	
		50 feet	100 feet	50 feet	100 feet	50 feet	100 feet	50 feet	100 feet	50 feet	100 feet
SR 68	South of Skyline Forest Drive	68	62	70	64	70	64	2	2	0	0
SR 68	North of David Avenue	67	60	68	61	68	62	1	2	0	1

Notes:

^a This impact was evaluated with Option 1 (Area M Spyglass Hill New Resort Hotel) because Option 1 would generate more trips than Option 2 (Area M Spyglass Hill New Residential Lots).

1 The results in Table 3.9-12 indicate that traffic noise levels with the proposed project in 2030 are
2 expected to increase between 1 and 5 dB over existing (2011) conditions, with the largest project-
3 related noise increases expected to occur on Spyglass Hill Road from proposed development in Area
4 M Spyglass Hill⁴. Table 3.9-12 also indicates that the proposed project's contribution to noise level
5 increases (i.e., changes in noise levels between 2030 with and without the proposed project) are
6 between 0 and 4 dB, with the largest project-related noise contribution expected to occur on
7 Spyglass Hill Road. Table 3.9-2 shows the standards for exterior noise exposure in the Noise
8 Element.

9 The overall project will also contribute limited traffic along SR 68 where existing hourly noise levels
10 at residential fence lines along the south side of SR 68 range from 64 to 70 dBA L_{eq} based on baseline
11 monitoring. Modeling of the existing (2011) and 2030 with-project noise levels indicates that the
12 increase of L_{dn} noise levels along SR 68 would be up to 2 dB, with the modeled L_{dn} of 67-68 dBA at
13 50 feet from SR 68 for existing (2011) conditions and 68 to 70 dBA at 50 feet for 2030 with-project
14 conditions. This 2 dB change would be a significant cumulative impact because it is more than a 1.5
15 dB increase and existing noise levels exceed 65 dBA. Table 3.9-12 also indicates that the proposed
16 project's contribution to noise level increases (i.e., changes in noise levels between 2030 with and
17 without the proposed project) would be 0 dB at 50 feet. Because the proposed project contribution
18 is less than the measurable threshold of 1 dB, the proposed project's contribution does not
19 represent a significant impact.

20 For all locations other than SR 68, all predicted traffic noise levels identified in Table 3.9-12 are
21 within the normally and conditionally acceptable ranges established in the Noise Element (Table
22 3.9-2) for uses other than open space.

23 As shown in Table 3.9-12, some of the traffic levels adjacent to open space areas will exceed the
24 normally and conditionally acceptable ranges for passive open space (50–55 dBA) shown in Table
25 3.9-2 within 100 feet of the roadways but none of the with-project increases exceed 5 dBA change
26 above existing levels. In three locations (along SR 68, along David Avenue between Congress Road
27 and SR 68, and 17-Mile Drive east of Palmero Way) there would be noise levels over 55 dBA at 100
28 feet from the roadway. There are no existing or planned trails within 100 feet of David Avenue
29 between Congress Road and SR 68. The only trail on the west side of SR 68 in Del Monte Forest is
30 Haul Road, south of the SFB Morse Gate, which is within designated open space. There is a trail up
31 Pescadero Canyon that crosses 17-Mile Drive and is parallel to 17-Mile Drive east of Carmel Way.
32 Thus, along some trails in open space areas in Del Monte Forest, recreationalists would experience
33 noise above 55 dBA for a distance of up to 100 feet, and beyond 100 feet for a portion of the Haul
34 Road and the trail along 17-Mile Drive east of Carmel Way (but the proposed project's contribution
35 to noise levels at these two locations are minimal and less than the significance criteria, as shown in
36 Table 3.9-12). Overall, recreationalists would experience noise above the 55 dBA standard for only
37 the immediate adjacent area to certain roadways and then would have noise levels that meet the
38 conditionally allowable standard for the remainder of their trail transit through open space. Due to
39 the limited duration of noise exposure and the limited area affected, the proposed project's
40 contribution to cumulative traffic noise impacts on open space use by recreationalist is less than
41 significant.

⁴ This impact was evaluated with Option 1 (Area M Spyglass Hill New Resort Hotel) because Option 1 would generate more trips than Option 2 (Area M Spyglass Hill New Residential Lots).

1 Therefore, although cumulative development impacts related to long-term noise are considered to
2 be potentially significant, the proposed project's contribution would not be considerable.

3 **B. Short-Term Noise Increases due to Construction**

4 **Impact NOI-B1(C). Cumulative development in Del Monte Forest might result in exposure of**
5 **outdoor activity areas of noise-sensitive land uses to construction noise greater than 85 dB at**
6 **a distance of 50 feet during construction, but the proposed project's contribution would be**
7 **reduced to a less-than-significant level with mitigation.**




8 Cumulative development in Del Monte Forest other than the proposed project would be very limited
9 and would consist of single-family residences. As discussed under Project Impacts and Mitigation
10 Measures, short-term increases in noise due to construction could occur in several project locations
11 (see Table 3.9-11). However, this increase in noise can be addressed by implementation of
12 Mitigation Measures NOI-B1 through NOI-B8 (see Project Impacts and Mitigation Measures), which
13 would include a variety of measures to reduce construction noise, including but not limited to
14 limiting the hours of construction, locating construction equipment away from noise sensitive
15 receptors, use of special noise-reducing equipment, and adherence to noise-reduction procedures.
16 Therefore, although cumulative development impacts related to short-term noise are considered to
17 be potentially significant, the proposed project's contribution would not be considerable.

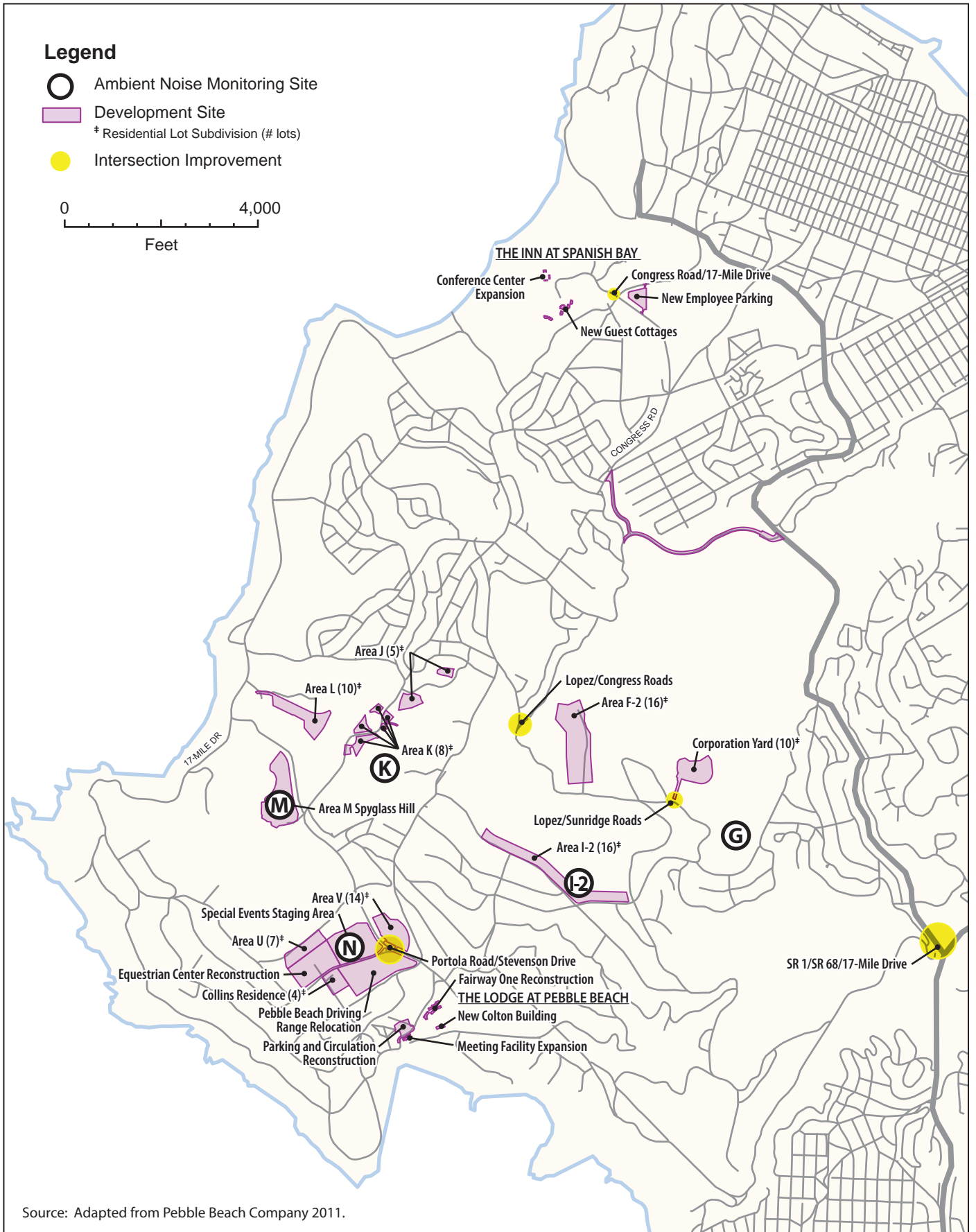
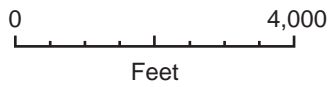
18 **C. Construction-Related Vibration**

19 **Impact NOI-C1(C). Cumulative contributions of construction-related vibration at the same**
20 **time as the proposed project are unlikely and the proposed project would not contribute to a**
21 **significant cumulative vibration impact during construction.**

22 This is a project-level impact only and is discussed under Project Impacts and Mitigation Measures.
23

Legend

-  Ambient Noise Monitoring Site
-  Development Site
- * Residential Lot Subdivision (# lots)
-  Intersection Improvement



Source: Adapted from Pebble Beach Company 2011.

**Figure 3.9-1
Ambient Noise Monitoring Locations in the Project Area**

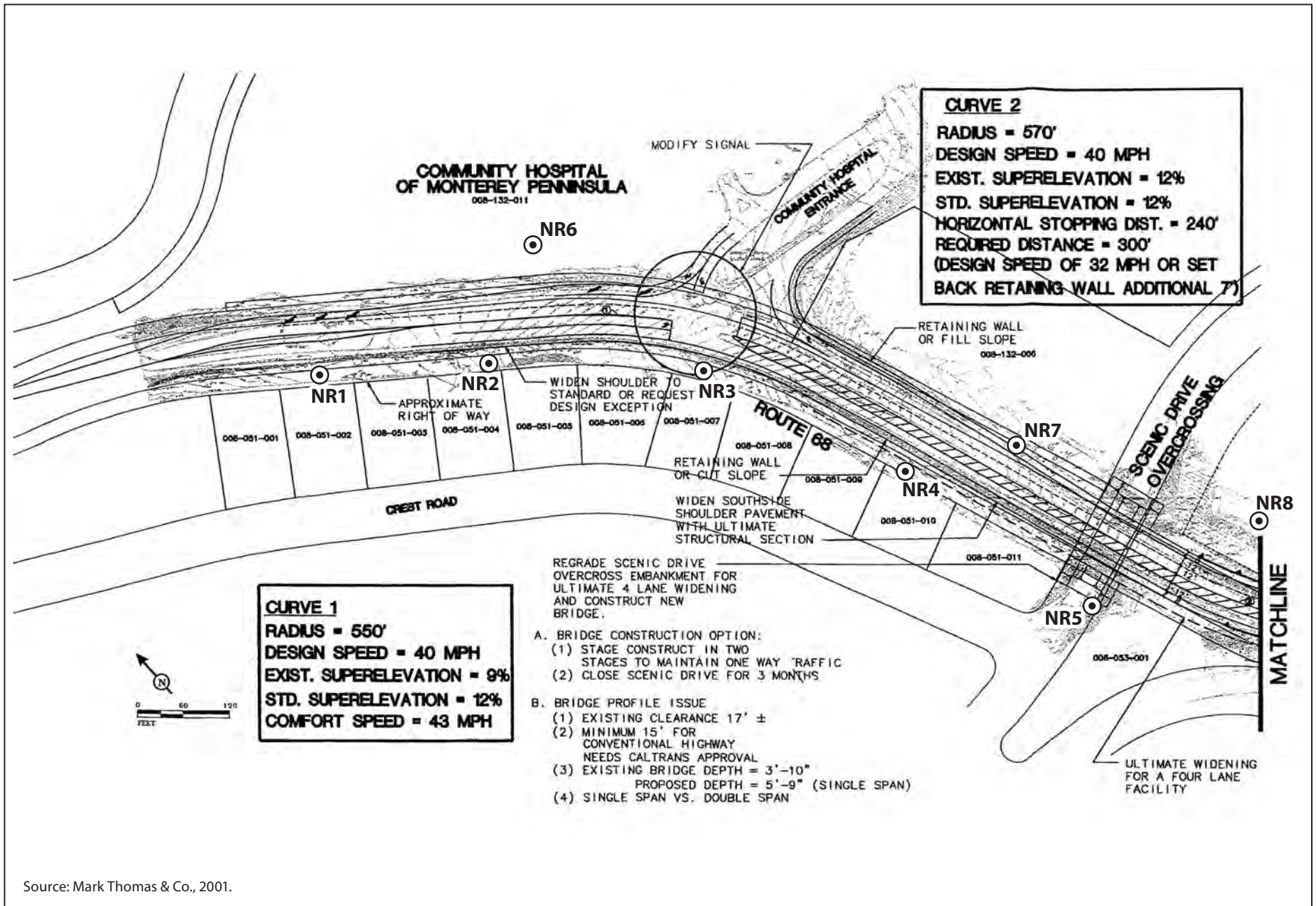


Figure 3.9-2
 Noise Monitoring Locations for SR 1/SR 68/17-Mile Drive Intersection Improvements

Section 3.10
Public Services and Utilities

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Section 3.10 **Public Services and Utilities**

Public services and utilities addressed in this section include police and fire protection, schools, wastewater collection and treatment, utilities (gas, electricity, telephone), and solid waste. Water supply and demand is discussed separately in Section 3.12, Water Supply and Demand. This section is based on consultation with and correspondence provided by various local agencies and districts that provide the services and utilities, and a review of existing documents.

The Pebble Beach Community Services District (PBCSD) is a multipurpose special district that provides fire protection and emergency medical services, security services, wastewater collection and treatment, recycled water distribution, and garbage collection, disposal and recycling.

This section presents a discussion of relevant regulations and existing public services and utilities in the project area; it identifies potential project impacts related to public services and utilities, and mitigation for significant impacts where feasible and appropriate. A summary of the impacts and mitigation measures is presented in Table 3.10-1.

1 **Table 3.10-1. Summary of Project Impacts on Public Services and Utilities**

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Police and Fire Protection										
PSU-A1. The proposed project would increase demand for fire and first-responder emergency medical services.	○	○	○	○	○	○	—	—	—	○
PSU-A2. The proposed project would increase demand for police services.	○	○	○	○	○	○	—	—	—	○
B. Emergency Access										
PSU-B1. The proposed project could interfere with emergency access routes to open space areas and an adopted emergency access plan during construction.	—	—	—	—	—	○	—	—	—	○
C. Wildland Fire Hazard										
PSU-C1. The proposed project could expose people and structures to a significant risk of loss, injury, or death involving wildland fires.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	PSU-C1. Implement vegetation management plans and maintenance in high-risk fire areas. PSU-C2. Implement fire safety precautions during the declared fire season when performing maintenance on natural open space areas. PSU-C3. Improve water flow requirements where needed to ensure proper fire flow.									
D. Schools										
PSU-D1. The proposed project could result in increased student enrollments.	—	—	—	—	○	○	—	—	—	○
E. Wastewater Collection and Treatment										
PSU-E1. The proposed project could result in increased wastewater treatment requirements.	○ (Applies to proposed project as a whole)									○
PSU-E2. The proposed project could increase need for sewer lines and wastewater treatment facility.	○ (Applies to proposed project as a whole)									○
F. Utility Disruption										
PSU-F1. The proposed project could result in utility service disruptions during construction.	⊙ (Applies to proposed project as a whole)									⊙
Mitigation Measures:	PSU-F1. Coordinate with the appropriate utility service providers and related agencies to reduce service interruptions prior to construction.									

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
G. Solid Waste										
PSU-G1. The proposed project would increase solid waste, green waste, and recycling disposal needs.	○ (Applies to proposed project as a whole)									○
Notes: ● = Significant unavoidable impact. ◎ = Significant impact that can be reduced to less than significant. ○ = Less-than-significant impact. - = No impact or not applicable to the development site. PBL – The Lodge at Pebble Beach; SBI – The Inn at Spanish Bay; COL-EQC – Collins Field–Equestrian Center–Special Events Area; MH – Area M Spyglass Hill—New Resort Hotel (Option 1); MR – Area M Spyglass Hill—New Residential Lots (Option 2); RES SUB – Residential Lot Subdivisions; RD – Roadway Improvements; TRA – Trail Improvements; INF – Infrastructure Improvements; Cumulative – Proposed Project’s Contribution to Cumulative Impacts										

1

2 Regulatory Setting

3 Relevant state and local regulations that apply to public services and utilities are discussed below.
 4 There are no relevant federal regulations that affect public services and utilities.

5 Fire Defense Plan, Including Emergency Access Routes for 6 Designated Open Space Areas and Undeveloped Parcels

7 The Fire Defense Plan contains policies and guidelines for PSCSD Fire Protection Services staff. The
 8 plan addresses the use, maintenance, and designation of emergency access routes; the protection of
 9 environmentally sensitive plant species; firebreaks and fuel breaks maintenance and guidelines;
 10 wildland areas fire defense guidelines; and maps of open space fire defense areas (Pebble Beach
 11 Community Services District 2009).

12 Monterey County Sheriff’s Office General Public Safety and 13 Security Guidelines

14 These guidelines apply to private and commercial developments in Monterey County and are
 15 intended to implement satisfactory public safety and security measures. Safety and security
 16 guidelines for the proposed project that are addressed include but are not limited to, the following
 17 components: address numbers/signage, rooftops and openings, fencing and barriers,
 18 doors/windows and locks encompassing them, burglar alarm systems, lighting, landscaping, streets
 19 and parking lots, emergency notification, and key coding.

1 **Public Education—Leroy F. Greene School Facilities Act of 1998** 2 **(Senate Bill 50)**

3 In 1998, the California State Legislature enacted SB 50, which made significant amendments to
4 existing state law governing school fees. SB 50 prohibited state or local agencies from imposing
5 school impact mitigation fees, dedications, or other requirements in excess of those provided in the
6 statute. Government Code Section 65995(e) provides that payment made to a school district in
7 accordance with the school fee program is considered full mitigation of any school impacts. The
8 legislation also prohibits local agencies from denying or conditioning any project (including a
9 general plan) based on the inadequacy of school facilities.

10 **California Integrated Waste Management Act of 1989**

11 The passage of the California Integrated Waste Management Act of 1989 (AB 939) changed the way
12 the state handled its solid waste stream. The act set a waste diversion goal of 25% of total waste in
13 1995 and 50% in 2000. The act also lays out a strategic framework of regulation and conservation.
14 Attesting to the effectiveness of the Act, California's rate of waste diversion has more than tripled
15 since the time AB 939 was enacted. (California Environmental Protection Agency 2009)

16 **Local Coastal Plan**

17 The existing and proposed LUPs contain the following relevant policies:

- 18 ● **Police and Fire Services.** The existing and proposed LUP have no policies regarding police or
19 fire services.
- 20 ● **Wildland Fire.** The existing and proposed LUP include policies for new development covering
21 management of fire hazards. Fire hazards are notable in Del Monte Forest due to the forested
22 condition and in particular the dense stands found in many locations in the forest in close
23 proximity to residential development. New subdivisions are only to be approved where new
24 development will not contribute to fire hazards.
- 25 ● **Schools.** The existing and proposed LUP contain no policies relative to schools or school
26 services although Robert Louis Stevenson High School is noted in the description of the Spyglass
27 Cypress Planning Area.
- 28 ● **Wastewater.** The existing and proposed LUP both contain a number of policies in relation to
29 wastewater and wastewater services. At the time of adoption of the existing LUP, there was
30 inadequate capacity for wastewater treatment and thus existing Policy 113 constrained new
31 development with a resource constraints overlay due to the lack of treatment capacity. The
32 existing LUP also contains policies concerning water quality associated wastewater discharges.
33 Since adoption of the existing LUP, Carmel Area Wastewater District (CAWD) has expanded
34 available wastewater treatment to serve Del Monte Forest and other areas. As such, the
35 proposed LUP amendment updates policies related to wastewater treatment capacity to reflect
36 current conditions and would lift the resource constraints overlay in relation to wastewater
37 treatment capacity, but would still require project-level demonstration of adequate treatment
38 capacity and that additional wastewater discharge will not significantly affect coastal resources,
39 including Carmel Bay.

- 1 • **Utilities.** The existing and proposed LUP contain limited reference to utility requirements in
2 relation to 17-mile drive and accessory units.
- 3 • **Solid Waste.** The existing and proposed LUP contains no policies concerning solid waste or
4 landfills.

5 **Environmental Setting**

6 **Police Protection**

7 The Monterey County Sheriff's Department provides police protection services to the Pebble Beach
8 area 24 hours per day, 7 days per week. The project area is located in Beat 6A. During the day shift
9 (6:30 a.m.–6:30 p.m.) and the night shift (6:30 p.m.–6:30 a.m.), there is one patrol vehicle with one
10 deputy covering this area. This unit is also responsible for covering Beat 6B. (Galletti pers. comm.
11 [A].)

12 Beat 6A encompasses only Pebble Beach, and Beat 6B includes the unincorporated areas on either
13 side of SR 68 from SR 1 to Laureles Grade, sections of the east and west sides from SR 68 and
14 Laureles Grade to the summit of the grade, and the unincorporated areas on the east and west sides
15 of SR 1 between Aguajito Road and Carpenter Street. (Galletti pers. comm. [B].)

16 In cooperation with Sheriff's Department and under contract with the PBCSD, the California
17 Highway Patrol (CHP) provides additional service to the area for traffic enforcement (Niccum pers.
18 comm. [A]). Traffic accidents and traffic enforcement issues in the project area fall primarily under
19 the CHP, although deputies can issue citations when they see violations of the California Vehicle
20 Code on both county roads and state highways. Deputies can also issue citations for parking
21 violations of the California Vehicle Code. The County Communications Center is notified of traffic-
22 related calls by the CHP dispatch center. Depending on their position, a deputy may be first to the
23 scene of a traffic accident to handle any necessary traffic control. If they suspect a driver of driving
24 under the influence (DUI), they will look for objective signs/symptoms. They will detain the driver
25 until CHP officers arrive and complete the DUI investigation. (Galletti pers. comm. [A].)

26 Response times to the Pebble Beach area range from a few seconds to several minutes depending on
27 the location of the officer responding to the call. Monterey County Sheriff's Office statistics show the
28 average response time in Beat 6A for the period from January 1, 2009 to May 1, 2011 was 17
29 minutes, 16 seconds. This figure includes emergency and non-emergency responses. Larceny, which
30 includes grand theft, theft, and theft from vehicles, is the highest reported crime in Del Monte Forest.
31 The average response time for Beat 6B from December 1, 2010 to June 1 2011 was 15 minutes, 46
32 seconds. This average includes both emergency and non-emergency calls. (Galletti pers. comm. [B].)

33 The Monterey County Sheriff's Office strives to maintain a service standard of one officer per 1,000
34 persons. Currently, the department has 88 patrol deputies, 32 fewer than needed to meet the
35 desired service standard. Due to recent budget reductions, the Monterey County Sheriff's Office is
36 set to lose more than 30 positions, which would further reduce the Sheriff's Office's ability to meet
37 the desired service standard. (Galletti pers. comm. [B] and [C])

38 During the six-month period between December 1, 2010 and June 5, 2011; the Monterey County
39 Sheriff's Office handled 1,095 computer aided dispatch transactions pertaining to Del Monte Forest.
40 This volume included calls for service made by the public as well those that were deputy initiated,

1 such as traffic stops and vehicle checks. Larceny, which includes grand theft (larceny), theft, and
2 theft from vehicles, is the highest reported crime in Del Monte Forest. In 2009 there were 82
3 reported larcenies, and in 2010 there were 37 reported larcenies. For the period from January to
4 May 2011, there were seven reported larcenies. In addition, there were 34 reported burglaries in
5 2009 and 35 reported burglaries in 2010. For the period from January to May 2011, there were 11
6 reported burglaries in Del Monte Forest. (Galletti pers. comm. [B].)

7 The PBC augments existing CHP and Monterey County Sheriff law enforcement efforts by employing
8 51 security guards to staff the five entrance gates and patrol the community. The gates are staffed 24
9 hours a day. The security force also patrols the area on a 24-hour basis and provides “good
10 neighbor” assistance to Del Monte Forest residents. In addition, the PBC’s Security Department
11 provides traffic control for special events when additional assistance is necessary. Finally, PBC
12 addresses speeding problems and pedestrian safety issues by using three radar speed display units
13 that are rotated between 12 sites to provide vehicle speed feedback to drivers and to collect speed
14 data for analysis (Burrell pers. comm.; Galletti pers. comm. [C]; Niccum pers. comm.; Pebble Beach
15 Community Services District 2011).

16 Fire Protection

17 The PBCSD provides fire protection and paramedic emergency medical services to the project area.
18 CAL FIRE supplies staff and operational services to PBCSD. Two fire stations provide services to Del
19 Monte Forest: the Pebble Beach Fire Station and the Carmel Hill Fire Station (Niccum pers. comm.
20 [A]). As of June 2011, the average response time for the Pebble Beach Fire Station was 4 minutes, 21
21 seconds; and the average response time for the Carmel Hill Fire Station was 4 minutes, 56 seconds
22 (Hamelin pers. comm. [A]).

23 The Pebble Beach Fire Station is located at 3101 Forest Lake Road in Pebble Beach. Seven personnel
24 staff the station at all times. Staffing includes two fire captains, two fire apparatus engineers, two
25 firefighters, and one paramedic. One fire battalion chief, who is responsible for four fire stations in
26 Pebble Beach and the surrounding area, is also intermittently present at the Pebble Beach Fire
27 Station (Niccum pers. comm. [A]). The following equipment serves this station:

- 28 ● One 2000 Emergency One Fire Engine with a pump that produces 1500 gallons per minute
29 (gpm).
- 30 ● One 2004 American La France Quint with a 75-foot ladder and pump that produces 2,000 gpm.
- 31 ● One 1993 Emergency One Fire Engine with a pump that produces 1500 gpm.
- 32 ● One 2002 Ford 550 four-wheel-drive patrol unit with a pump that is not rated. (Hamelin pers.
33 comm. [A]).

34 The Carmel Hill Fire Station keeps four personnel on duty at all times: one fire captain, two
35 firefighters/engineers, and one paramedic. Additionally, the same fire battalion chief responsible for
36 the Pebble Beach Fire Station is intermittently present at the Carmel Hill Fire Station. (Niccum pers.
37 comm. [A]) The following fire equipment resides at the Carmel Hill Fire Station:

- 38 ● One 2005 Emergency One Fire Engine with a pump that produces 1500 gpm.
- 39 ● One 1995 HME Fire Engine with a pump that produces 1000 gpm.
- 40 ● Two 2009 International Fire Engines with pumps that produce 500 gpm (Hamelin pers. comm.
41 [A]).

1 During the peak wildland fire season (typically mid-May through November), CAL FIRE staffs two
2 additional Type 3 four-wheel-drive fire engines at the Carmel Hill Fire Station with a fire captain and
3 two firefighters on one engine and a fire apparatus engineer and two firefighters on the second
4 engine. Additionally, and on the same schedule, CAL FIRE staffs a fire bulldozer at their Monterey
5 automotive shop and has other wildland fire stations in the area as well as a helicopter base and an
6 air attack base in San Benito County, which is a 15-minute flight from Pebble Beach. (Hamelin pers.
7 comm. [B]).

8 In addition to the Pebble Beach and Carmel Hill Fire Station engine personnel, the PBCSD also has a
9 Fire Protection Planning (FPP) office staffed five days a week with two fire Captains (a Fire Marshal
10 and an Emergency Services Planner) and overseen by a FPP Battalion Chief who is shared with
11 Cypress and Carmel Highlands Fire Protection Districts.

12 PBCSD also has an automatic aid agreement with the cities of Pacific Grove and Monterey. Automatic
13 aid provides additional fire protection support at the initial report of requested services (Niccum
14 pers. comm. [A]).

15 The PBCSD Fire Department has attained a Class III ISO rating, and has an ongoing improvement
16 program to provide increased fire protection benefits, including water system improvements for fire
17 protection, a Fire Defense Plan, and Emergency Access Routes for Designated Open Space Areas and
18 Other Undeveloped Parcels (see regulatory section) (Niccum pers. comm. [A]). According to CAL
19 FIRE, Del Monte Forest is considered a Medium to Very High Fire Hazard Severity Zone (FHSZ)
20 (Hamelin pers. comm. [A]). Percentages of Del Monte Forest by zone type include:

- 21 • 50% in a Very High FHSZ.
- 22 • 30% in a High FHSZ.
- 23 • 20 % is in a Medium FHSZ.

24 Schools

25 Three public school districts serve the residents of Pebble Beach: Carmel Unified School District
26 (CUSD), Pacific Grove Unified School District (PGUSD), and Monterey Peninsula Unified School
27 District (MPUSD). Although there are three school districts that serve the project area, proposed
28 residential developments would be constructed in only two of the three districts: CUSD and MPUSD.
29 Schools that would serve residents of the project area include two high schools, two middle schools,
30 and two elementary schools.

31 The Robert Louis Stevenson School also serves students of Pebble Beach. This private institution has
32 campuses in Carmel, serving K-8, and in Pebble Beach, serving grades 9–12 (Stevenson School
33 2011).

34 Table 3.10-2 presents the current enrollment and capacity at each school and Table 3.10-3 lists the
35 school districts associated with each development site.

1 **Table 3.10-2. Current Enrollment and Capacity for Public School Districts Serving the Project Area**

School District and Schools	Enrollment (2011)	Total Student Capacity (2011)	Remaining Capacity (2011)
Monterey Peninsula Unified School District (MPUSD)			
Monterey High School	1,254	1,431	177
Walter Colton Middle School	698	756	58
Monte Vista Elementary School	381	525	144
Carmel Unified School District (CUSD)			
Carmel High School	741	786	45
Carmel Middle School	548	561	13
Carmel River Elementary School	439 ^a	450	11

Sources:
 Albert pers. comm.; Biasotti pers. comm.[A][B]; Pebble Beach Company 2011. Monterey County Office of Education boundary map.

Notes:
^a To ensure Carmel River Elementary School enrollment remains within capacity, approximately 70 students are currently being transported to Carmelo Elementary School (another CUSD elementary school), according to the CUSD Superintendent (Biasotti pers. comm. [B]).

2

3 **Table 3.10-3. School Districts Serving Proposed Residential Development Sites**

Development Site	Number of Lots	Associated School District ^a
Residential Subdivisions		
Area F-2	16 residential lots	MPUSD
Area I-2	16 residential lots	CUSD
Area J	5 residential lots	MPUSD
Area K	8 residential lots	MPUSD
Area L	10 residential lots	MPUSD
Area U	7 residential lots	CUSD
Area V	14 residential lots	CUSD
Collins Residence	4 residential lots	CUSD
Corporation Yard	10 single-lot subdivision	MPUSD
Area M Spyglass Hill Residential Lots (Option 2)	10 single-family lots	CUSD

Notes:
 CUSD = Carmel Unified School District.
 MPUSD = Monterey Peninsula Unified School District.
^a The school district designations were determined by comparing the Monterey County Office of Education boundary map with the application plan set (Pebble Beach Company 2011).

4

5 **Wastewater**

6 The PBCSD provides wastewater collection and treatment services for uses in the project area.
 7 Wastewater is taken to the CAWD secondary treatment plant for processing. PBCSD contributes to

1 33% of the plant's capital items costs and has access rights to 33% of the CAWD plant's capacity.
2 PBCSD also shares approximately 40% of the plant operations, maintenance, and administrative
3 costs. (Niccum pers. comm. [A])

4 The CAWD wastewater plant has an NPDES permit to accept a capacity of 3 million gallons per day
5 (mgd) (California Regional Water Control Board 2008:4). PBCSD is entitled to a waste discharge of 1
6 mgd and is currently using approximately 500,000 to 600,000 gallons per day (gpd) based on dry-
7 weather flows (Niccum pers. comm. [A]).

8 **Utilities (Gas, Electricity, and Telephone)**

9 Utilities addressed include gas, electricity, and telephone service. Pacific Gas and Electric (PG&E)
10 provides natural gas and electricity services to the project area. AT&T provides telephone service.
11 (Niccum pers. comm. [A])

12 **Solid Waste**

13 The PBCSD provides solid waste, green waste, and recycling collection services in the project area
14 through contract with Waste Management Inc., doing business as Carmel Marina Corporation. These
15 services are contracted through 2015. Waste, green waste, and recycling is taken to the Monterey
16 Peninsula Landfill and Recycling Facility, managed by the Monterey Regional Waste Management
17 District (MRWMD) (Niccum pers. comm. [A]; Pebble Beach Community Services District 2011). As of
18 April 30, 2011, the Monterey Peninsula Landfill and Recycling Facility had approximately 49 million
19 tons of remaining capacity and was expected to remain open until 2161 (Shedden pers. comm.).

20 **Impacts Analysis**

21 **Methodology**

22 **Approach**

23 In order to evaluate potential impacts on public services and utilities resulting from the proposed
24 project, the project elements were evaluated against the criteria below for determining significance.
25 Some of the project elements increase demand for services and utilities because they generate
26 additional visitors, employees, and permanent residents in the Pebble Beach area. Table 3.10-4
27 includes the estimated daily population increase from the proposed project. Additional details on
28 the approach for analysis are contained within the impact discussions.

1 **Table 3.10-4. Estimated Daily Population Increase from the Del Monte Forest Plan**

Project Location/Project Element	Estimated Daily Population Increase			
	Visitor-Serving Uses		Residential Uses (Residents ^d)	Total
	Visitors	Employees		
Lodge at Pebble Beach				
Meeting Facility Expansion ^a	25.2	1	0	26.2
New Colton Building ^b	18	4	0	22
Fairway One Reconstruction ^b	31.5	8	0	39.5
Inn at Spanish Bay				
Conference Center Expansion ^a	47.52	2	0	49.52
New Guest Cottages ^b	36	8	0	44
Collins Field – Equestrian Center – Special Events Area				
Relocation of Pebble Beach Driving Range from Area V to Collins Field ^c	0	0	0	0
Equestrian Center Reconstruction ^c	0	0	0	0
Special Events Staging Area Grading and Expansion ^c	0	0	0	0
Area M Spyglass Hill				
New Resort Hotel (Option 1) ^{b, e}	108	88	0	196
New Residential Lots (Option 2)	0	0	21.1	21.1
Residential Lot Subdivisions				
Area F-2 (16 lots)	0	0	33.76	33.76
Area I-2 (16 lots)	0	0	33.76	33.76
Area J (5 lots)	0	0	10.55	10.55
Area K (8 lots)	0	0	16.88	16.88
Area L (10 lots)	0	0	21.1	21.1
Area U (7 lots)	0	0	14.77	14.77
Area V (14 lots)	0	0	29.54	29.54
Collins Residence (4 lots)	0	0	8.44	8.44
Corporation Yard (10 lots)	0	0	21.1	21.1
TOTAL				
Area M Spyglass Hill Option 1 New Resort Hotel	266.23	111	190.01	517.6
<i>Rounded Estimate</i>	266	111	190	518
Area M Spyglass Hill Option 2 New Residential Lots	158.23	23	211.15	342.7
<i>Rounded Estimate</i>	158	23	211	343

Source:

Burrell pers. comm.

Notes:

PBL = The Lodge at Pebble Beach, SBI = The Inn at Spanish Bay.

^a Consistent with the traffic analysis for the project, it is assumed that there would be 12 new visitors for every 1,000 sf of new meeting. (As shown in Table 2-2, the additional meeting room space would be an estimated 2,100 sf at PBL and 4,600 sf at SBI.) According to www.cvent.com, a 1,000 sf meeting room is designed to accommodate 24 people. According to PBC, the meeting rooms are used almost exclusively (up to 75%) by hotel guests. For purposes of project analysis and consistent with the traffic analysis

conducted for the project, it is assumed that 50% of the meeting space would be occupied by hotel guests while the remainder was assumed to drive from off-site. Therefore, these estimates are conservative and represent a maximum.

- b It is assumed that the guest room occupancy rate is 60%, based on 2010 Monterey County occupancy level. Further, it is assumed that occupied guest units will accommodate 1.5 guests, acknowledging that while two visitors per room is common, there are also solo business travelers. As shown in Table 2-2, the number of additional guest units is 20 at New Colton Building, 35 at Fairway One, 40 at New Guest Cottages, and 100 at New Resort Hotel (Option 1). For Option 1, it is assumed that non-hotel guests would average about 20% of hotel guests, so with 90 hotel guests/day on average, there would be 18 non-hotel guests per day on average, for a total of 108 visitors per day on average. This total includes hotel, restaurant, and spa use.
 - c Consistent with the traffic analysis for the project, it is assumed that this project element would not result in a population increase because these services are currently being provided. Visitors and employees would be relocated from elsewhere within Pebble Beach.
 - d Consistent with 2010 U.S. Census data average for the Del Monte Forest census-designated place, it is assumed that each single-family residence has 2.11 occupants. This does not include any daily visitors or employees that may go to residences.
 - e Although the New Resort Hotel would have approximately 160 employees, it is estimated that only 88 employees on average would be working on site each day. The additional employees are necessary to serve peak occupancy days, to cover operation 7 days per week, and to cover shifts for vacation, holidays, and sick days.
-

1

2 **Criteria for Determining Significance**

3 In accordance with CEQA, the State CEQA Guidelines, Monterey County plans and policies, and
 4 agency and professional standards, a project impact would be considered significant if the project
 5 would:

6 **Police and Fire Protection**

- 7 • Result in substantial adverse physical impacts associated with the provision of new or physically
 8 altered governmental facilities, need for new or physically altered governmental facilities, the
 9 construction of which could cause significant environmental impacts, in order to maintain
 10 acceptable service ratios, response times or other performance objectives for fire or police
 11 protection.

12 **Emergency Access**

- 13 • Impair implementation of, or physically interfere with, an adopted emergency response plan or
 14 emergency evacuation plan.

15 **Wildland Fire Hazard**

- 16 • Expose people or structures to a significant risk of loss, injury, or death involving wildland fires,
 17 including where wildlands are adjacent to urbanized areas or where residences are intermixed
 18 with wildlands.

1 **Schools**

- 2 • Result in a substantial adverse physical impact associated with the provision of new or
3 physically altered facilities, the construction of which would cause significant environmental
4 impacts, in order to accommodate increases in student enrollment.

5 **Wastewater Collection and Treatment**

- 6 • Result in wastewater flows that exceed sewer line or treatment plant capacity, or that contribute
7 substantial increases to flows in existing sewer lines that exceed capacity.

8 **Utility Disruption**

- 9 • Result in prolonged or recurring disruption in the provision of services and utilities, including
10 power, water, and sewer service to residences, businesses, or public service providers during
11 construction of the proposed project.

12 **Solid Waste**

- 13 • Be served by a landfill with insufficient permitted capacity to accommodate the proposed
14 project's solid waste disposal needs.

15 **Project Impacts and Mitigation Measures**

16 **A. Police and Fire Protection**

17 **Impact PSU-A1. The proposed project would increase demand for fire and first-responder** 18 **emergency medical services. (Less than significant)**

19 The proposed project includes visitor-serving and residential development that would increase the
20 daily population in the Pebble Beach area by an estimated 518 people under Option 1 and 343
21 people under Option 2 (Table 3.10-4), thus increasing potential demand for fire and first-responder
22 emergency medical services. The likely daily average is expected to be less because all new visitor-
23 serving uses are unlikely to be at capacity every day.

24 PBCSD has an ongoing improvement program to provide increased fire protection benefits in the
25 project area. The current staffing, equipment, and facilities are adequate to provide acceptable
26 service ratios and response times and are not anticipated to change substantially with
27 implementation of the proposed project. In addition, PBCSD has an automatic aid agreement with
28 the cities of Carmel, Pacific Grove, and Monterey that improves the District's ability to provide fire
29 protection and emergency medical services to the project area. (Niccum pers. comm. [A])

30 The implementation of SR 1/SR 68/17-Mile Drive improvements would help facilitate improved site
31 access and potentially reduce fire and first-responder emergency services response times when
32 using these highway improvement locations.

33 The proposed development would be required to comply with required fire protection development
34 standards. Cal-Am has stated it can provide sufficient water flows and pressure when the need for
35 fire protection services arises (Niccum pers. comm. [A]).

36 While the proposed project has the potential to increase demand for fire protection and emergency
37 medical services, this need would not result in substantial increased demands resulting in the

1 inability to maintain acceptable service ratios, response times, or other performance objectives
2 related to fire services that would require additional staff, equipment and/or new expanded
3 facilities. Therefore, this impact would be less than significant.

4 **Impact PSU-A2. The proposed project would increase demand for police services. (Less than**
5 **significant)**

6 The proposed project includes visitor-serving and residential development that would increase the
7 daily population in the Pebble Beach area by an estimated 518 people under Option 1 and 343
8 people under Option 2 (Table 3.10-4), thus increasing potential demand for police services. The
9 likely daily average is expected to be less because all new visitor-serving uses are unlikely to be at
10 capacity every day.

11 According to the Monterey County Sheriff's Office, any permanent and/or temporary population
12 increase would have an adverse effect on police service because the potential for calls for service
13 (CFS), crime, crime reports, and traffic would increase. Increased traffic could increase traffic-
14 related issues and crimes (e.g., accidents, vehicle theft, and driving under the influence) and could
15 increase response times to residents in the project area. (Galletti pers. comm.)

16 The Monterey County Sheriff's Office requires each project applicant to satisfactorily comply with
17 the recommended Monterey County Sheriff's General Office Public Safety and Security Guidelines,
18 including specific guidance for address numbers/signage; rooftops and openings; fencing and
19 barriers; doors/windows and locks encompassing them; burglar alarm systems; lighting;
20 landscaping; streets and parking lots; emergency notification; and key coding. Compliance with
21 these guidelines would improve public safety and security of the proposed project (Galletti pers.
22 comm. [B].)

23 Funding for sheriff's office services would continue to be provided based on local tax assessments,
24 which would increase as a result of the proposed project. Supplemental police service would
25 continue to be provided by PBC security and PBCSD (via contract with CHP). The implementation of
26 SR 1/SR 68/17-Mile Drive Intersection Reconstruction would improve access to the project area and
27 potentially reduce police response times. Furthermore, the proposed project itself would not result
28 in a physical change or substantial increased demands that would require additional staff,
29 equipment or new or expanded facilities to maintain provision of service or adequate emergency
30 access. Therefore, this impact would be considered less than significant.

31 **B. Emergency Access**

32 **Impact PSU-B1. The proposed project could interfere with emergency access routes to open**
33 **space areas and an adopted emergency access plan. (Less than significant)**

34 The proposed project could potentially block emergency access routes to open space areas and
35 undeveloped parcels identified in the PBCSD Fire Defense Plan during construction of infrastructure
36 for the Residential Lot Subdivision at the Corporation Yard. Review of the PBCSD Fire Defense Plan
37 reveals that construction at this location could block access to Haul Road (used as a fire road and
38 fuel break) and fire roads 2 and 4 (Pebble Beach Community Service District 2009). Although it
39 appears emergency access could be obstructed, CAL FIRE has reviewed the project application and
40 determined that the proposed project would not block emergency access to open space areas and
41 undeveloped parcels identified in the PBCSD Fire Defense Plan (Hamelin pers. comm. [A]). In
42 addition, once the Residential Lot Subdivisions at the Corporation Yard are constructed, access to

1 the Haul Road would be improved when compared with current access conditions. Therefore, this
2 impact would be considered less than significant.

3 **C. Wildland Fire Hazard**

4 **Impact PSU-C1. The proposed project could expose people and structures to a significant risk** 5 **of loss, injury, or death involving wildland fires. (Less than significant with mitigation)**

6 The proposed project would place residential structures adjacent to wildland and open space areas,
7 particularly the Residential Lot Subdivisions at the Corporation Yard which is adjacent to the
8 HHNHA and SFB Morse open space preservation areas to the north and Preservation Areas G and H
9 to the south. There may not be fire hydrants/lines at or near areas proposed for residential
10 development, which would contribute to risk of loss, injury or death from wildland fires. To assist in
11 preventing wildland fires from reaching homes, the PBCSD Fire Department enforces the California
12 Public Resources Code, sec 4291 et seq., which mandates 100 feet of vegetation reduction/treatment
13 around all buildings in a hazardous fuel area. As part of its Defensible Space program, the PBCSD
14 Fire Department inspects an average of 85% of all residences in Pebble Beach each year and 100%
15 of all vacant lots. (Hamelin pers. comm. [B]). In addition, Chapter 18.10, *Fire Code*, Section K105.3, of
16 the Monterey County Code of Ordinances (Fire Code) includes standards for fire hydrant and/or fire
17 valve installation for residential dwellings.

18 The placement of residential structures adjacent to wildland and open space areas, and potentially
19 increasing the risk of wildland fires as a result, is considered a potentially significant impact.
20 Implementing Mitigation Measures PSU-C1, PSU-C2, and PSU-C3 would reduce this impact to a less-
21 than-significant level.

22 **Mitigation Measure PSU-C1. Implement vegetation management plans and maintenance** 23 **in high-risk fire areas.**

24 The applicant will coordinate with PBCSD Fire Department and the County to develop and
25 implement a fire prevention and management plan for those sites adjacent to open space, or an
26 equivalent mitigation as determined by the fire department, to reduce the risk of wildland fires.
27 Implementation of this plan might include an approved landscape planting list, and/or funding
28 by the applicant for ongoing vegetation management, and maintenance of vegetation
29 management zones adjacent to wildland locations with high fire risk.

30 **Mitigation Measure PSU-C2: Implement fire safety precautions during the declared fire** 31 **season when performing maintenance on natural open space areas.**

32 The applicant will implement fire safety precautions during the declared fire season, as
33 determined by the PBCSD Fire Department, when performing maintenance activities within and
34 adjacent to natural open space areas to reduce the risk of wildland fires. These precautions
35 include:

- 36 ● The applicant or their maintenance contractor will obtain a site inspection and approval by
37 the PBCSD Fire Department during declared fire season prior to using any equipment or
38 performing any maintenance activity that may create an increased fire hazard, such as using
39 chippers and chainsaws, clearing brush, or other vegetation removal efforts.

- 1 • The applicant or maintenance contractor party performing vegetation management will
 2 keep adequate and working fire suppressant equipment on site at all times when
 3 performing maintenance and vegetation management activities.

4 **Mitigation Measure PSU-C3. Improve water flow requirements where needed to ensure**
 5 **proper fire flow.**

6 The applicant will coordinate with PBCSD Fire Department to assess existing and planned
 7 infrastructure and evaluate water flow requirements for each development site to reduce risk of
 8 loss, injury or death from wildland fires. Where the PBCSD Fire Department determines it is
 9 needed, the applicant will install adequate infrastructure to ensure water flow requirements are
 10 met to ensure proper fire flows exist. In addition, PBCSD will ensure that fire hydrants and/or
 11 fire valves are installed in accordance with Monterey County’s Fire Code. Cal-Am has stated that
 12 it can provide sufficient water flows and pressure when the need for fire protection services
 13 arises (Niccum pers. comm. [A]).

14 **D. Schools**

15 **Impact PSU-D1. The proposed project could result in increased student enrollments. (Less**
 16 **than significant)**

17 The proposed project would result in increased residents (Table 3.10-4), an estimated 190 residents
 18 under Option 1 (new resort hotel) and 211 under Option 2 (new residential lots) for Area M
 19 Spyglass Hill, potentially including school-age children. This potential increase in school-age
 20 children could increase student enrollments at local public schools in MPUSD (Monterey High
 21 School, Walter Colton Middle School, and Monte Vista Elementary School) and CUSD (Carmel High
 22 School, Carmel Middle School, and Carmel River Elementary School). A conservative multiplying
 23 factor of 0.25 students per household was used to determine the potential increase of school-age
 24 children attending public schools. Based on the ratio of 0.25 students per household, up to 23
 25 students are projected under Option 1 and up to 25 students are projected under Option 2, with up
 26 to 13 students in MPUSD and 13 in CUSD (Table 3.10-5).

27 **Table 3.10-5. Estimated Increase in Numbers of School-Age Children Resulting from the Proposed**
 28 **Project**

School District ^a	Number of Residential Units ^b	Estimated Number of School-Age Children ^c	Current Remaining Capacity ^d
MPUSD	49	13	379
CUSD ^e	41/51	11/13	69
Total	90/100	23/25	

Sources:

Albert pers. comm.; Biasotti pers. comm.[A][B]; Monterey County Office of Education (no date); Pebble Beach Company 2011; Carmel Unified School District 2011.

Notes:

^a CUSD = Carmel Unified School District; MPUSD = Monterey Peninsula Unified School District.

^b See Table 3.10-3 for a breakdown of proposed residential units by development site.

^c A multiplying factor of 0.25 student per household was used to determine potential increase of school-age children.

^d See Table 3.10-2 for a breakdown of remaining capacity by school.

^e There are two options for development in Area M Spyglass Hill: Option 1 (New Resort Hotel) and Option 2 (New Residential Lots). The estimates for both options are presented (Option 1/Option 2). The estimated number of residents and school-age children would be less under Option 1.

1

2 Based on communications with MPUSD and as shown in Table 3.10-5, there is adequate school
3 capacity to accommodate the estimated students that could enroll as a result of new residential
4 development within the MPUSD boundaries (Albert pers. comm. 2011).

5 Based on communications with CUSD and as shown in Table 3.10-5, there is adequate school
6 capacity to accommodate the estimated students that could enroll in CUSD. All seven of the CUSD
7 schools have recently undergone modernization and expansion; but the completed and proposed
8 improvements at Carmel High School, Carmel Middle School, and Carmel River Elementary School
9 would replace temporary/portable facilities and upgrade existing facilities, not provide additional
10 capacity (Paul pers. comm.). Both the Carmel Middle School and the Carmel High School currently
11 have sufficient capacity to accommodate the estimated maximum number of students that could
12 enroll as a result of new residential development within the CUSD boundaries, and the CUSD has the
13 flexibility to transport students who would attend Carmel River Elementary school to Carmelo
14 Elementary School to ensure all students are accommodated. Therefore, although no capacity-
15 increasing projects are planned for the CUSD, the addition of 13 or fewer students to the CUSD
16 would not require construction of new school facilities.

17 In summary, the school districts could accommodate the potential increase in students from
18 residential development. Furthermore, future homeowners would be required to pay school impact
19 (developer) fees at the time of construction on their residential lots. Payment of these developer
20 fees would offset any potential physical impacts as a result of new or expanded school facilities at
21 MPUSD and CUSD per Government Code Section 65995(e). Therefore, this impact is considered less
22 than significant.

23 E. Wastewater Collection and Treatment

24 **Impact PSU-E1. The proposed project could result in increased wastewater treatment** 25 **requirements. (Less than significant)**

26 The proposed project would increase wastewater flows to the CAWD treatment plant. The project
27 area is currently using about half (500,000 to 600,000 gpd) of its 1 mgd allotted capacity (Niccum
28 pers. comm. [A]). The PBCSD has estimated increased wastewater flows expected to result from
29 implementation of the proposed project, and proposed project wastewater flows are not expected to
30 exceed an additional 150,000 gpd (Niccum pers. comm. [B]). This is a conservative estimate. In total,
31 including the proposed project, future Del Monte Forest wastewater flows would not exceed
32 700,000 gpd. As previously mentioned, the PBCSD has a reserved capacity of 1 million gpd at the
33 CAWD. Therefore, under project build-out conditions, PBCSD would retain an approximate 300,000
34 gpd reserve capacity. (Niccum pers. comm. [B]) Therefore, the proposed project would not result in
35 wastewater flows that exceed treatment plant capacity. This impact is considered less than
36 significant.

1 **Impact PSU-E2. The proposed project could increase need for sewer lines and wastewater**
 2 **treatment facility capacity. (Less than significant)**

3 As stated in the discussion of Impact PSU-E1, the proposed project would increase demand for
 4 wastewater treatment. The increase in demand can be met by existing wastewater treatment
 5 facilities and sewer lines, in combination with installing sewer line extensions as described in
 6 Chapter 2 (Niccum pers. comm.; Beretti pers. comm.). It would not be necessary to install larger
 7 regional infrastructure mains (Niccum pers. comm.). Therefore, impacts resulting from increased
 8 demand for sewer lines and sewer capacity would be less than significant.

9 **F. Utility Disruption**

10 **Impact PSU-F1. The proposed project could result in utility service disruptions during**
 11 **construction. (Less than significant with mitigation)**

12 Construction of proposed development, including infrastructure and roadway improvements, (as
 13 described in Chapter 2) could result in utility service disruption to residences, businesses, and
 14 public service and utility providers. Potentially affected utilities include water, reclaimed water,
 15 sewer, gas, electricity, telecommunications, cable, and other infrastructure. Water service
 16 interruptions could also affect fire flows. The duration of this disruption is uncertain and could be
 17 prolonged. This impact is considered significant. Implementing Mitigation Measure PSU-F1 would
 18 reduce this impact to a less-than-significant level.

19 **Mitigation Measure PSU-F1. Coordinate with the appropriate utility service providers and**
 20 **related agencies to reduce service interruptions prior to construction.**

21 Prior to construction, the applicant and/or its construction contractor will coordinate with the
 22 appropriate utility service providers and related agencies to determine the location of utilities
 23 and develop a plan to reduce service interruptions. The plan will be approved by the
 24 construction contractor and utility provider, and will be incorporated into the construction
 25 specifications. Utilities will include, but may not be limited to: water, reclaimed water, sewer,
 26 gas, electricity, telephone, cable. This coordination will include the following:

- 27 ● The applicant will contact the Underground Service Alert of Northern California and Nevada
 28 at least 48 hours before excavation work begins to verify the nature and location of existing
 29 underground utilities. The applicant will also notify all public and private utility owners at
 30 least 48 hours prior to the commencement of work adjacent to any existing utility, unless
 31 the excavation permit specifies otherwise.
- 32 ● The applicant will coordinate with Cal-Am as the water purveyor and the PBCSD Fire
 33 Department to minimize or eliminate potential water interruptions. Such coordination
 34 efforts may include requiring the construction contractor to hot-tap¹ existing water lines for
 35 new water line connections when possible to maintain service of existing water lines.
 36 Another option is to isolate construction areas and back-feed water through alternate lines
 37 to provide continuous service.
- 38 ● The applicant will coordinate with PBCSD, as the wastewater agency, to minimize or
 39 eliminate potential interruptions of service when connections are made between sewer

¹ *Hot-tap* means drilling into a pipe that is live (currently providing water) as a means of temporarily providing water, so service is not interrupted when connecting new lines to existing lines.

1 lines. Efforts may include coordination with the construction contractor to bypass sewage
 2 flows in the affected areas through use of a portable pipeline that connects to unaffected
 3 sewage lines.

4 **G. Solid Waste**

5 **Impact PSU-G1. The proposed project would increase solid waste, green waste, and recycling** 6 **disposal needs. (Less than significant)**

7 The proposed project would result in generation of construction period solid waste over the four
 8 phases (10 years), between September 2012 and August 2022. This would include construction
 9 debris (e.g., cut material from grading, construction debris, other non-recyclables) from
 10 development (as described in Chapter 2) at The Lodge at Pebble Beach, The Inn at Spanish Bay,
 11 Collins Field–Equestrian Center–Special Events Area, Area M Spyglass Hill, the residential lot
 12 subdivisions, and roadway, trail, and infrastructure improvements.

13 The proposed project would also increase the daily population (visitors, employees, residents) in
 14 Del Monte Forest by an estimated 518 or 343 people under Option 1 or 2, respectively, as shown in
 15 Table 3.10-4. The increased daily population would increase the amount of solid waste, green waste,
 16 and recycling generated. As mentioned previously, PBCSD has contracted for collection services with
 17 Waste Management, Inc. through 2015 (Niccum pers. comm.). Currently, the Monterey Peninsula
 18 Landfill and Recycling Facility has an estimated remaining capacity of 49 million tons and is
 19 expected to be open for approximately 150 years (Shedden pers. comm.). Monterey Peninsula
 20 Landfill and Recycling Facility management confirmed that the landfill has sufficient capacity to
 21 accommodate the proposed project (construction and operation period waste generation) and all
 22 other planned development (Van Horn pers. comm.).

23 Increased solid waste, green waste, and recycling needs resulting from the proposed project can be
 24 accommodated by the existing collection and disposal services, and it could be served by a landfill
 25 with sufficient permitted capacity. Therefore, this impact would be less than significant.

26 **Cumulative Impacts and Mitigation Measures**

27 The methodology for determining cumulative impacts is described under Analysis of Cumulative
 28 Impacts at the beginning of Chapter 3.

29 **A. Police and Fire Protection**

30 **Impact PSU-A1(C) and PSU-A2. Cumulative development would increase demand for fire, first** 31 **responder emergency medical services, and police services but not to a level that would** 32 **result in the need for new physical facilities for these services and the cumulative impact** 33 **would be less than significant.**

34 Other than the proposed project, cumulative development in Del Monte Forest includes up to 105
 35 new dwelling unit vacant lots². The net increase of up to 668 to 843 daily population³ by all

² As shown in Table 3-2 in the introduction to Chapter 3, Del Monte Forest buildout with the project (and the LCP Amendment) would be 195 to 205 units including 90 to 100 units from the project and 105 units from existing vacant lots (96) and limited units in new subdivisions (9 units).

³ Assuming 3.1 persons per dwelling unit and assumptions earlier in the section.

1 cumulative development is not sufficient demand to result in the need for new physical facilities that
2 might otherwise result in secondary impacts on the environment.

3 **B. Emergency Access**

4 **Impact PSU-B1(C). Cumulative development could result in interference with emergency**
5 **access plans, but the proposed project would not impede emergency access and would not**
6 **considerably contribute to a cumulative impact.**

7 Other than the proposed project, cumulative development in Del Monte Forest includes up to 105
8 new dwelling units². Proposals for new residential development would be responsible for
9 maintaining and/or replacing access, and would be required to comply with County and Fire
10 Department access requirements. The proposed project would be required to adhere to the PBCSD
11 Fire Defense Plan and the conditions of CAL FIRE. Cumulative impacts related to emergency access
12 are unlikely, but in any case, the project will be conditioned to comply with access requirements,
13 and would not contribute to any interference with emergency access.

14 **C. Wildland Fire Hazard**

15 **Impact PSU-C1(C). Cumulative development could expose people and structures to wildland**
16 **fire risk, but the project's contribution would be reduced to a less-than-significant level with**
17 **mitigation.**

18 Cumulative development might have a substantial adverse effect by placing residential structures
19 adjacent to wildland and open space areas, and in areas where there are no fire hydrants/lines,
20 contributing to the risk of loss, injury, or death from wildland fires.

21 As identified under Project Impacts and Mitigation Measures, all development will be required to
22 comply with PBCSD Fire Department requirements and Monterey County's Fire Code. Furthermore,
23 implementation of Mitigation Measures PSU-C1, PSU-C2, and PSU-C3 (see Project Impacts and
24 Mitigation Measures), through implementation of a vegetation management plan, safety precautions
25 during maintenance during the declared fire season, and improved water flow where needed, would
26 reduce the potential wildland fire hazard impacts to a less-than-significant level. Therefore, although
27 cumulative development impacts related to wildland fire hazards are considered to be potentially
28 significant, the proposed project's contribution would not be considerable.

29 **D. Schools**

30 **Impact PSU-D1(C). Cumulative development would result in increased student enrollments**
31 **which would increase demand for new school facilities, but fees paid at the time of**
32 **construction of residential lots would offset any potential physical impacts as a result of new**
33 **or expanded facilities at MPUSD or CUSD per Government Code Section 65995(e) and the**
34 **proposed project's contribution to cumulative impacts would be less than significant.**

35 The proposed project would generate up to 25 new students to the MPUSD and CUSD. Other projects
36 in Del Monte Forest include up to 105 new dwelling units (see footnote 2). Using a conservative
37 estimate of 0.25 students per household, these new units could generate up to 26 additional
38 students. As discussed under Project Impacts and Mitigation, the MPUSD has adequate school
39 capacity to accommodate this increase and all of the CUSD schools have recently undergone
40 modernization and expansion. Furthermore, future homeowners/developers would be required to

1 pay school impact fees at the time of construction on their residential site. Payment of these
2 developer fees would offset any potential physical impacts as a result of new or expanded school
3 facilities at MPUSD and CUSD per Government Code Section 65995(e). Therefore, cumulative
4 impacts related to schools are considered to be less than significant and the proposed project would
5 not contribute to a significant cumulative impact.

6 **E. Wastewater Collection and Treatment**

7 **Impact PSU-E1(C) and E2(C). Cumulative development would result in increased wastewater**
8 **treatment requirements, but because there is adequate PBCSD allotted wastewater capacity**
9 **and no need for additional sewer lines or wastewater treatment facility, the proposed project**
10 **would not contribute to a significant cumulative impact.**

11 Cumulative development other than the proposed project would include up to 105 new dwelling
12 units in Del Monte Forest (see footnote 2). Assuming all of those lots are developed for single-family
13 residences, with an average of 3.1 persons/residence, the cumulative addition of residents could be
14 up to 325 persons. Using a factor of 70 gpd/person (EPA 2002), the additional cumulative
15 wastewater flow would be 22,750 gpd. The project increase in flow would be 150,000 gpd for a total
16 of 177,750 gpd. PBCSD is currently using 500,000 to 600,000 gpd or half of its current allotted
17 capacity of 1 mgd. Increased flow resulting from the cumulative plus-project conditions would not
18 exceed the 1 mgd capacity. The proposed project is already served by existing wastewater
19 infrastructure and includes new project-serving sewer lines to support development. Therefore,
20 cumulative impacts related to expanded or new wastewater collection or treatment facilities are
21 considered to be less than significant and the proposed project would not contribute to a significant
22 cumulative impact.

23 **F. Utility Disruption**

24 **Impact PSU-F1(C). Cumulative development could result in construction-related utility**
25 **service disruption, but the proposed project's contribution would be reduced to a less-than-**
26 **significant level with mitigation.**

27 Cumulative development could result in construction-related service disruptions. However, other
28 than the proposed project, development would be limited to construction of up to 105 new single-
29 family dwelling units in Del Monte Forest (see footnote 2). Construction of individual homes is not
30 anticipated to result in significant, if any, construction-related service disruptions. The proposed
31 project would be developing both structures and roadways, and potential utilities that could be
32 affected include water, reclaimed water, sewer, gas, electricity, telephone, cable, and other
33 infrastructure. Implementation of Mitigation Measure PSU-F1 (see Project Impacts and Mitigation
34 Measures) would ensure that coordination would occur with utility service providers to reduce
35 potential service interruptions that might occur as a result of project construction. Therefore,
36 although cumulative development impacts related to utility disruption are considered to be
37 potentially significant, the proposed project's contribution would not be considerable.

38 **G. Solid Waste**

39 **Impact PSU-G1(C). Cumulative development would increase solid waste, green waste, and**
40 **recycling disposal needs, but solid waste services and facilities are sufficient to accommodate**

1 **cumulative development and the proposed project would not contribute to a significant**
2 **cumulative impact.**

3 Cumulative development could result in an increase in solid waste generation. However, other than
4 the proposed project, development would be limited to construction of single-family residential
5 development of up to 105 new dwelling units (see footnote 2). Construction and occupation of
6 individual homes is not anticipated to result in significant increases in solid waste generation. Solid
7 waste services in Del Monte Forest are provided by PBCSD, who has contracted for collection
8 services with Waste Management. Currently the Monterey Peninsula Landfill and Recycling Facility
9 have estimated remaining capacity of 49 million tons and is expected to be open for approximately
10 150 years. Increased solid waste, green waste, and recycling needs resulting from cumulative
11 development including the proposed project can be accommodated by the existing collection and
12 disposal services. Therefore, cumulative impacts related to solid waste are considered to be less
13 than significant.
14

Section 3.11

Transportation and Circulation

Transportation and Circulation

1
2

3 This section discusses potential transportation impacts of the proposed project and identifies
4 mitigation for significant impacts where feasible. The study area for transportation includes Del
5 Monte Forest and areas outside Del Monte Forest that could experience traffic impacts associated
6 with the proposed project. The existing roadway network and study area are shown in Figure 3.11-
7 1.

8 This section is largely based on a transportation analysis conducted by Fehr & Peers to evaluate the
9 transportation impacts of the proposed project on behalf of PBC (Fehr & Peers 2011). An
10 independent third-party review of Fehr & Peers' analysis was conducted by ICF and Monterey
11 County. The tables and figures provided in this section are from the Fehr & Peers report, with some
12 modifications for presentation purposes.

13 The section begins with a presentation of the regulatory setting associated with transportation,
14 followed by a description of existing transportation conditions in the study area in both regional and
15 site-specific contexts. The impact analysis is presented later in the section. It includes a description
16 of the methods used to determine the impacts of the proposed project and the thresholds used to
17 conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify,
18 reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

19 Table 3.11-1 provides a summary of project impacts on transportation and the significance
20 conclusion.

1 **Table 3.11-1. Summary of Impacts on Transportation**

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Traffic during Project Construction										
TRA-A1. Construction traffic would result in short-term increases in traffic volumes that would affect level of service and intersection operations.	● (Applies to proposed project as a whole)									●
Mitigation Measures:	TRA-A1. Schedule construction work and truck trips to comply with Del Monte Forest Architectural Board Guidelines. TRA-A2. Develop and implement a traffic control plan. TRA-A3. Obtain approval for construction truck traffic routes from Monterey County and include these routes in all contracts. TRA-A4. Implement SR 1/68/17-Mile Drive Intersection Reconstruction early in the overall construction schedule.									
B. Del Monte Forest Gates										
TRA-B1. The project would result in a minor increase in traffic at the Del Monte Forest gates.	○ (Applies to proposed project as a whole)									○
C. Impacts to Roadway Intersections and Segments										
TRA-C1. The proposed project would add substantial traffic to intersections in Del Monte Forest and the immediate vicinity to decrease from acceptable levels of service to unacceptable levels or to worsen existing unacceptable levels of service.	● (Applies to proposed project as a whole)									●
Mitigation Measures:	TRA-C1. Pay fair-share contribution to install a traffic signal at the intersection of SR 68/Skyline Forest Drive and widen SR 68 from two to four lanes through the intersection. TRA-C2. Pay fair-share contribution to construct the full SR 68 Widening Project. TRA-C3. Pay fair-share contribution to construct new turn lanes and establish new traffic signal timings at the SR 1/Ocean Avenue intersection. TRA-C6(C). Pay fair-share contribution to restripe the westbound approach at the Sunset Drive/Congress Avenue intersection to provide a left-turn pocket. TRA-C7(C). Pay fair-share contribution to optimize signal timings and phasing at the Forest Avenue/David Avenue intersection. TRA-C8(C). Pay fair-share contribution to construct the full SR 68 Widening Project (as required by TRA-C2) and to add third lane and to construct a third eastbound lane on SR 68 from east of the Carmel Hill Professional Center driveway through the SR 1 intersection, with one lane going to the SR 1 southbound on-ramp and two lanes proceeding across the SR 68 overcrossing. TRA-C9(C). Pay fair-share contribution to construct a refuge lane on SR 68 for traffic turning left out of the Aguajito Road intersection.									

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES	RD	TRA	INF	
				MH	MR	SUB				
	TRA-C10(C). Pay fair-share contribution to optimize signal timings at the SR 1/Carpenter Street intersection.									
TRA-C2. The project would add traffic to regional highway sections that are projected to operate at unacceptable levels of service.	● (Applies to proposed project as a whole)									●
Mitigation Measures:	TRA-C4. Pay fair-share traffic impact fee for various improvements to SR 1, SR 68, and SR 156 based on the conditions described in the Transportation Agency of Monterey County's Regional Development Impact Fee Program.									
TRA-C3. The project would add traffic to a highway ramp projected to operate at an unacceptable level of service.	● (Applies to proposed project as a whole)									●
Mitigation Measures:	TRA-C5. Pay fair-share contribution to replace the SR 1 northbound merge at SR 68 (west) with an auxiliary lane between SR 68 (west) and Munras Avenue.									
D. Access and Circulation										
TRA-D1. The project would create new roadways that do not meet the design criteria established in the Del Monte Forest Transportation Policy Agreement, substantially increase hazards because of roadway design or internal circulation patterns, or result in inadequate emergency access.	⊙ (Applies to proposed project as a whole)									—
Mitigation Measures:	TRA-D1. Ensure compliance with the Del Monte Forest Transportation Policy Agreement. TRA-D2. Incorporate a 25-foot transition between all driveways and roadways that has no more than a 2% grade. TRA-D3. At The Lodge at Pebble Beach, add a crosswalk to address a pedestrian desire line (i.e., places pedestrians will walk) crossing the circulation road. TRA-D4. At The Lodge at Pebble Beach, modify the design of the two traffic circles to facilitate efficient vehicle flow. TRA-D5. At The Lodge at Pebble Beach, install yield signs to control the three-leg traffic circle while the other traffic circle should have no vehicle traffic controls. TRA-D6. At The Lodge at Pebble Beach, add sidewalks or paths to serve pedestrian movements between the Fairway One Complex, Peter Hay Golf Course, and The Lodge at Pebble Beach. TRA-D7. At the Colton Building, improve sight distance at the intersection between the existing driveway and Cypress Drive. TRA-D8. At the Colton Building, install a warning sign or lights at the entry to the parking facility, or widen the opening to at least 22 feet. TRA-D9. At The Inn at Spanish Bay, modify the 17-Mile Drive/Congress Road intersection to an all-way stop-controlled intersection, installing stop signs at all approaches. TRA-D10. At the Pebble Beach Links Driving Range, add a									

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
	pedestrian crosswalk that connects the driving range to the Peter Hay Golf Course.									
E. Parking										
TRA-E1. Project land uses would create a need for additional parking.	○	○	○	—	○	—	—	—	—	—
F. Special Events										
TRA-F1. The project could change traffic volumes at Del Monte Forest gates during special events.	○ (Applies to proposed project as a whole)									—
TRA-F2. The project could change traffic volumes on internal roads during special events.	○ (Applies to proposed project as a whole)									—
TRA-F3. The project could change parking conditions during special events.	○ (Applies to proposed project as a whole)									—
G. Transit and Alternative Transportation										
TRA-G1. The project would be inconsistent, in part, with Del Monte Forest Land Use Plan alternative transportation policies and Monterey County trip reduction requirements.	⊙ (Applies to proposed project as a whole)									—
Mitigation Measures:	TRA-G1. Prepare and implement an alternative transportation plan, emphasizing specific trip reduction measures for proposed visitor, resident, and employee uses. TRA-G2. Expand the existing shuttle and valet system to incorporate the Spyglass Hotel as part of the overall parking management system (Option 1 only).									
H. Bicycles and Trails										
TRA-H1. The project would introduce additional traffic along 17-Mile Drive between Spanish Bay Drive and the Pacific Grove Gate, which could compromise the effectiveness of existing bicycle signage.	⊙ (Applies to proposed project as a whole)									—
Mitigation Measures:	TRA-H1. Stencil "Route" after the bicycle symbols on the designated route for bicycling between the Pacific Grove Gate and Stevenson Drive at Ondulado Road.									
TRA-H2. The project would not conflict with adopted policies, plans, or programs supporting trails.	○ (Applies to proposed project as a whole)									—
<p>Notes:</p> <ul style="list-style-type: none"> ● = Significant unavoidable impact. ⊙ = Significant impact that can be reduced to less than significant. ○ = Less-than-significant impact. — = No impact or not applicable to the development site. <p>PBL – The Lodge at Pebble Beach; SBI – The Inn at Spanish Bay; COL-EQC – Collins Field–Equestrian Center–Special Events Area; MH – Area M Spyglass Hill—New Resort Hotel (Option 1); MR – Area M Spyglass Hill—</p>										

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
New Residential Lots (Option 2); RES SUB – Residential Lot Subdivisions; RD – Roadway Improvements; TRA – Trail Improvements; INF – Infrastructure Improvements; Cumulative – Proposed Project’s Contribution to Cumulative Impacts										

1

2 Regulatory Setting

3 This section describes the regulatory setting associated with transportation. No federal regulations
 4 directly apply to this section.

5 State

6 California Department of Transportation

7 Level of Service Standards for State Highways

8 According to the California Department of Transportation’s (Caltrans’) Guide for the Preparation of
 9 Traffic Impact Studies (2002), Caltrans endeavors to maintain a target level of service (LOS) at the
 10 transition between C and D on state highway facilities. However, Caltrans acknowledges that this
 11 may not always be feasible and recommends that the Lead Agency consult with Caltrans to
 12 determine the appropriate target LOS. If an existing state highway facility is operating below the
 13 appropriate target LOS, the existing LOS should be maintained. Definitions for LOS A–F for various
 14 facility types are provided under “Traffic Level of Service Methodology” later in this section.

15 Transportation Concept Report for State Route 1 in District 5

16 Caltrans’ Transportation Concept Report for State Route 1 in District 5 (TCR; California Department
 17 of Transportation 2006) identifies long-range improvements and establishes the concept (desired)
 18 LOS for specific corridor segments. The report identifies long-range improvements needed to bring
 19 an existing facility up to expected standards needed to adequately serve 20-year traffic forecasts.
 20 Additionally, it identifies the ultimate design concept for conditions beyond the immediate 20-year
 21 design period. The TCR establishes LOS D as the acceptable threshold for SR 1 in Monterey County.

22 Regional and Local

23 Transportation Agency for Monterey County

24 2010 Monterey County Regional Transportation Plan

25 The 2010 Monterey County Regional Transportation Plan (Transportation Agency for Monterey
 26 County 2010) satisfies federal and state requirements to identify transportation projects that can be
 27 funded over the next 25 years to serve the county’s transportation needs. This 25-year plan
 28 addresses all forms of transportation, and includes the priorities and actions embodied in the plans
 29 prepared by the County and each of its 12 cities.

1 The RTP recognizes that “adequate funding is not available to implement all highway construction
2 projects required to solve declining levels of service and meet current and forecasted travel
3 demands.”

4 One objective of the RTP is to “design facilities included in TAMC’s expenditure plan program of
5 regional transportation projects to operate at LOS C, achieve at least LOS D on the regional roadway
6 network by 2020, and maintain at least LOS D on regional roadways thereafter.”

7 The RTP also introduces the Regional Development Impact Fee Program (Fee Program), which
8 applies to development projects throughout the county based on their impact on the regional
9 transportation system.

10 **Regional Development Impact Fee Program**

11 The Regional Impact Fee Nexus Study Update (Nexus Study; Transportation Agency for Monterey
12 County 2008), which is included as Appendix C of the RTP, provides an update of the 2004 Nexus
13 Study for a regional development impact fee. The report outlines a development fee program for
14 Monterey County. A complete analysis was performed for the update, beginning with the new
15 region-wide model and culminating with the adoption of new development fees. This 2008 Nexus
16 Study provides the necessary technical and legal basis under CEQA for implementing the updated
17 Fee Program as mitigation for cumulative impacts on the regional transportation system. It was
18 approved by the TAMC Board of Directors. The Fee Program’s expected revenues, collected from
19 new development in Monterey County, will total \$235 million (2007 dollars): \$223 million for
20 transportation improvement projects, \$10 million for transit expansion, and \$2 million for
21 administrative costs over the 22-year life of the program. This funding mechanism only represents
22 part of the required funding for each proposed project. The share of funding corresponding to
23 existing traffic and out-of county traffic is planned to come from other sources.

24 The program includes more than \$1 billion of transportation improvements, spread over 17
25 identified projects, and an additional \$10 million in transit capital improvements. The projects
26 included in the program are listed below:

- 27 ● County Road G-12 South Widening (along San Miguel Canyon Road).
- 28 ● County Road G-12 North Widening (along Hall Road and Elkhorn Road).
- 29 ● Del Monte—Lighthouse Corridor Improvements.
- 30 ● Harris Road/Eastside Connector (Salinas).
- 31 ● Marina—Salinas Corridor Widening.
- 32 ● Westside Bypass (Salinas).
- 33 ● SR 1—Sand City/Seaside Widening.
- 34 ● SR 68—Community Hospital of Monterey Peninsula Widening.
- 35 ● SR 68 Commuter Improvements.
- 36 ● U.S. Highway 101 (US 101)—San Juan Road Interchange.
- 37 ● US 101—South County Frontage Roads.
- 38 ● US 101—Gloria Road Interchange.

- 1 • US 101—South Soledad Interchange.
- 2 • US 101—North Soledad Interchange.
- 3 • US 101—Walnut Avenue Interchange.
- 4 • US 101—King City Loop Road Extension.
- 5 • SR 156 Widening (Oak Hills area).

6 **Regional Transportation Improvement Program**

7 The Regional Transportation Improvement Program (RTIP) is a 4-year program of transportation
 8 projects for Monterey County that includes: 1) federally funded transportation projects, and 2)
 9 projects nominated for inclusion in the State Transportation Improvement Program (STIP). The
 10 RTIP is adopted by TAMC and is submitted to Caltrans and the California Transportation
 11 Commission by December 15 of every odd year. Projects in the RTIP must be consistent with the
 12 adopted RTP to be programmed into the STIP.

13 **Monterey County**

14 The project area is in the Coastal Zone, except a small portion of the SR 1/SR 68/17-Mile Drive
 15 intersection (the southbound off-ramp). However, roadways outside the project area are affected by
 16 the proposed project.

17 **2010 Monterey County General Plan (Inland Area)**

18 The Circulation Element of the 2010 Monterey County General Plan (2010 General Plan; County of
 19 Monterey 2010) provides policy direction for the transportation systems that serve the
 20 unincorporated lands of Monterey County and describes how the County intends to serve
 21 transportation needs for the next 20 years as its population grows.

22 The 2010 General Plan only applies to inland areas outside the Coastal Zone.

23 According to Policy C-1.1, the acceptable LOS for county roads and intersections will be LOS D,
 24 except as follows:

- 25 a. Acceptable level of service for County roads in Community Areas may be reduced below LOS D
 26 through the Community Plan process.
- 27 b. County roads operating at LOS D or below at the time of adopting this General Plan shall not be
 28 allowed to be degraded further except in Community Areas where a lower LOS may be approved
 29 through the Community Plan process.
- 30 c. Area Plans and Land Use Plans may establish an acceptable level of service for County roads
 31 other than LOS D. The benefits which justify less than LOS D shall be identified in the Area Plan.
 32 Where an Area Plan does not establish a separate LOS, the standard LOS D shall apply.”

33 Policy C-1.8 states that “the County, in consultation with TAMC and Monterey County cities, shall,
 34 within 18 months of adoption of the General Plan, develop a County Traffic Impact Fee that
 35 addresses impacts of development in cities and unincorporated areas on major County roads. From
 36 the time of adoption of the General Plan until the time of adoption of a County Traffic Impact Fee, the
 37 County shall impose an ad hoc fee on its applicants based upon a fair share traffic impact fee study.”
 38 This County Traffic Impact Fee program has not been adopted yet.

1 **1982 Monterey County General Plan (Coastal Zone)**

2 The applicable general plan in the Coastal Zone is the 1982 General Plan (County of Monterey 1982).

3 Performance of the county's roads and highways is evaluated based on LOS calculations. Six levels of
4 service represent varying roadway conditions, ranging from LOS A (free-flowing) to LOS F (forced
5 flow). The Monterey County Transportation Commission objective established for the 1982 General
6 Plan, for optimum driving conditions, is LOS C or better (County of Monterey 1982).

7 Some of the relevant transportation policies are listed below:

8 **Policy 37.2.1.** Transportation demands of proposed development shall not exceed an acceptable
9 level of service for existing transportation facilities, unless appropriate increases in capacities are
10 provided for.

11 **Policy 37.2.2.** Land uses requiring concentrated commodity movements shall be located with
12 adequate access to necessary transportation facilities.

13 **Policy 37.5.1.** The design and location of new development shall consider and incorporate
14 provisions for appropriate transportation modes.

15 **Policy 38.1.4.** The County shall encourage transportation alternatives such as bicycles, car pools,
16 transit, and compact vehicles.

17 **Policy 38.1.5.** Adequate traffic capacity shall be a criterion for development consideration.

18 **Policy 39.1.2.** The cost of new roads shall be borne as equitably as possible among benefiting
19 property owners and/or users.

20 **Policy 39.1.4.** New development shall be located where there is existing road and highway capacity
21 or where adequate road and highway capacity will be provided.

22 **Policy 39.2.1.** All new road and interior circulation systems shall be designed, developed, and
23 maintained according to adopted County standards.

24 **Policy 39.2.2.** The needs of bicyclists, pedestrians, utilities, and drainage shall be considered and,
25 where appropriate, provided for on all public rights-of-way.

26 **Monterey County Trip Reduction Requirements**

27 Under special regulations in Title 20 of the Monterey County Zoning Ordinance any residential
28 development of 25 units or more is subject to Section 20.64.250 (Regulations for Reductions in
29 Vehicle Trips).

30 The purpose of this section is to establish requirements to reduce vehicle trips in certain
31 developments by ensuring that new developments, redevelopment, and expansion of existing
32 developments contain the infrastructure and programs needed to reduce the need to travel and to
33 encourage alternative modes of travel.

34 Developers are required to submit a trip reduction checklist and site development plans with their
35 applications. The checklist and plans must identify the proposed design elements and facilities that
36 encourage alternative transportation usage by residents, employees, and customers of the
37 development.

38 After reviewing the checklist and plans, the County may require the developer to implement one or
39 more programs as a condition of approval of the development. Examples of programs that may be
40 required include:

- 1 • Ridesharing, public transportation, and child care information to tenants/buyers.
- 2 • Addition of a bus stop, bike lane, or park-and-ride lot.
- 3 • Printed transit schedules and promotional materials.
- 4 • Park-and-ride, shuttles, and marketing techniques for special events.
- 5 • Bicycle racks, lockers, or paths.
- 6 • Bus pullouts, pedestrian access, or transit stops and shelters.
- 7 • Pedestrian facilities linking transit stops and common open areas.
- 8 • Transportation information centers or kiosks.
- 9 • Shuttle bus services, bus pools, or improved transit service.

10 **Monterey County Code Parking Requirements**

11 Chapter 20.58 (Regulations for Parking) of the Monterey County Code specifies the minimum
 12 number of off-street parking spaces required for all land uses in the unincorporated areas of the
 13 county. For any land use not specifically listed, the parking requirement will be determined by the
 14 County's Director of Planning based on standards established for similar uses.

15 **Monterey County Local Coastal Program**

16 **Existing Del Monte Forest Area Land Use Plan**

17 The existing Del Monte Forest LUP includes the following relevant transportation policies:

18 **Policy Guidance Statement:** Circulation. The continued development of a circulation system within
 19 the Forest shall be encouraged to provide an adequate level of service with minimal intrusion to the
 20 Forest environment, encourage separation of visitor and resident traffic, and provide for a
 21 proportionate share of the improvements necessary to impacted areas of Highway 68, which serves
 22 as an external access route to the Del Monte Forest area.

23 **Policy 71.** Transportation improvements should include consideration of non-automobile facilities,
 24 including public transit stops and shelters. Expansion of existing commercial facilities or
 25 development of new facilities shall be approved only where requirement for adequate parking can be
 26 fully satisfied. Adequate parking shall include all uses on the subject site (e.g., hotel units, restaurant,
 27 employees, and day use facilities). [Maintained in proposed LUP amendment with revisions, see
 28 below].

29 **Policy 96** (part). Seventeen Mile Drive shall remain open to the public for recreational use and any
 30 entrance fee charge shall remain reasonable. [Maintained in proposed LUP amendment with
 31 revisions, see discussion below].

32 **Policy 99** (part). With the exception of existing lots of record, approval of new residential or hotel
 33 development in the Forest shall be conditioned upon completion, and acceptance by the County, of an
 34 applicant-funded, independent engineering study that will establish an arterial system for the Forest
 35 according to this plan, establish the necessary changes to Highway 68 between Haul Road and
 36 Highway One, establish the necessary changes to access gates in order to provide for the increased
 37 traffic, and establish those needed traffic controls within the Forest to make effective the preceding
 38 determination. [Maintained in proposed LUP amendment with revisions, see discussion below].

39 **Policy 101.** In order to preserve both visual and physical access to the coast, the impacts on the road
 40 system of the Forest and on Highways 68 and One from incremental development of the Forest shall

1 be mitigated in conjunction with or as a function of new development. [Maintained in proposed LUP
2 amendment with revisions, see discussion below].

3 **Policy 106** (part). Applications for future development in the Forest shall include an analysis of the
4 traffic generation of such development and an analysis of the probable routes of such traffic, If it is
5 determined by the Planning Commission and/or Board of Supervisors that the additional traffic
6 generated by such development will create the need for additional traffic facilities over and above the
7 base traffic, because highway capacity as determined by Caltrans or Monterey County Public Works
8 will exceed Level of Service D... and without regard to any other traffic generated by other sources,
9 the County shall require the applicant to contribute to the County and/or the State Division of
10 Highways, at the time of construction, the estimated incremental cost of those facilities made
11 necessary by the development. If the development will not, considered alone, create the need for
12 additional traffic facilities until other development within the Forest is constructed, the County may
13 approve such development without requiring the developer to contribute to the cost of any traffic
14 facilities. In that event, the County may provide in such approval that any future development, the
15 cumulative effect of which will require additional traffic facilities, will be conditioned upon the
16 contribution by the applicant to the development of such required facilities made necessary by the
17 cumulative development within the Forest. [Maintained in proposed LUP amendment with revisions,
18 see discussion below].

19 **Policy 108.** Safety improvements should be made to the existing bike route along 17-Mile Drive from
20 the Pacific Grove Gate to Fan Shell Beach. The policy also requires access between Fan Shell Beach
21 and the Carmel Gate to continue to be available as a bicycle route and not as bicycle lanes.
22 [Maintained in proposed LUP amendment with revisions, see discussion below].

23 **Policy 113** (part). The Resource Constraint Area designation shall be removed only when water and
24 sewer capacity sufficient to serve such development becomes available and that highway capacity
25 and circulation solutions have been agreed upon and adopted. Until such time that resource
26 problems are solved, there shall be no development other than existing lots of record. [Deleted in
27 proposed LUP amendment, see discussion below].

28 **Proposed Del Monte Forest Land Use Plan**

29 The proposed LUP amendment includes a similar intent in managing circulation within Del Monte
30 Forest as the existing LUP amendment. Policies are updated to reflect current conditions and
31 clarified as to intent. The proposed Del Monte Forest LUP amendment includes the following key
32 relevant transportation policies:

33 **Key Policy.** Circulation. The continued development of a multi-modal circulation system within the
34 Del Monte Forest shall be encouraged to provide an adequate level of service with minimal intrusion
35 to the Forest environment, ensure adequate and effective public recreational access, encourage
36 separation of visitor and resident traffic, and provide for a proportionate share of the improvements
37 necessary to impacted areas of Highway 68, which serves as an external access route to the Del
38 Monte Forest.

39 **Policy 69.** Transportation improvements shall include consideration of non-automobile facilities,
40 including public transit stops. Expansion of existing commercial facilities or development of new
41 facilities shall be approved only where the requirement for adequate parking can be fully satisfied on
42 and/or off-site. Adequate parking must account for all uses of the facilities (e.g., hotel units,
43 restaurant, employees, day use facilities, etc.), but parking supply/demand may be adjusted when
44 such uses overlap (e.g., hotel guests use multiple aspects of resort facilities (rooms, golf, meeting
45 space, etc.) and the amount of required parking can be reduced to reflect such overlap, if applicable).
46 [Revised from Existing Policy 71]

47 **Policy 97.** Seventeen Mile Drive shall remain open to the public for recreational use and any
48 entrance fee charged shall be limited to a vehicular access fee (i.e., pedestrian and bicycle access shall
49 remain free) and shall remain reasonable. [Revised from Existing Policy 96]

1 **Policy 101.** Approval of new subdivision and/or hotel development in the Forest shall be based upon
 2 professional engineering traffic studies that will identify and provide for circulation
 3 changes/improvements necessary to appropriately offset such development's impacts on existing
 4 visitor and residential circulation needs. Approval of any such development shall incorporate and/or
 5 require as a condition of approval the identified mitigation for circulation changes/improvements.
 6 [Revised from Existing Policy 99]

7 **Policy 103.** To preserve both visual and physical access to the coast, the impacts on the road system
 8 of the Forest and on Highways 68 and 1 resulting from incremental development in the Forest shall
 9 be mitigated in conjunction with, or as a function of, new development. [Revised from Existing Policy
 10 101]

11 **Policy 108.** Applications for development in the Forest shall include an analysis of the traffic
 12 generation of such development and an analysis of the probable routes of such traffic. If the decision
 13 making body determines that the additional traffic generated by such development will create the
 14 need for additional traffic facilities, including changes and/or enhancements, to account for traffic
 15 that will exceed Level of Service D, and without regard to any other traffic generated by other
 16 sources, the County shall require the applicant to contribute to the County, at the time of
 17 construction, the applicant's estimated proportionate share of the cost of those facilities made
 18 necessary to which the development contributes. [Revised from Existing Policy 106]

19 **Policy 110.** Improved bicycle access and connectivity within the Del Monte Forest, including a safe
 20 and usable through route (off-road preferably) from Pacific Grove to Carmel where space and grades
 21 permit, as close as feasible to the sea, is encouraged. Development that affects existing bicycle access
 22 (e.g., road improvement projects) shall include enhanced bicycle access improvements if such
 23 improvements are feasible. [Revised from Existing Policy 108]

24 The proposed LUP amendment would delete existing Policy 113. As described above, this existing
 25 policy requires delay in development until highway capacity and circulation solutions have been
 26 agreed upon and adopted (as well as wastewater treatment and water supply constraints)¹. At the
 27 time of adoption of the existing LUP, SR 68 between SR1 and Pacific Grove was considered adequate
 28 to handle existing traffic (see existing LUP policy 106), but traffic conditions were predicted in the
 29 future to worsen along SR 68 from the intersection between SR1 westward and there was an
 30 identified need for an additional Del Monte Forest gate. Subsequent to the adoption of the existing
 31 LUP, the SFB Morse Gate was constructed and the Highway 68 Widening Project as designed and
 32 adopted by TAMC as part of the regional traffic impact fee program. The SR68/SR1/17-mile Drive
 33 Phase 1B interchange improvement included as part of the proposed project is consistent with the
 34 Highway 68 Widening Project. Thus, the highway capacity and circulation solutions referenced in
 35 Policy 113 have been agreed upon and adopted and thus Policy 113 is proposed to be deleted in the
 36 proposed LUP amendment.

37 **Agreements with Pebble Beach Company**

38 Several agreements have been enacted between PBC and the Monterey County Board of
 39 Supervisors: the Del Monte Forest Area Land Use Plan Agreement (July 17, 1984), 17-Mile Drive
 40 Public Use Agreement (October 20, 1987), and Del Monte Forest Transportation Policy Agreement
 41 (October 20, 1987). These agreements are briefly summarized below from a transportation
 42 perspective.

¹ Wastewater constraints and water supply constraints are discussed separately in Section 3.10, Public Services and Utilities and Section 3.12, Water Supply and Demand, respectively.

1 **Del Monte Forest Area Land Use Plan Agreement (July 17, 1984)**

2 This agreement acknowledges that PBC owns the forest road system with supervised gate entrances.
3 The agreement establishes that PBC retains the forest road system as a private road system, solely
4 owned and operated by PBC. The agreement further establishes that PBC maintains the gate
5 entrances to the road system with 24-hour staffing, and maintains and repairs the road system in
6 accordance with the standards attached to the agreement.

7 **17-Mile Drive Public Use Agreement (October 20, 1987)**

8 This agreement acknowledges that forest roads are privately owned and maintained by PBC and are
9 not established, maintained, or held open for public use. The agreement further establishes the
10 general public's access to the forest, as mandated by the LCP, and use of 17-Mile Drive during
11 daylight hours subject to payment of an entrance fee and other appropriate restrictions.

12 **Del Monte Forest Transportation Policy Agreement (October 20, 1987)**

13 This agreement sets forth the general understanding of PBC and the County with respect to
14 improvement and maintenance of the internal forest road system, and the financial contribution
15 from new development in the forest to road improvements outside the forest. The agreement is a
16 dynamic policy statement that is intended to act as a guide and is subject to modification over time,
17 as necessary, upon mutual written concurrence of PBC and the County. The basis for the policy was
18 the "Crowell Report." The improvements specifically addressed include the development of a fifth
19 gate to the forest (which has been completed), improvements to SR 68 outside the forest, and
20 improvements to the SR 1/SR 68 interchange.

21 The general design criteria from this Agreement for the internal roadways include the following
22 standards:

- 23 • Stopping sight distance must be 250 feet for 17-Mile Drive and primary roads.
- 24 • Stopping sight distance must be 200 feet for local roadways.
- 25 • New roads must have a minimum right-of-way width of 60 feet for 17-Mile Drive and primary
26 roads and 50 feet for local roads.
- 27 • Right-of-way widths for existing roadways do not need to be expanded.
- 28 • 17-Mile Drive and primary roads must have a minimum pavement width of 24 feet, and local
29 roads must have a minimum width of 20 feet exclusive of shoulders.

30 **Del Monte Forest Architectural Board Design Guidelines**

31 The Del Monte Forest Architectural Review Board developed a set of design guidelines "to foster
32 careful design and harmony between structures and the surrounding environment and to enhance
33 the overall desirability of living within Del Monte Forest." The guidelines also include construction
34 regulations (Pebble Beach Company 2002).

1 Cities of Monterey and Pacific Grove

2 City of Monterey General Plan

3 The Skyline Drive/Skyline Forest Drive intersection falls within the jurisdiction of the City of
4 Monterey. The City of Monterey operational LOS standard varies by roadway type and classification.
5 The City standard is LOS D for roadways that do not provide alternative modes of transportation.
6 The City standard is LOS E–F for roadways that do provide alternative modes of transportation (City
7 of Monterey 2004: Section 2.12). The City of Monterey General Plan Update set LOS D as the
8 threshold for Skyline Forest Drive (City of Monterey 2004:Table 17).

9 City of Pacific Grove General Plan

10 Two intersections studied as part of the transportation analysis fall within the jurisdiction of the
11 City of Pacific Grove (Congress Avenue/Forest Lodge Road, Congress Avenue/David Avenue). Goal 2,
12 Policy 2 of the Pacific Grove General Plan (City of Pacific Grove 1994) states that the City of Pacific
13 Grove will “strive to maintain a level of service no worse than C during peak periods on arterials and
14 collector streets within the city.”

15 Environmental Setting

16 This section discusses the setting related to transportation in the study area. It includes a
17 presentation of existing (2011), 2015, and 2030 conditions without project traffic and without
18 planned roadway and transit improvements. The impacts of the proposed project are compared to
19 these 2011, 2015 and 2030 conditions.

20 Traffic Study Area

21 The roadway analysis is divided into four subsections:

- 22 • **Del Monte Forest Gates.** The five gates providing entrance into Del Monte Forest.
- 23 • **Intersections in Del Monte Forest and Immediate Vicinity:** Intersections internal to Del
24 Monte Forest and in the immediate vicinity.
- 25 • **Regional Highway Sections.** Major roadway sections outside Del Monte Forest.
- 26 • **SR 1/SR 68 Interchange Ramp Junctions.** Merge, diverge, and weave areas for the SR 1 ramps
27 to and from SR 68 (west).

28 Del Monte Forest Gates

29 Five gates in various locations provide access to Del Monte Forest to residents, visitors, and
30 employees: the Pacific Grove and Country Club Gates from Pacific Grove, the SFB Morse Gate from
31 SR 68, the SR 1 Gate from the southerly SR 1/SR 68 interchange (hereafter referenced as SR 68
32 west), and the Carmel Gate from Carmel in Figure 3.11-2 shows the gate locations. Traffic conditions
33 and LOS are evaluated at each gate.

1 **Intersections in Del Monte Forest and Immediate Vicinity**

2 A total of 33 intersections located in Del Monte Forest or the immediate vicinity are studied as part
3 of the traffic analysis, including 13 locations within the forest, 15 locations in Pacific Grove and
4 along SR 68, and five locations in and around Carmel. The intersection locations, existing
5 intersection control type, and lane configurations are shown in Figure 3.11-2.

6 **Regional Highway Sections**

7 The analysis of regional highway impacts focuses on the primary highways that allow for regional
8 travel through Monterey County. The studied highway sections include:

- 9 • SR 1 from SR 68 (west) to Munras Avenue.²
- 10 • SR 1 from Munras Avenue to Fremont Street.
- 11 • SR 1 from Fremont Street to Fremont Boulevard.
- 12 • SR 1 from Fremont Boulevard to Imjin Parkway.
- 13 • SR 1 north of SR 156.
- 14 • SR 68 west of Skyline Forest Drive
- 15 • SR 68 east of Olmsted Road.
- 16 • SR 68 east of Laguna Seca.
- 17 • US 101 south of Salinas.
- 18 • US 101 north of SR 156.
- 19 • SR 156 from SR 1 to US 101.

20 The regional highways are shown in Figure 3.11-3.

21 Other highways in the region such as SR 218, SR 183 and SR 146 were originally considered for this
22 analysis. However, in general, these highways do not provide direct distribution routes for regional
23 traffic traveling to and from Pebble Beach. Although the proposed project may contribute some
24 occasional daily trips, the peak hour contributions are likely to be limited and sporadic. Therefore,
25 these highways were not carried forward into the impact analysis.

26 **SR 1/SR 68 Interchange Ramp Junctions**

27 The traffic analysis also includes the merge, diverge, and weave areas for the SR 1 ramps to and from
28 SR 68 (west). The specific ramps studied include:

- 29 • SR 1 southbound off-ramp to SR 68 (west).
- 30 • SR 1 southbound on-ramp from SR 68 (west).
- 31 • SR 1 northbound off-ramp to SR 68 (west).
- 32 • SR 1 northbound on-ramp from SR 68 (west).

² Northbound direction only. The southbound direction of this section is studied as a weave section as part of the SR 1/SR 68 Interchange Ramp Junctions [SR 1 southbound off-ramp to SR 68 (west)].

1 Traffic Level of Service Methodology

2 To measure and describe the operational status of a roadway network, transportation engineers and
3 planners commonly use the LOS methodology. This analysis is based on the 2000 Highway Capacity
4 Manual (Transportation Research Board 2000) . The LOS grading system qualitatively characterizes
5 traffic conditions associated with varying levels of traffic. LOS varies from LOS A, indicating free-
6 flow traffic conditions with little or no delay, to LOS F, representing oversaturated conditions where
7 traffic flows exceed design capacity, resulting in long queues and delays.

8 Del Monte Forest Gates

9 Access gate operations are analyzed using a volume-to-capacity (V/C) ratio methodology. The Del
10 Monte Forest gates provide vehicular access to Del Monte Forest. Visitors to Del Monte Forest must
11 stop at one of the five gates and pay a gate entrance fee. Residents and employees within Del Monte
12 Forest do not pay an entrance fee (residents pay annual fees), but must provide visible identification
13 to the security guard, either with a pass or emblem on their vehicle.

14 Gate capacity is a function of the visitor-to-resident ratio. Most gates have separate visitor and
15 resident lanes. The Carmel, SFB Morse, and Pacific Grove Gates all have one visitor and one resident
16 entry lane. The SR 1 Gate has two visitor lanes and one resident lane, and the Country Club Gate has
17 only one entry lane. The Pacific Grove Gate also has a bus-only lane.

18 Previous studies indicate that, on average, the entry time for residents is approximately 6 seconds,
19 and about 30 seconds for visitors. This indicates that a lane serving only residents could service
20 600 vehicles hourly, while a lane serving only visitors could only service 120 vehicles per hour. As
21 shown in Table 3.11-2, the percentage of visitors entering each gate ranges from 0 to more than
22 25% of the PM peak hour³ volume at the gate. The capacity per lane represents the maximum flow
23 through the gates.

24 Capacity at the SR 1 Gate is reduced by 10% because of its unique operating characteristics. This
25 assumption is based on observations of drivers negotiating the tight turn approaching the gate and
26 the fact that one entry lane is situated such that the guard is on the passenger side of the car, which
27 slows the gate efficiency. The western 17-Mile Drive approach is a hairpin turn, which is difficult to
28 negotiate. The middle visitor lane of the three lanes provided does not have a guardhouse on the
29 driver's side of the vehicle, which may confuse visitors. These characteristics, combined with the
30 outside lane being striped for residents, cause visitors to use the innermost lane first, the middle
31 lane second, and the outside lane last, in order of preference during typical conditions. During
32 special events, the gates are closed to visitors to allow more cars through for those attending the
33 special events.

³ In this section, the morning peak hour is referred to as the "AM peak hour" and the afternoon/evening peak hour as the "PM peak hour."

1 **Table 3.11-2. Del Monte Forest Gate Capacity**

Gate	Percent Paid Visitor^a	Calculated Hourly Capacity Per Lane	Number of Lanes	Total Gate Capacity (per hour)
Pacific Grove	25	300	2 ^b	600
Carmel	10	450	2	900
SR 1	20	340	2.7 ^c	920
Country Club	0	600	1	600
SFB Morse	5	520	1	520

Source:

Fehr & Peers 2011.

Notes:

^a Percent paid visitor data obtained from previous environmental documents. Data is consistent with field observations made in April 2011.

^b There are 3 lanes at the Pacific Grove Gate. One lane is reserved for buses and so is not considered in the analysis.

^c SR 1 Gate utilization is reduced by 10% to account for unique operating characteristics.

2

3 The V/C ratio describes the inbound afternoon peak hour (3 to 4 p.m.) traffic flow at the gates as it

4 relates to gate capacity. Comparing the V/C ratio indicates whether a particular gate would operate

5 at an unacceptable level. For purposes of this study, a V/C ratio of 0.90 or greater for the gate

6 analysis is considered unacceptable.

7 **Intersections in Del Monte Forest and Immediate Vicinity**

8 The existing intersection LOS operation is evaluated using the 2000 Highway Capacity Manual (2000

9 HCM; Transportation Research Board 2000) operations method, consistent with County and

10 Caltrans guidelines. In general, Synchro Version 6 is used to calculate the LOS of signalized and

11 unsignalized intersections.

12 However, several unsignalized intersections are analyzed using SimTraffic instead of Synchro. The

13 Sunset Drive (SR 68)/17-Mile Drive, Sunset Drive (SR 68)/Congress Road, and Sloat Road/Forest

14 Lodge/17-Mile Drive intersections were evaluated with SimTraffic because they each have more

15 than four approach legs. The SR 68/Presidio Boulevard intersection includes right turns only from

16 the side street; SimTraffic provides a more realistic operational analysis under this type of

17 condition. The SR 68/Aguajito Road intersection has a very low left-turn volume; again, SimTraffic

18 provides a more realistic analysis.

19 **Signalized Intersections**

20 Signalized intersection traffic conditions and resulting LOS are determined using the 2000 HCM

21 methodology. This operations analysis uses various intersection characteristics (e.g., traffic volumes,

22 lane geometry, signal phasing) to estimate the control delay per vehicle. Control delay is the portion

23 of the total delay attributed to signal operations and includes initial deceleration, queue move-up

24 time, stopped delay, and acceleration delay. Using this methodology, the LOS for a signalized

25 intersection is based on the control delay per vehicle measured in seconds. The signalized

26 intersection LOS criteria are summarized in Table 3.11-3.

1 **Table 3.11-3. Signalized Intersection Level of Service Criteria**

Level of Service	Control Delay per Vehicle (seconds)
A	≤10.0
B	>10.0 and ≤20.0
C	>20.0 and ≤35.0
D	>35.0 and ≤55.0
E	>55.0 and ≤80.0
F	>80.0

Source:
Transportation Research Board 2000.

2

3 **Unsignalized Intersections**

4 Unsignalized intersections (four-way stop-controlled and side-street stop-controlled) are also
 5 evaluated using the 2000 HCM methodology. With this methodology, operations are evaluated using
 6 the average control delay per vehicle (measured in seconds) for each movement that must yield the
 7 right-of-way. This incorporates delay associated with deceleration, acceleration, stopping, and
 8 moving up in the queue. At side-street stop-controlled intersections, the control delay and LOS are
 9 calculated for each controlled movement, the left-turn movement from the major street, and the
 10 entire intersection. The delays for the entire intersection and for the movement or approach with
 11 the highest delay are reported. Table 3.11-4 summarizes the relationship between delay and LOS for
 12 unsignalized intersections.

13 **Table 3.11-4. Unsignalized Intersection Level of Service Criteria**

Level of Service	Control Delay per Vehicle (seconds)
A/B	≤15.0
C	>15.0 and ≤25.0
D	>25.0 and ≤35.0
E	>35.0 and ≤50.0
F	>50.0

Source:
Transportation Research Board 2000.

14

15 **Regional Highway Sections**

16 Regional highway sections are analyzed using the Florida Department of Transportation’s V/C ratio
 17 methodology (2009). The LOS is determined based on the traffic demand using an uninterrupted
 18 highway section (i.e., no signalized intersections) compared to a theoretical highway section
 19 capacity based on the physical characteristics of the study section. This methodology is also
 20 consistent with those in the 2000 HCM. Table 3.11-5 summarizes the relationship between volume
 21 and LOS.

1 **Table 3.11-5. Regional Highway Section Level of Service Criteria**

LOS	V/C Ratio
A/B	≤0.47
C	>0.47 and ≤0.68
D	>0.68 and ≤0.88
E	>0.88 and ≤1.0
F	>1.0

Source:

Florida Department of Transportation 2009.

Note:

Peak hour road section capacities are 1,420 vehicles per hour (vph) for one lane, 3,550 vph for 2 lanes, and 5,330 vph for three lanes.

2

3 **SR 1/SR 68 Interchange Ramp Junctions**

4 Highway ramp junctions, including merging and diverging sections, are evaluated using the 2000
 5 HCM methodology. LOS is used to describe on- and off-ramp traffic operations based on vehicle
 6 density, which reflects a driver's freedom to maneuver in and out of traffic, using six levels, ranging
 7 from LOS A (best operating conditions) to LOS F (worst). LOS E represents “at capacity” operation.

8 The LOS for ramp merges and diverges is based on density (passenger cars per lane per mile). Table
 9 3.11-6 presents a summary of the relationship between density and LOS for ramp junctions.

10 The weave segments at the ramp junctions were evaluated using the Leich methods described in the
 11 Caltrans’ Highway Design Manual (2010), which establishes an LOS based on a combination of
 12 weave segment type and length, as well as entering and exiting traffic demands. The weave analysis
 13 is based on vehicle speeds.

14 **Table 3.11-6. Highway Ramp Junction Level of Service Criteria**

LOS	Description	Density ^a
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	≤10
B	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.	>10 and ≤20
C	Flow with speeds at or near free-flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.	>20 and ≤28
D	Speeds decline slightly with increasing flows. Freedom to maneuver with the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.	>28 and ≤35
E	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.	>35 and ≤43
F	Represents a breakdown in flow.	>43

LOS	Description	Density ^a
	Source: Transportation Research Board 2000.	
	Note: ^a Density in passenger cars per mile per lane.	

1

2 Existing Traffic Conditions (2011)

3 This section presents the existing traffic conditions (2011) in the study area. It is divided into the
4 four study area subsections previously identified.

5 Del Monte Forest Gates

6 Traffic data at the five gates was collected in March and April 2011. The existing traffic conditions
7 for the gates were determined using individual gate capacities, which are explained in detail under
8 “Traffic Level of Service Methodology.” LOS results are shown in Table 3.11-7. A ratio below 0.9 is
9 considered acceptable. As shown, all gates currently operate at an acceptable LOS.

10 **Table 3.11-7. Forest Gate Peak Hour Volumes and Levels of Service—Existing Conditions (2011)**

Gate	Capacity	Peak Hour Volume/Volume-to-Capacity Ratio ^a	
		AM	PM
Pacific Grove	600	103/0.17	135/0.23
Carmel	900	128/0.14	137/0.15
SR 1	920	483/0.53	328/0.36
Country Club	600	189/0.32	212/0.35
SFB Morse	520	130/0.25	132/0.25

Source:

Fehr & Peers 2011.

Notes:

^a The V/C ratio describes inbound peak-hour traffic flow as it relates to gate capacity.

11

12 Intersections in Del Monte Forest and Immediate Vicinity

13 Intersection turning movement data was collected in March and April 2011 for the weekday AM
14 (7 to 9 a.m.) and PM (4 to 6 p.m.) peak periods. The existing AM and PM peak-hour intersection
15 operations were derived from peak period counts and evaluated with traffic LOS calculations. The
16 traffic volumes used in this analysis outside the forest generally represent the AM peak hour (8 to 9
17 a.m.) and PM peak hour (5 to 6 p.m.). Signal timing information was obtained from Monterey County
18 or from field observations. The exception is SR 1, south of SR 68, where data from June 2008 was
19 used because of the road repairs currently underway south of Carmel. Appendix G.1 contains the
20 existing intersection traffic volumes used in this section.

21 Table 3.11-8 lists all intersections analyzed and shows the existing LOS for each intersection. As
22 shown in the table, all analyzed intersections operate at LOS C or better during the AM and PM peak
23 hours under existing conditions, with the following exceptions:

- 1 • SR 68/Skyline Forest Drive (LOS F during AM and PM peak hours).
- 2 • SR 68/Carmel Hill Professional Center (LOS F during AM and PM peak hours).
- 3 • SR 68/SR 1 southbound off-ramp (LOS F during AM peak hour and LOS E during PM peak hour).
- 4 • SR 1/Carpenter Street (LOS D during PM peak hour).
- 5 • SR 1/Ocean Avenue (LOS D during PM peak hour).

6 **Table 3.11-8 Intersection Peak Hour Levels of Service—Existing Conditions (2011)**

Intersection	Control^a	AM^{b, c}	PM^{b, c}
Sunset Drive (SR 68)/17-Mile Drive ^d	AWSC	6.9/A	5.6/A
Sunset Drive (SR 68)/Congress Road ^d	AWSC	11.8/B	9.6/A
Congress Avenue/Forest Lodge Road	AWSC	11.5/B	10.6/B
Congress Avenue/David Avenue	AWSC	10.9/B	10.5/B
Forest Avenue (SR 68)/David Avenue	Signal	24.8/C	30.1/C
SR 68/Prescott Avenue	Signal	11.2/B	19.2/B
SR 68/Presidio Boulevard ^d	SSSC	3.8 (4.3)/A(A)	3.6 (3.8)/A(A)
SR 68/SFB Morse Gate	Signal	5.3/A	3.9/A
SR 68/Skyline Forest Drive	SSSC	21.4(>120)/C(F)	15.9(>120)/C(F)
Skyline Forest Drive/Skyline Drive	AWSC	7.9/A	8.3/A
SR 68/Community Hospital	Signal	7.1/A	8.7/A
SR 68/Carmel Hill Professional Center	SSSC	64.6(>120)/F(F)	23.4(>120)/C(F)
SR 68/SR 1 Southbound Off-Ramp	Signal	80.8/F	70.1/E
17-Mile Drive/SR 1 Southbound On-Ramp	SSSC	3.2 (14.1)/A(B)	8.7 (22.9)/A(C)
SR 68/Aguaquito Road ^d	SSSC	2.6 (9.5)/A(A)	2.9 (11.0)/A(A)
SR 1/Carpenter Street	Signal	16.0/B	45.9/D
San Antonio Road/Ocean Avenue	AWSC	7.9/A	8.8/A
SR 1/Ocean Avenue	Signal	34.5/C	45.4/D
SR 1/Carmel Valley Road	Signal	9.4/A	17.4/B
SR 1/Rio Road	Signal	30.5/C	32.9/C
17-Mile Drive/Congress Road	SSSC	4.8 (10.6)/A(B)	5.5 (11.8)/A(B)
Forest Lodge Road/Congress Road	SSSC	2.0 (11.1)/A(B)	3.5 (13.9)/A(B)
SFB Morse Drive/Congress Road	AWSC	7.7/A	7.9/A
17-Mile Drive/Forest Lodge Road/Sloat Road ^d	SSSC	4.5 (7.1)/A(A)	4.1 (7.7)/A(A)
Lopez Road/Sloat Road	AWSC	8.0/A	8.0/A
Spyglass Hill Road/Stevenson Drive	SSSC	2.9 (8.6)/A(A)	2.7 (9.0)/A(A)
Forest Lake Road/Stevenson Drive	SSSC	4.0 (11.9)/A(B)	3.9 (11.7)/A(B)
17-Mile Drive/Alvarado Lane	AWSC	9.4/A	9.6/A
17-Mile Drive/Palmero Way	SSSC	2.2 (15.5)/A(C)	3.5 (16.2)/A(C)
Sunridge Road/Ronda Road	SSSC	2.1 (10.0)/A(A)	3.7 (9.5)/A(A)
Sunridge Road/Scenic Drive	SSSC	0.6 (9.8)/A(A)	0.8 (10.6)/A(B)
Sunridge Road/Constanilla Way	SSSC	5.5 (9.5)/A(A)	2.5 (9.2)/A(A)
Sunridge Road/Haul Road ^d	SSSC	0.8 (5.3)/A(A)	1.1 (5.6)/A(A)

Intersection	Control^a	AM^{b, c}	PM^{b, c}
Source: Fehr & Peers 2011.			
Notes:			
^a Signal = signalized intersection; SSSC = side-street stop-controlled intersection; AWSC = all-way stop-controlled intersection.			
^b Average delay (in seconds) is listed first, followed by corresponding LOS.			
^c For side-street stop-controlled intersections, average delay is listed first, followed by delay for worst approach.			
^d Intersection analyzed using SimTraffic.			

1

2 **Regional Highway Sections**

3 For the regional highway sections, traffic counts were collected in 2009 by Caltrans (2011). The data
 4 was generally collected in March or October and summarized by direction for the peak hours. For
 5 the section of SR 68 east of Olmsted Road, traffic volumes were obtained from the Monterey
 6 Peninsula Airport Draft EIR (Monterey Peninsula Airport District 2009). Tables 2-12 and 2-13 of the
 7 transportation study (Fehr & Peers 2011) contain the existing AM and PM peak hour traffic volumes
 8 used in this section.

9 Table 3.11-9 lists all highway sections analyzed and shows the existing LOS for each highway
 10 section. As shown in the table, many of the studied highway sections do not meet the LOS standard
 11 under existing conditions, including:

- 12 • SR 1 from SR 68 (west) to Munras Avenue (LOS D during PM peak hour).
- 13 • SR 1 from Munras Avenue to Fremont Street (LOS D during AM peak hour).
- 14 • SR 1 from Fremont Street to Fremont Boulevard (LOS F during AM peak and LOS E during PM
 15 peak hour).
- 16 • SR 1 from Fremont Boulevard to Imjin Parkway (LOS D during AM and PM peak hours).
- 17 • SR 1 north of SR 156 (LOS F during AM and PM peak hours).
- 18 • SR 68 west of Skyline Forest Drive (LOS D during AM and PM peak hours).
- 19 • SR 68 east of Olmsted Road (LOS D during AM and PM peak hours).
- 20 • SR 68 east of Laguna Seca (LOS F during AM and PM peak hours).
- 21 • SR 156 from SR 1 to US 101 (LOS E during AM peak hour and LOS F during PM peak hour).
- 22

1 **Table 3.11-9. Regional Highway Section Levels of Service—Existing Conditions (2011)**

Highway	Section	Direction	AM ^a	PM ^a
SR 1	SR 68 (west) to Munras Avenue	North	0.65/C	0.86/D
SR 1	Munras Avenue to Fremont Street	North	0.49/C	0.68/C
		South	0.72/D	0.56/C
SR 1	Fremont Street to Fremont Boulevard	North	0.48/C	1.00/E
		South	1.08/F	0.77/D
SR 1	Fremont Boulevard to Imjin Parkway	North	0.34/B	0.83/D
		South	0.72/D	0.49/C
SR 1	North of SR 156	North	0.70/D	1.57/F
		South	1.35/F	0.98/E
SR 68	West of Skyline Forest Drive	East	0.73/D	0.60/C
		West	0.50/C	0.78/D
SR 68	West of Skyline Forest Drive	East	0.73/D	0.60/C
		West	0.50/C	0.78/D
SR 68	East of Olmsted Road	East	0.71/D	0.73/D
		West	0.75/D	0.84/D
SR 68	East of Laguna Seca	East	1.14/F	0.90/E
		West	0.77/D	1.20/F
US 101	South of Salinas	North	0.27/B	0.35/B
		South	0.25/B	0.45/B
US 101	North of SR 156	North	0.42/B	0.61/C
		South	0.56/C	0.65/C
SR 156	SR 1 to US 101	East	0.54/C	1.18/F
		West	0.89/E	0.63/C

Source:
Fehr & Peers 2011.

Note:
^a V/C ratio is listed first, followed by corresponding LOS.

2

3 **SR 1/SR 68 Interchange Ramp Junctions**

4 Table 3.11-10 summarizes the merge, diverge, and weave LOS for the SR 1 ramps to and from SR 68
 5 (west) under existing conditions. All ramps operate at LOS C or better except the SR 1 northbound
 6 on-ramp from SR 68, which operates at LOS D during the weekday PM peak hour.

1 **Table 3.11-10. SR 1/SR 68 Interchange Ramp Junction Levels of Service—Existing Conditions (2011)**

Ramp	Section Type	AM Peak Hour	PM Peak Hour
Density^a/LOS			
SR 1 Northbound On-Ramp from SR 68	Merge ^b	19.9/B	29.3/D
SR 1 Southbound On-Ramp from SR 68	Merge ^b	20.3/C	21.1/C
SR 1 Northbound Off-Ramp to SR 68	Diverge ^b	18.2/B	21.1/C
Weaving Speed (miles per hour)/LOS			
SR 1 Southbound Off-Ramp to SR 68	Weave ^c	38.6/B	35.3/C

Source:

Fehr & Peers 2011.

Notes:

^a Passenger cars per lane per mile.

^b HCM 2000 methodology.

^c Caltrans Highway Design Manual methodology.

2

3 **2015 Without-Project Traffic Conditions**

4 This section presents without-project traffic conditions in the study area in 2015, which is
 5 considered the likely timeframe for project buildout.⁴ Traffic projections were developed based on
 6 the 2010 General Plan (2010 GP). The recently completed EIR for the General Plan contained
 7 existing and forecasted daily traffic for SR 1, SR 68, US 101, and SR 156 (County of Monterey 2008).
 8 The existing traffic represented 2008 traffic. As part of the General Plan work, the Association of
 9 Monterey Bay Area Governments (AMBAG) Regional Travel Demand Model was updated and
 10 calibrated to the 2008 traffic. Land use forecasts in the model were then updated to reflect the
 11 General Plan for unincorporated areas of the county. Development information for incorporated
 12 areas and in adjacent counties, including Santa Cruz, San Benito, and parts of Santa Clara, was
 13 obtained directly from the Year 2030 AMBAG land use forecasts. According to discussions with
 14 County representatives, the proposed project was not considered in the land use forecasting used
 15 for the General Plan.

16 The General Plan provided daily traffic forecasts for 2008 and 2030 on several roads in the study
 17 area. Annualized growth factors were derived from the general plan work. Because the general plan
 18 expected growth to be different across the county, different growth rates were derived for each
 19 study area, as shown on Table 3.11-11. These annualized growth factors were then applied to the
 20 existing (2011) traffic volumes to obtain forecasts for 2015.

⁴ Even if some project components were to be built later, this analysis would provide a conservative approach.

1 **Table 3.11-11. Growth Rates Used to Derive 2015 Without-Project Traffic Volumes**

Study Locations	Annual Traffic Growth Factor
Intersections located in Del Monte Forest, Pacific Grove, and along SR 68 to the SR 1 interchange	0.68%
Intersections located in Carmel and SR 1, south of SR 68	0.55%
SR 1 north of SR 68 (west) interchange to SR 156	0.10% to 0.47% (average 0.42%)
SR 1 north of SR 156	0.33%
SR 68 east of SR 1 to Salinas	0.03% to 0.08% (average 0.06%)
US 101 south of Salinas	0.1%
US 101 north of Salinas	0.64%
SR 156 between SR 1 and US 101	0.06%

Source:
Fehr & Peers 2011.

2

3 **Del Monte Forest Gates**

4 The 2015 peak hour volumes anticipated at the gates and resulting V/C ratios are shown in Table
 5 3.11-12. A ratio below 0.9 is considered acceptable. All gates currently are anticipated to operate at
 6 an acceptable LOS under 2015 without-project conditions.

7 **Table 3.11-12. Forest Gate Peak Hour Volumes and Levels of Service—2015 Without-Project**
 8 **Conditions**

Gate	Capacity	Peak Hour Volume/Volume-to-Capacity Ratio ^a	
		AM	PM
Pacific Grove	600	105/0.18	139/0.23
Carmel	900	132/0.15	141/0.16
SR 1	920	497/0.54	337/0.37
Country Club	600	194/0.32	218/0.36
SFB Morse	520	134/0.26	136/0.26

Source:
Fehr & Peers 2011.

Notes:

^a The V/C ratio describes inbound peak-hour traffic flow as it relates to gate capacity.

9

10 **Intersections in Del Monte Forest and Immediate Vicinity**

11 Appendix G.1 contains the 2015 intersection traffic volumes used in this section. Table 3.11-13 lists
 12 all intersections analyzed and shows the 2015 LOS for each intersection. As shown in the table, all
 13 analyzed intersections operate at LOS C or better during the AM and PM peak hours under 2015
 14 without-project conditions, with the following exceptions:

- 15 • SR 68/Skyline Forest Drive (LOS F during AM and PM peak hours).

- 1 • SR 68/Carmel Hill Professional Center (LOS F during AM and PM peak hours).
- 2 • SR 68/SR 1 southbound off-ramp (LOS F during AM peak hour and LOS E during PM peak hour).
- 3 • 17-Mile Drive/SR 1 southbound on-ramp (LOS D during PM peak hour).
- 4 • SR 1/Carpenter Street (LOS E during PM peak hour).
- 5 • SR 1/Ocean Avenue (LOS D during AM and PM peak hours).
- 6 • SR 1/Rio Road (LOS D during PM peak hour).

7 **Table 3.11-13. Intersection Peak Hour Levels of Service—2015 Without-Project Conditions**

Intersection	Control^a	AM^{b, c}	PM^{b, c}
Sunset Drive (SR 68)/17-Mile Drive ^d	AWSC	7.3/A	6.0/A
Sunset Drive (SR 68)/Congress Road ^d	AWSC	16.3/C	11.4/B
Congress Avenue/Forest Lodge Road	AWSC	12.9/B	11.4/B
Congress Avenue/David Avenue	AWSC	11.9/B	11.5/B
Forest Avenue (SR 68)/David Avenue	Signal	25.8/C	32.4/C
SR 68/Prescott Avenue	Signal	12.7/B	21.4/C
SR 68/Presidio Boulevard ^d	SSSC	4.2 (4.7)/A(A)	3.7 (3.9)/A(A)
SR 68/SFB Morse Gate	Signal	5.5/A	4.0/A
SR 68/Skyline Forest Drive	SSSC	33.3(>120)/D(F)	25.1(>120)/D(F)
Skyline Forest Drive/Skyline Drive	AWSC	8.1/A	8.5/A
SR 68/Community Hospital	Signal	8.2/A	9.1/A
SR 68/Carmel Hill Professional Center	SSSC	95.0(>120)/F(F)	39.3(>120)/E(F)
SR 68/SR 1 Southbound Off-Ramp	Signal	105.7/F	79.0/E
17-Mile Drive/SR 1 Southbound On-Ramp	SSSC	3.5 (15.1)/A(C)	9.6 (25.7)/A(D)
SR 68/Aguaquito Road ^d	SSSC	2.4 (11.8)/A(B)	3.3 (16.0)/A(C)
SR 1/Carpenter Street	Signal	18.3/B	57.9/E
San Antonio Road/Ocean Avenue	AWSC	8.2/A	9.2/A
SR 1/Ocean Avenue	Signal	39.5/D	51.8/D
SR 1/Carmel Valley Road	Signal	9.7/A	18.7/B
SR 1/Rio Road	Signal	32.3/C	35.9/D
17-Mile Drive/Congress Road	SSSC	5.2 (11.2)/A(B)	6.2 (12.9)/A(B)
Forest Lodge Road/Congress Road	SSSC	3.1 (11.8)/A(B)	4.4 (15.4)/A(C)
SFB Morse Drive/Congress Road	AWSC	7.8/A	8.1/A
17-Mile Drive/Forest Lodge Road/Sloat Road ^d	SSSC	4.6 (7.4)/A(A)	4.5 (7.8)/A(A)
Lopez Road/Sloat Road	AWSC	8.2/A	8.5/A
Spyglass Hill Road/Stevenson Drive	SSSC	3.2 (8.9)/A(A)	3.1 (9.3)/A(A)
Forest Lake Road/Stevenson Drive	SSSC	4.8 (13.4)/A(B)	4.4 (12.6)/A(B)
17-Mile Drive/Alvarado Lane	AWSC	9.9/A	10.3/B
17-Mile Drive/Palmero Way	SSSC	3.1 (18.4)/A(C)	4.6 (17.7)/A(C)
Sunridge Road/Ronda Road	SSSC	2.6 (10.4)/A(B)	3.9 (9.8)/A(A)
Sunridge Road/Scenic Drive	SSSC	0.9 (10.2)/A(B)	1.2 (10.5)/A(B)
Sunridge Road/Constanilla Way	SSSC	5.6 (9.7)/A(A)	2.8 (9.4)/A(A)

Intersection	Control^a	AM^{b, c}	PM^{b, c}
Sunridge Road/Haul Road ^d	SSSC	1.2 (7.4)/A(A)	1.4 (5.5)/A(A)

Source:
Fehr & Peers 2011.

Notes:
^a Signal = signalized intersection; SSSC = side-street stop-controlled intersection; AWSC = all-way stop-controlled intersection.
^b Average delay (in seconds) is listed first, followed by corresponding LOS.
^c For side-street stop-controlled intersections, average delay is listed first, followed by delay for worst approach.
^d Intersection analyzed using SimTraffic.

1

2 Regional Highway Sections

3 The 2015 AM and PM peak hour traffic volumes used in this section were obtained from Tables 2-12
 4 and 2-13 of the transportation study (Fehr & Peers 2011). Table 3.11-14 lists all highway sections
 5 analyzed and includes the 2015 LOS for each highway section. As shown in the table, many of the
 6 studied highway sections do not meet the LOS C standard under 2015 without-project conditions,
 7 including:

- 8 • SR 1 from SR 68 (west) to Munras Avenue (LOS D during PM peak hour).
- 9 • SR 1 from Munras Avenue to Fremont Street (LOS D during AM and PM peak hours).
- 10 • SR 1 from Fremont Street to Fremont Boulevard (LOS F during AM and PM peak hours).
- 11 • SR 1 from Fremont Boulevard to Imjin Parkway (LOS D during AM and PM peak hours).
- 12 • SR 1 north of SR 156 (LOS F during AM and PM peak hours).
- 13 • SR 68 west of Skyline Forest Drive (LOS D during AM and PM peak hours).
- 14 • SR 68 east of Olmsted Road (LOS D during AM and PM peak hours).
- 15 • SR 68 east of Laguna Seca (LOS F during AM and PM peak hours).
- 16 • SR 156 from SR 1 to US 101 (LOS E during AM peak hour and LOS F during PM peak hour).

17 **Table 3.11-14. Regional Highway Section Levels of Service—2015 Without-Project Conditions**

Highway	Section	Direction	AM^a	PM^a
SR 1	SR 68 (west) to Munras Avenue	North	0.65/C	0.86/D
SR 1	Munras Avenue to Fremont Street	North	0.50/C	0.68/D
		South	0.74/D	0.57/C
SR 1	Fremont Street to Fremont Boulevard	North	0.50/C	1.02/F
		South	1.10/F	0.78/D
SR 1	Fremont Boulevard to Imjin Parkway	North	0.34/B	0.84/D
		South	0.73/D	0.50/C
SR 1	North of SR 156	North	0.73/D	1.66/F
		South	1.42/F	1.04/F

Highway	Section	Direction	AM ^a	PM ^a
SR 68	West of Skyline Forest Drive	East	0.75/D	0.62/C
		West	0.52/C	0.81/D
SR 68	West of Skyline Forest Drive	East	0.75/D	0.62/C
		West	0.52/C	0.81/D
SR 68	East of Olmsted Road	East	0.71/D	0.73/D
		West	0.75/D	0.84/D
SR 68	East of Laguna Seca	East	1.15/F	0.91/E
		West	0.78/D	1.20/F
US 101	South of Salinas	North	0.27/B	0.36/B
		South	0.25/B	0.45/B
US 101	North of SR 156	North	0.43/B	0.62/C
		South	0.58/C	0.66/C
SR 156	SR 1 to US 101	East	0.54/C	1.19/F
		West	0.89/E	0.63/C

Source:

Fehr & Peers 2011.

Notes:

^a V/C ratio is listed first, followed by corresponding LOS.

1

2 SR 1/SR 68 Interchange Ramp Junctions

3 Table 3.11-15 summarizes the merge, diverge, and weave LOS for the SR 1 ramps to and from SR 68
 4 (west) under 2015 without-project conditions. All ramps operate at LOC or better, except the SR 1
 5 northbound on-ramp from SR 68, which operates at LOS D during the weekday PM peak hour.

6 **Table 3.11-15. SR 1/SR 68 Interchange Ramp Junction Levels of Service—2015 Without-Project**
 7 **Conditions**

Ramp	Section Type	AM Peak Hour	PM Peak Hour
Density^a/LOS			
SR 1 Northbound On-Ramp from SR 68	Merge ^b	20.3/C	30.0/D
SR 1 Southbound On-Ramp from SR 68	Merge ^b	20.9/C	21.5/C
SR 1 Northbound Off-Ramp to SR 68	Diverge ^b	18.7/B	21.5/C
Weaving Speed (miles per hour)/LOS			
SR 1 Southbound Off-Ramp to SR 68	Weave ^c	38.1/B	34.9/C

Source:

Fehr & Peers 2011.

Notes:

^a Passenger cars per lane per mile.

^b HCM 2000 methodology.

^c Caltrans Highway Design Manual methodology.

8

1 Cumulative Traffic Conditions (2030)

2 This section presents the estimated cumulative traffic conditions (2030) in the study area. Traffic
 3 projections to 2030 were developed based on the 2010 General Plan. The 2010 General Plan
 4 provided daily traffic forecasts for 2008 and 2030 on several roads in the study area. Annualized
 5 growth factors were derived from the general plan work (see Table 3.11-11). These annualized
 6 growth factors were then applied to the existing (2011) traffic volumes to obtain forecasts for 2030.

7 Del Monte Forest Gates

8 The cumulative peak hour volumes anticipated at the gates and the resulting V/C ratios are shown
 9 in Table 3.11-16. A ratio below 0.9 is considered acceptable. All gates currently are anticipated to
 10 operate at an acceptable LOS under cumulative conditions.

11 **Table 3.11-16. Forest Gate Peak Hour Volumes and Levels of Service—Cumulative Conditions**
 12 **(2030)**

Gate	Capacity	Peak Hour Volume/Volume-to-Capacity Ratio ^a	
		AM	PM
Pacific Grove	600	117/0.20	154/0.26
Carmel	900	146/0.16	156/0.17
SR 1	920	550/0.60	373/0.41
Country Club	600	215/0.36	242/0.40
SFB Morse	520	148/0.28	150/0.29

Source:

Fehr & Peers 2011.

Notes:

^a The V/C ratio describes inbound peak hour traffic flow as it relates to gate capacity.

13

14 Intersections in Del Monte Forest and Immediate Vicinity

15 Appendix G.1 contains the cumulative intersection traffic volumes used in this section. Table 3.11-17
 16 lists all intersections analyzed and shows the cumulative LOS for each intersection. As shown in the
 17 table, all analyzed intersections operate at LOS C or better during the AM and PM peak hours under
 18 cumulative conditions, with the following exceptions:

- 19 • Forest Avenue (SR 68)/David Avenue (LOS D during PM peak hour).
- 20 • SR 68/Skyline Forest Drive (LOS F during AM and PM peak hours).
- 21 • SR 68/Carmel Hill Professional Center (LOS F during AM and PM peak hours).
- 22 • SR 68/SR 1 southbound off-ramp (LOS F during AM and PM peak hours).
- 23 • 17-Mile Drive/SR 1 southbound on-ramp (LOS F during PM peak hour).
- 24 • SR 68/Aguaquito Road (LOS F during PM peak hour).
- 25 • SR 1/Carpenter Street (LOS E during PM peak hour).
- 26 • SR 1/Ocean Avenue (LOS D during AM peak hour and LOS E during PM peak hour).

- SR 1/Rio Road (LOS D during PM peak hour).

Table 3.11-17. Intersection Peak Hour Levels of Service—Cumulative Conditions (2030)

Intersection	Control^a	AM^{b, c}	PM^{b, c}
Sunset Drive (SR 68)/17-Mile Drive ^d	AWSC	8.0/A	6.6/A
Sunset Drive (SR 68)/Congress Road ^d	AWSC	18.1/C	18.2/C
Congress Avenue/Forest Lodge Road	AWSC	12.2/B	12.6/B
Congress Avenue/David Avenue	AWSC	11.3/B	12.6/B
Forest Avenue (SR 68)/David Avenue	Signal	26.5/C	38.9/D
SR 68/Prescott Avenue	Signal	15.7/B	24.0/C
SR 68/Presidio Boulevard ^d	SSSC	12.8 (21.6)/B(C)	5.2 (5.6)/A(A)
SR 68/SFB Morse Gate	Signal	12.8/B	17.8/B
SR 68/Skyline Forest Drive	SSSC	>120(>120)/F(F)	>120(>120)/F(F)
Skyline Forest Drive/Skyline Drive	AWSC	8.2/A	8.8/A
SR 68/Community Hospital	Signal	9.5/A	23.7/C
SR 68/Carmel Hill Professional Center	SSSC	98.6(>120)/F(F)	>120(>120)/F(F)
SR 68/SR 1 Southbound Off-Ramp	Signal	>120/F	>120/F
17-Mile Drive/SR 1 Southbound On-Ramp	SSSC	3.7 (16.8)/A(C)	18.8(56.6)/C(F)
SR 68/Aguajito Road ^d	SSSC	3.1 (17.4)/A(C)	32.4(>120)/D(F)
SR 1/Carpenter Street	Signal	18.3/B	74.1/E
San Antonio Road/Ocean Avenue	AWSC	8.2/A	9.4/A
SR 1/Ocean Avenue	Signal	45.0/D	63.9/E
SR 1/Carmel Valley Road	Signal	10.2/B	21.7/C
SR 1/Rio Road	Signal	33.7/C	38.3/D
17-Mile Drive/Congress Road	SSSC	5.2 (11.2)/A(B)	6.1 (12.6)/A(B)
Forest Lodge Road/Congress Road	SSSC	2.8 (11.5)/A(B)	4.2 (15.4)/A(C)
SFB Morse Drive/Congress Road	AWSC	7.8/A	8.1/A
17-Mile Drive/Forest Lodge Road/Sloat Road ^d	SSSC	4.8 (7.5)/A(A)	4.6 (8.2)/A(A)
Lopez Road/Sloat Road	AWSC	8.1/A	8.4/A
Spyglass Hill Road/Stevenson Drive	SSSC	3.2 (8.8)/A(A)	2.9 (9.3)/A(A)
Forest Lake Road/Stevenson Drive	SSSC	4.6 (12.8)/A(B)	4.5 (12.3)/A(B)
17-Mile Drive/Alvarado Lane	AWSC	9.9/A	10.5/B
17-Mile Drive/Palmero Way	SSSC	2.9 (17.3)/A(C)	4.4 (18.1)/A(C)
Sunridge Road/Ronda Road	SSSC	2.4 (10.2)/A(B)	4.0 (9.8)/A(A)
Sunridge Road/Scenic Drive	SSSC	0.8 (10.1)/A(B)	1.1 (10.6)/A(B)
Sunridge Road/Constanilla Way	SSSC	5.6 (9.6)/A(A)	3.0 (9.4)/A(A)
Sunridge Road/Haul Road ^d	SSSC	1.2 (7.3)/A(A)	1.6 (5.9)/A(A)

Source:

Fehr & Peers 2011.

Notes:

^a Signal = signalized intersection; SSSC = side-street stop-controlled intersection; AWSC = all-way stop-controlled intersection.

^b Average delay (in seconds) is listed first, followed by corresponding LOS.

^c For side-street stop-controlled intersections, average delay is listed first, followed by delay for the worst

Intersection	Control ^a	AM ^{b, c}	PM ^{b, c}
approach.			
^d Intersection analyzed using SimTraffic.			

1

2 **Regional Highway Sections**

3 Tables 2-12 and 2-13 of the transportation study (Fehr & Peers 2011) contain the cumulative AM
 4 and PM peak hour traffic volumes used in this section. Table 3.11-18 lists all highway sections
 5 analyzed and shows the cumulative LOS for each highway section. As shown in the table, many of the
 6 studied highway sections do not meet the LOS C standard under cumulative conditions, including:

- 7 • SR 1 from SR 68 (west) to Munras Avenue (LOS D during AM peak hour and LOS F during PM
 8 peak hour).
- 9 • SR 1 from Munras Avenue to Fremont Street (LOS E during AM peak hour and LOS D during PM
 10 peak hour).
- 11 • SR 1 from Fremont Street to Fremont Boulevard (LOS F during AM and PM peak hours).
- 12 • SR 1 from Fremont Boulevard to Imjin Parkway (LOS D during AM and LOS E during PM peak
 13 hour).
- 14 • SR 1 north of SR 156 (LOS F during AM and PM peak hours).
- 15 • SR 68 west of Skyline Forest Drive (LOS F during AM and PM peak hours).
- 16 • SR 68 east of Olmsted Road (LOS E during AM peak hour and LOS D during PM peak hour).
- 17 • SR 68 east of Laguna Seca (LOS F during AM and PM peak hours).
- 18 • US 101 north of SR 156 (LOS D during PM peak hour).
- 19 • SR 156 from SR 1 to US 101 (LOS E during AM peak hour, and LOS F during PM peak hour).

20 **Table 3.11-18. Regional Highway Section Levels of Service—Cumulative Conditions (2030)**

Highway	Section	Direction	AM ^a	PM ^a
SR 1	SR 68 (west) to Munras Avenue	North	0.69/D	1.02/F
SR 1	Munras Avenue to Fremont Street	North	0.55/C	0.84/D
		South	0.89/E	0.62/C
SR 1	Fremont Street to Fremont Boulevard	North	0.54/C	1.16/F
		South	1.25/F	0.85/D
SR 1	Fremont Boulevard to Imjin Parkway	North	0.36/B	0.90/E
		South	0.79/D	0.52/C
SR 1	North of SR 156	North	0.90/E	2.06/F
		South	1.77/F	1.27/F
SR 68	West of Skyline Forest Drive	East	0.92/F	1.13/F
		West	1.01/F	0.99/E
SR 68	West of Skyline Forest Drive	East	0.92/F	1.13/F
		West	1.01/F	0.99/E

Highway	Section	Direction	AM ^a	PM ^a
SR 68	East of Olmsted Road	East	0.74/D	0.86/D
		West	0.89/E	0.87/D
SR 68	East of Laguna Seca	East	1.18/F	0.99/E
		West	0.87/D	1.23/F
US 101	South of Salinas	North	0.28/B	0.36/B
		South	0.25/B	0.45/B
US 101	North of SR 156	North	0.48/C	0.70/D
		South	0.65/C	0.73/D
SR 156	SR 1 to US 101	East	0.56/C	1.24/F
		West	0.94/E	0.64/C

Source:

Fehr & Peers 2011.

Notes:

^a V/C ratio is listed first, followed by corresponding LOS.

1

2 SR 1/SR 68 Interchange Ramp Junctions

3 Table 3.11-19 summarizes the merge, diverge, and weave LOS for the SR 1 ramps to and from SR 68
 4 (west) under cumulative conditions. All ramps operate at LOS C or better, except the SR 1
 5 northbound on-ramp from SR 68, which operates at LOS E during the weekday PM peak hour.

6 **Table 3.11-19. SR 1/SR 68 Interchange Ramp Junction Levels of Service—Cumulative Conditions**
 7 **(2030)**

Ramp	Section Type	AM Peak Hour	PM Peak Hour
Density^a/LOS			
SR 1 Northbound On-Ramp from SR 68	Merge ^b	20.9/C	35.4/E
SR 1 Southbound On-Ramp from SR 68	Merge ^b	21.3/C	22.5/C
SR 1 Northbound Off-Ramp to SR 68	Diverge ^b	19.1/B	22.5/C
Weaving Speed (miles per hour)/LOS			
SR 1 Southbound Off-Ramp to SR 68	Weave ^c	33.1/C	34.0/C

Source:

Fehr & Peers 2011.

Notes:

^a Passenger cars per lane per mile.

^b HCM 2000 methodology.

^c Caltrans Highway Design Manual methodology.

8

9 Planned Roadway Improvements

10 Several studies have addressed the SR 68 corridor, west of the SR 1 interchange. Similarly, several
 11 studies have been completed for the SR 1 corridor, south of SR 68 through the Carmel area. Some
 12 roadway improvements are included in the proposed project and are discussed separately in
 13 Chapter 2.

1 **SR 68 Corridor Widening**

2 The TAMC Board of Directors approved the Fee Program as mitigation for cumulative impacts on the
3 regional transportation system. The program included a project to construct additional lanes on
4 SR 68 from the Community Hospital intersection to SR 1.

5 In 2000, Caltrans completed and approved a Project Study Report (PSR) for the SR 68 Widening
6 Project (California Department of Transportation 2000). The intent of the SR 68 project, as
7 described in the PSR, is to relieve existing and future traffic congestion on SR 68, and improve traffic
8 safety and vehicular access to the Pebble Beach entrance, Community Hospital, and Carmel Hill
9 Professional Center. Features of the SR 68 Widening Project are illustrated on Figure 3.11-4 and
10 include:

- 11 • Widening SR 68 from a two-lane to four-lane cross section from the ramp terminal intersection
12 with SR 1 through the Community Hospital intersection.
- 13 • Replacing the SR 68 overcrossing at SR 1 to include four travel lanes and a facility for non-
14 motorized travel between SR 68 and the planned Coastal Trail along the east side of SR 1.
- 15 • Replacing the Scenic Drive overcrossing to accommodate the four-lane SR 68.
- 16 • Widening the SR 1 southbound off-ramp for more vehicle storage and to provide a left-turn lane.
- 17 • Reconfiguring the SR 1 southbound on-ramp to separate Pebble Beach- and highway-related
18 traffic.
- 19 • Extending the SR 1 southbound on-ramp merge from the Pebble Beach entrance.
- 20 • Signalizing the Carmel Professional Center driveway intersection with SR 68.

21 Although the SR 68 project, as described above, is included in the Fee Program, it is not certain when
22 sufficient funds would be accumulated and the project constructed. Therefore, it is not assumed in
23 either the 2015 or 2030 traffic scenarios evaluated in this study.

24 As described in Chapter 2, the proposed project does include a subset of the SR 68 project in its
25 development plan:

- 26 • Widening SR 68 eastbound from one to two lanes from east of the Scenic Drive overcrossing to
27 the ramp terminal intersection with SR 1.
- 28 • Widening the SR 1 southbound off-ramp to provide a left-turn lane.
- 29 • Reconfiguring the SR 1 southbound on-ramp to separate Pebble Beach- and highway-related
30 traffic.

31 **Presidio of Monterey Master Plan and New SR 68 Access Control Point**

32 In February 2011, the Presidio of Monterey (Presidio) released a Draft EIR for its Real Property
33 Master Plan (Presidio of Monterey 2011). A key component to the Presidio's planning effort is to
34 establish a new access point, which would be located on SR 68 at the SFB Morse Drive intersection.

35 Changes to the SR 68/SFB Morse Drive intersection that are necessary to accommodate the access
36 point include:

- 37 • Left- and right-turn lanes on SR 68.

- 1 • Two through lanes on SR 68 in each direction.
- 2 • Two left-turn lanes and one right-turn lane from the new access point onto SR 68.

3 These changes are assumed to be implemented under the 2030 cumulative scenarios when the
4 Presidio development proposal is assumed to be in place.

5 **SR 1 Corridor Improvements**

6 No road improvements are assumed along SR 1 between Rio Road and Carpenter Street because
7 Caltrans and TAMC have not included improvement of this segment of roadway in the Fee Program
8 and/or current plans, and do not appear likely to do so in the near future. In addition, the recent
9 attempt to raise the sales tax to fund regional traffic improvements was not approved by county
10 voters in November 2008. Including the most recent effort, there have been three unsuccessful
11 attempts to pass a sales tax increase for transportation. The potential to raise future sales tax
12 revenues to fund regional traffic improvements at this location is speculative at this time. Last, the
13 Carmel Valley Transportation Improvement Program did not incorporate any road improvements to
14 SR 1, even though cumulative development from Carmel Valley would represent between 4% and
15 11% of the cumulative traffic growth on SR 1 through the area (County of Monterey 2009).

16 The September Ranch EIR (County of Monterey 2004) includes two mitigation measures along SR 1
17 that are directly relevant to the proposed project. First, at the SR 1 signalized intersection with
18 Carpenter Street, overlap phasing would be implemented so that the westbound right turns had a
19 green arrow at the same time as the southbound left turns. Based on the transportation study (Fehr
20 & Peers 2011), this measure would not noticeably change operations, so it is not assumed to be in
21 place in any scenario or as a mitigation for the proposed project.

22 **Existing Transit Conditions**

23 **Monterey-Salinas Bus Service**

24 Monterey-Salinas Transit (MST) provides bus service to the Monterey and Salinas areas, and service
25 extends to Watsonville. MST has one route that travels directly into Del Monte Forest, and two
26 additional routes travel within the Del Monte Forest Plan vicinity that are accessible by walking.
27 These routes are described below:

- 28 • **Route 1X—Asilomar/Lovers Point Express** is a local express service with a stop on 17-Mile
29 Drive at Sunset Drive, several hundred feet from the Pacific Grove Gate. It primarily serves
30 Pacific Grove and travels to the Monterey Transit Plaza. This service operates daily between
31 about 6 a.m. and 7 p.m. with 60-minute headways.
- 32 • **Route 2X—Pebble Beach Express** is an express service with a stop at The Inn at Spanish Bay
33 and The Lodge at Pebble Beach. It provides service to the major transit centers, including the
34 Monterey Transit Plaza, Edgewater Transit Exchange, and Marina Transit Exchange, and
35 eventually to the Salinas Transit Center. This service operates daily to Pebble Beach in the AM
36 commute period and to Salinas in the PM commute period. This service was implemented after
37 the environmental studies were completed for the previous development proposal by PBC.
- 38 • **Route 78—Presidio/Pacific Grove** is a local service with a stop on 17-Mile Drive at Sunset
39 Drive, several hundred feet from the Pacific Grove Gate. It primarily serves the AM and PM

1 weekday commute periods traveling in Pacific Grove, to the Presidio and Monterey Transit
2 Plaza.

3 **Monterey-Salinas Transit Business Plan and Short-Range Transit Plan**

4 MST's Business Plan and Short-Range Transit Plan (SRTP) sets forth operating and capital projects
5 (Monterey-Salinas Transit 2005). The SRTP compares existing transit service and performance to
6 adopted goals, objectives, and policies. The SRTP recommends operating, capital, and planning
7 improvements needed to more efficiently and effectively serve the traveling public. The SRTP also
8 programs funding necessary for improvements.

9 The SRTP identifies transit service needs and deficiencies. Within the unincorporated areas, service
10 to Pebble Beach/Del Monte Forest/Spanish Bay is noted in the SRTP was started in 2004. In 2004,
11 MST carried about 5,000 passengers to Pebble Beach via supplemental service over the 4-day AT&T
12 Pebble Beach National Pro-Am (Monterey-Salinas Transit 2005). Potential ridership directly into
13 Pebble Beach will continue to be monitored by MST.

14 **Emergency Guaranteed Ride Home**

15 The Emergency Guaranteed Ride Home program (EGRH), part of AMBAG's Commute Alternatives
16 program, provides a guaranteed ride home in an emergency to registered users who use alternative
17 transportation to get to work. EGRH is available to commuters who live or work in Monterey County
18 and who ride the bus, carpool, vanpool, ride a bicycle, or walk to work at least 1 day a week. To
19 participate, commuters must register with Commute Alternatives. The service will reimburse up to
20 \$60 for a taxi or rental car in case of personal illness, a sick family member, or a serious problem at a
21 child's school or day care, or if employees must unexpectedly work late.

22 **Pebble Beach Company Shuttles**

23 PBC operates private shuttles serving visitors between destinations in Del Monte Forest and
24 neighboring jurisdictions as requested, including Carmel, Pacific Grove, Monterey, and Monterey
25 Peninsula Airport. Popular service destinations are scheduled, while others are based on customer
26 requests. PBC also operates shuttles for employees when employee parking is not available at the
27 work site.

28 **Existing Bicycle Facilities**

29 Bicycles are allowed in Del Monte Forest during daylight hours, and riders are advised to use
30 designated bicycle routes. Riders may enter and exit at any gate. Bicycles are not permitted on
31 hiking or equestrian trails at any time. A paved, marked bicycle route is provided from the Pacific
32 Grove Gate to The Lodge at Pebble Beach area along 17-Mile Drive, Spanish Bay Road, Spyglass Hill
33 Road, and Stevenson Drive. The route is identified with a bicycle symbol for purposes of wayfinding,
34 but using the symbol alone for wayfinding may be misinterpreted. The marked route terminates on
35 Stevenson Drive near Ondulado Road.

36 Although advised to retrace the route once they have reached Ondulado Road, bicyclists may elect to
37 continue along Stevenson Drive and 17-Mile Drive to an exit at the Carmel Gate. This last portion of
38 the bicycle route travels along a narrow road with heavy traffic volumes (17-Mile Drive), and PBC
39 notifies bicyclists that this segment is not recommended for bicycle travel.

1 PBC evaluated opportunities to continue bicycle improvements from Ondulado Road to the Carmel
2 Gate. Substantial physical constraints exist that are prohibitive to the completion of a marked
3 bicycle lane. Construction of a Class I (bicycle path) or Class II (bicycle lane) facility on these
4 roadways would require, at a minimum, widening the existing roadways by 8 feet to provide two 4-
5 foot bicycle lanes on both sides of the roadway. Widening of this type would require substantial
6 vegetation removal, utility relocation, right-of-way acquisition, retaining wall construction, and
7 relocation and reconstruction of many residential driveways and gates.

8 Creegan & D'Angelo conducted a field investigation of the possible conversion from a Class III
9 (bicycle route) to a Class I or II facility in March 1994. (A copy of this report is on file with the
10 Monterey County Planning Department.) The investigation found that 8 feet of widening along the
11 identified portions of 17-Mile Drive and Carmel Way would require removal of about 150 mature
12 trees and relocation/reconstruction of roughly 30 residential driveways, with substantial grade
13 issues. Many driveways along these roadways rise up or fall off quickly from the street, and
14 widening of the main roadway would require complete regrading and reconstruction of these
15 driveways. Finally, the investigation identified that widening of the existing roadway cross sections
16 would require substantial property acquisition and construction of a number of retaining walls
17 between Stevenson Drive in The Lodge at Pebble Beach area and the Carmel Gate. The section of 17-
18 Mile Drive between its two intersections with Crespi Lane would be an area where substantial
19 retaining walls would be required.

20 Existing LUP Policy 108 requires bicycle route safety improvements along 17-Mile Drive from the
21 Pacific Grove Gate to Fan Shell Beach. It also requires access between Fan Shell Beach and the
22 Carmel Gate to continue to be available as a bicycle route, not as bicycle lanes. This requirement has
23 been satisfied. The LUP does not require improved bicycle lanes to the Carmel Gate.

24 Impact Analysis

25 This section describes the impact analysis related to transportation for the proposed project.
26 Baseline conditions for transportation are those existing as of 2011, and the impacts of the proposed
27 project are compared to these baseline conditions, as well as conditions in 2015 and 2030 without
28 the proposed project. This section describes the methods used to determine the project impacts and
29 lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate
30 (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany
31 each impact discussion. Cumulative impacts are discussed at the end of this section.

32 Methodology

33 The purpose of the transportation impacts analysis is to evaluate the potential impacts of the
34 proposed project on the surrounding transportation system, based on guidelines set forth by the
35 County, Caltrans, and TAMC. The guidelines are discussed under "Regulatory Setting."

36 Criteria for Determining Significance

37 In accordance with CEQA, the State CEQA Guidelines, Monterey County plans and policies, and
38 agency and professional standards, a project impact would be considered significant if the project
39 would:

1 **A. Traffic during Project Construction**

- 2 • Cause short-term increases in traffic on roads or intersections that cause the existing LOS to
3 drop to an unacceptable level or worsens the operation of intersections previously identified as
4 deficient.

5 **B. Del Monte Forest Gates**

- 6 • Cause an increase in traffic resulting in a V/C ratio of 0.90 or more at one of the Del Monte
7 Forest gates.

8 **C. Impacts to Roadway Intersections and Segments**

9 **Signalized Intersections**

- 10 • Cause an intersection operating at LOS A, B, or C to degrade to unacceptable traffic conditions of
11 LOS D, E, or F (LOS E or F outside the Coastal Zone, or a specific standard established in an Area
12 or Community Plan).
- 13 • Add 0.01 or more to the critical movement V/C ratio at intersections already operating at an
14 unacceptable LOS D or E (LOS E outside the Coastal Zone).
- 15 • Add one or more cars to the critical movement V/C ratio at intersections already operating at
16 LOS F.

17 **Unsignalized Intersections**

- 18 • Result in any traffic movement operating at LOS F or in the meeting of any traffic signal warrant.

19 **Roadway Segments**

- 20 • Cause a county roadway segment operating at LOS A to E to degrade to a lower LOS—D, E, or F
21 (LOS E or F outside the Coastal Zone, or a specific standard established in an Area or Community
22 Plan).
- 23 • Cause a state highway segment to degrade to below the transition between LOS C and LOS D. If
24 an existing state highway facility is operating at less than the appropriate target (e.g., LOS E or
25 F), the existing LOS should be maintained. A significant impact would occur if a project adds 0.01
26 to the critical movement volume-to-capacity ratio.
- 27 • Add one or more cars to the segment to roadway segments already operating at LOS F.

28 **D. Access and Circulation**

- 29 • Create a new roadway that does not meet the design criteria established in the Del Monte Forest
30 Transportation Policy Agreement, that substantially increases hazards because of roadway
31 design or internal circulation patterns, or that results in inadequate emergency access.

32 **E. Parking**

- 33 • Result in inadequate parking.⁵

⁵ Parking is not considered a CEQA impact under the current guidelines. The parking analysis is for information purposes only.

1 **F. Special Events**

- 2 • Result in inadequate transportation conditions during special events.

3 **G. Transit and Alternative Transportation**

- 4 • Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g.,
- 5 bus turnouts, bicycle racks).

6 **H. Bicycles and Trails**

- 7 • Conflict with adopted policies, plans, or programs supporting transportation by bicycles.
- 8 • Conflict with adopted policies, plans, or programs supporting trails.

9 **Approach**

10 The approach for determining trip generation calculations, trip distribution, and trip assignment are
11 summarized below, as are the key project characteristics that would generate trips.

12 **Key Project Characteristics**

13 The key project characteristics that would result in trip generation are listed below with the specific
14 project element indicated in parentheses (Refer to Chapter 2, Project Description, and Table 2-2 for
15 greater detail):

- 16 • 55 additional hotel rooms at The Lodge at Pebble Beach (35 units at Fairway One
- 17 Reconstruction and 20 units at New Colton Building).
- 18 • 2,100 square feet of additional meeting room space at The Lodge at Pebble Beach (Meeting
- 19 Facility Expansion).
- 20 • 40 additional hotel rooms at The Inn at Spanish Bay (New Guest Cottages).
- 21 • 4,660 square feet of additional meeting room space at The Inn at Spanish Bay (Conference
- 22 Center Expansion).
- 23 • 88 additional single-family residences (Residential Lot Subdivisions in various areas).⁶

24 Additionally, the proposed project includes two development options in Area M Spyglass Hill:⁷

- 25 • 100 additional hotel rooms with a restaurant and meeting spaces, and a 17,000-square-foot spa
- 26 (Option 1 New Resort Hotel), or
- 27 • 10 single-family residences (Option 2 New Residential Lots).

28 **Trip Generation**

29 To estimate the number of trips generated by the proposed project, trip rates from the Institute of
30 Transportation Engineers Trip Generation Manual (Institute of Transportation Engineers 2008) are
31 applied to each land use, unless otherwise noted.

⁶ The project description references 90 additional residential lots in Areas F-2, I-2, J, K, L, U, V, Collins Residence and Corporation Yard. Because the Collins Residence already has two units on site, the total additional units is 88.

⁷ Options 1 and 2 are Land Use Alternatives 1 and 2, respectively, in the Fehr & Peers traffic report (Fehr & Peers 2011).

1 As a result of the multiple existing land uses within Del Monte Forest, there is a significant level of
2 internalization (i.e., the number of trips that have both an origin and destination within the forest).
3 These trips use the forest road system, but do not use the forest gates or roads external to the forest.
4 The most recent AMBAG Travel Demand Model was used to determine that 25% of the project traffic
5 would have both an origin and destination within the forest, thereby affecting roads in the forest but
6 not outside it.

7 **Meeting Facility Expansion/Conference Center Expansion.** The additional space at the meeting
8 rooms and conference center would be used primarily for executive-type meetings and would
9 generally be used in a conference-style format, as described at <http://www.cvent.com>. According to
10 calculations provided on this website, a 1,000-square-foot meeting room is designed to
11 accommodate 24 people. According to PBC, the meeting rooms are used almost exclusively (up to
12 75%) by hotel guests. For this analysis, 50% of the meeting space was assumed to be occupied by
13 hotel guests, while the remainder was assumed to drive from off-site. Assuming auto occupancy of
14 1.5 people per car, a 1,000-square-foot meeting room space could generate eight vehicle trips.

15 **Area M Spyglass Hill New Resort Hotel (Option 1).** The New Resort Hotel would include a
16 restaurant, meeting room space, and a spa. The guest rooms, restaurant, and meeting room space
17 are consistent with the hotel land use code from the ITE Manual. The restaurant would be open to
18 the general public, and given the high visitor-related use in Del Monte Forest, including 17-Mile
19 Drive, the trip generation for the restaurant component was increased to reflect use by visitors to
20 the forest. This factor was conservatively assumed to represent 25% of a stand-alone restaurant per
21 the ITE Manual.

22 Because there is not an appropriate classification for the spa use in the ITE Manual, the spa trip
23 generation was derived from the available parking supply at the spa. The typical spa treatment time
24 is 2–3 hours, and there could be about 10 employees on-site at one time. There are 41 parking
25 spaces at the spa for employees and clientele. With 10 employees on-site during the peak hours, 31
26 parking spaces would be used by spa guests, which with a 3-hour parking turnover rate would
27 generate about 12 inbound and 12 outbound peak hour trips.

28 **Pebble Beach Driving Range Relocation from Area V to Collins Field/Equestrian Center**
29 **Reconstruction/Special Events Area Grading and Expansion.** These project elements would not
30 generate new trips because they are not new facilities. The driving range would be relocated from
31 the existing facility along Stevenson Drive and Forest Lake Road to the nearby existing Collins Field
32 bound by Portola Road, Stevenson Drive, and Ondulado Road. The Equestrian Center and the Special
33 Events Area would remain at the current location on Portola Road near Alva Lane. The Special
34 Events Area expansion involves a minor expansion northward. These changes do not have a regional
35 traffic impact, and local traffic impacts would be negligible because the uses already exist in the
36 area. The trip generation for the single-family residential units was derived from the ITE Manual.

37 Table 3.11-20 shows the net new trips generated by the proposed project. Under Option 1 (New
38 Resort Hotel), there are 269 AM peak hour trips, 300 PM peak hour trips, and approximately 3,109
39 daily trips generated by the proposed project. Under Option 2 (New Residential Lots), the
40 residential subdivision, there are 188 AM peak hour trips, 216 PM peak hour trips, and
41 approximately 2,013 daily trips generated by the proposed project.

42 **Table 3.11-20. Project Trip Generation**

Land Use	Size	Unit	Trip Rate (per unit of use)			Trips		
			AM	PM	Daily	AM	PM	Daily
Project Elements Common to Both Options								
SBI New Guest Cottages	40	Rooms	0.56	0.59	4.90	22	24	196
SBI Conference Center Expansion ^a	66	People	0.34	0.34	3.40	43	43	438
PBL New Colton Building and Fairway One Reconstruction ^b	55	Rooms	0.56	0.59	4.90	31	32	270
PBL Meeting Facility Expansion ^c	20	People	0.34	0.34	3.40	17	17	171
Equestrian Center Reconstruction ^d	1	Center	-	-	-	-	-	-
Driving Range Relocation ^d	1	Range	-	-	-	-	-	-
Residential Lots Area F-2	16	DU	0.75	1.01	9.57	12	16	153
Residential Lots Area I-2	16	DU	0.75	1.01	9.57	12	16	153
Residential Lots Area J	5	DU	0.75	1.01	9.57	4	5	48
Residential Lots Area K	8	DU	0.75	1.01	9.57	6	8	77
Residential Lots Area L	10	DU	0.75	1.01	9.57	8	10	96
Residential Lots Area U	7	DU	0.75	1.01	9.57	5	7	67
Residential Lots Area V	14	DU	0.75	1.01	9.57	11	14	134
Residential Lots Collins ^e	2	DU	0.75	1.01	9.57	2	2	19
Residential Lots Corporation Yard	10	DU	0.75	1.01	9.57	8	10	96
Elements Specific to Option 1 (New Resort Hotel)								
Spyglass Hotel	100	Rooms	0.56	0.59	8.17	56	59	817
Spyglass Hotel Spa ^f	41	PS	0.59	0.59	5.85	24	24	240
Hotel Restaurant Adjustment ^g	6,000	SF	1.39	1.87	22.49	8	11	135
Elements Specific to Option 2 (New Residential Lots)								
10 Single-Family Homes	10	DU	0.75	1.01	9.57	8	10	96
Total with Option 1 (New Resort Hotel)						269	300	3,109
Total with Option 2 (New Residential Lots)						188	216	2,013

Source:

Fehr & Peers 2011.

Notes:

DU = dwelling units, PBL = The Lodge at Pebble Beach, PS = parking spaces, SBI = The Inn at Spanish Bay, SF = square feet.

^a Conference Center Expansion would include 4,660 SF additional meeting space, although 2011 Fehr & Peers analysis assumed a slightly larger meeting space of 5,369 SF. The analysis also assumes 24 people per 1,000 square feet for conference-style meetings (<http://www.cvnet.com>), 50% use by hotel guests, and 1.5 people per car for those that drive.

^b Colton Building would contain 20 units. Fairway One would replace five existing units with 40 new units.

^c Meeting Facility Expansion would include 2,100 SF new meeting space. The analysis also assumes 24 people per 1,000 square feet for conference-style meetings (<http://www.cvnet.com>), 50% use by hotel guests, and 1.5 people per car for those that drive.

^d These services are currently being provided; thus, there will be no new trips generated.

^e The Collins residences would replace two existing units with four new units.

^f Spa trip generation is based on the 41 parking spaces provided at the spa. Ten spaces are assumed to be

for employees. The remaining 31 would be used by guests, with an average parking turnover of 3 hours. Thus, 31 parking spaces would generate about 12 inbound and 12 outbound trips during the peak hour.

^g Restaurant use is considered in the hotel trip generation rates. The visitor adjustment reflects visitors to Del Monte Forest who may also stop by the restaurant, such as visitors to 17-Mile Drive or nearby residents.

1

2 **Trip Distribution and Assignment**

3 The project trip distribution is based on the AMBAG Travel Demand Model. The model was used to
4 identify the travel patterns between Del Monte Forest and other areas in Monterey County. As
5 discussed previously, 25% of the generated traffic was assumed to have an origin and destination
6 within the forest. The remaining 75% was distributed per the distribution pattern shown in Table
7 3.11-21.

8 The distribution of traffic at the forest gates depends on the time period and direction of travel.
9 Generally, over the day, traffic is distributed to the gates as follows:

- 10 ● 35% to the Pacific Grove Gate.
- 11 ● 10% to the Country Club Gate.
- 12 ● 10% to the SFB Morse Gate.
- 13 ● 40% to the SR 1 Gate.
- 14 ● 5% to the Carmel Gate.

1 **Table 3.11-21. Project Trip Distribution Patterns**

Location	Percent
17-Mile Drive	10
Forest Avenue	10
David Avenue	8
Prescott Avenue	2
West Monterey	3
Seaside	5
Marina	5
SR 1 North of SR 156	4
SR 156	1
US 101 North of SR 156	4
Salinas	5
East Monterey	4
South of Carmel	2
Downtown Carmel	8
Carmel Valley Road	4
Del Monte Forest	25
Total	100

Source:
Fehr & Peers 2011.

2

3 **Weekend Conditions**

4 The transportation impact analysis is based on weekday AM and PM peak periods. No detailed
 5 analysis of weekend traffic conditions was conducted because the proposed project would not
 6 increase the size or change the nature or frequency of the events taking place in Del Monte Forest.
 7 With the proposed increase in the number of guest rooms in Del Monte Forest, more people
 8 attending weekend special events could stay in Del Monte Forest and would be less likely to drive
 9 during the event activities. Project impacts on special events are further described in the Impacts
 10 and Mitigation Measures section (see F. Special Events).

11 **Impacts and Mitigation Measures**

12 This section is divided into eight separate subject areas: traffic during project construction, impacts
 13 on Del Monte Forest gates, impacts on roadway intersections and segments, access and circulation,
 14 parking, special events, transit and alternative transportation, and bicycle facilities/trails.

1 Project Construction

2 A. Traffic during Project Construction

3 **Impact TRA-A1: Construction traffic would result in short-term increases in traffic volumes**
 4 **that would affect level of service and intersection operations. (significant and unavoidable**
 5 **with mitigation)**

6 Construction Phases, Workers, and Vehicles

7 As described in Table 2-5 (Preliminary Construction Duration and Workers for Proposed
 8 Development), construction of all elements included in the proposed project is anticipated to occur
 9 over approximately 10 years. Portions of this work would be underway simultaneously in several
 10 areas of Del Monte Forest. PBC intends to make efficient use of truck traffic during the heaviest
 11 times of construction (excavation and grading) and to complete work as soon as possible, thereby
 12 minimizing construction impacts on residents of the forest, guests, and visitors.

13 Tables 3.11-22 and 3.11-23 highlight the construction activity assumed in this analysis and
 14 discussed in detail in subsequent sections. As shown in the tables, each “truck” or “construction
 15 worker” indicates a two-way movement during the course of a day: one movement to the site and
 16 another from the site. Trucks are based on the amount of material needed to be transferred to or
 17 from the site. Construction workers are based on the number of construction workers required on
 18 site each day to implement the improvements. As shown in the tables, the greatest construction
 19 activity could occur during Phases I and II.

20 **Table 3.11-22. Estimated Daily Haul Truck Characteristics**

Construction Phase	Estimated Start Date	Estimated Finish Date	Number of Weeks	Total Haul Trucks per Day
Phase I	9/1/2012	9/7/2012	1	97
	9/8/2012	11/30/2012	12	22
	3/4/2013	5/31/2013	13	28
Phase II	3/3/2014	3/10/2014	1.2	56
	3/10/2014	3/24/2014	2.2	114
	3/25/2014	5/9/2014	6.8	38
	5/10/2014	5/30/2014	3	27
Phase III	3/2/2015	3/9/2015	1.2	5
Phase IV—Option1	3/2/2020	5/29/2020	13	63
	5/30/2020	8/28/2020	13	38
Phase IV—Option 2	3/2/2020	5/29/2020	13	41

Source:

Fehr & Peers 2011.

1 **Table 3.11-23. Estimated Daily Construction Characteristics**

Construction Phase	Project Element	Delivery Trucks	Workers
Phase I—18 Months	Residential Lot Subdivisions ^a	0-13	3-56
	PBL Parking and Circulation Reconstruction	1	20-50
	SBI New Employee Parking	1	10-20
	Driving Range Relocation from Area V to Collins Field	1	10-40
	Phase I Total	3-16	43-166
Phase II—12 Months	Residential Lot Subdivisions ^b	0-2	15
	PBL Meeting Facility Expansion	1	20-40
	PBL New Colton Building	2	20-40
	Equestrian Center Reconstruction	2	20-50
	SBI Conference Center Expansion (meeting rooms)	1	0-20
Phase II Total	6-8	75-165	
Phase III—40 Months	PBL Fairway One Reconstruction	2	20-75
	SBI New Guest Cottages	2	20-75
	SBI Conference Center Expansion (support/circulation)	1	10-20
Phase IV Total	5	50-170	
Phase IV—29 Months	Residential Lot Subdivisions ^c	0-2	10
	Area M Spyglass Hill New Resort Hotel (Option 1) ^d	1-5	30-200
Phase IV Total	1-7	40-210	

Source:

Fehr & Peers 2011.

Notes:

PBL = The Lodge at Pebble Beach, SBI = The Inn at Spanish Bay

^a 66 lots in Areas F-2, I-2, J, K, L, U, Collins Residence

^b 10 lots at Corporation Yard

^c 14 lots in Area V

^d Under Option 2, there would be 10 residential lots, and the construction characteristics would be substantially less. Hence Option 1 was used as a worst-case scenario.

2

3 **Construction Truck Routing**

4 PBC proposes to limit major construction truck activity to key collector roads in Del Monte Forest.
 5 Construction truck access to The Lodge at Pebble Beach and Area M Spyglass Hill would be via the
 6 SR 1 Gate. Truck access to The Inn at Spanish Bay would be via the SFB Morse Gate. Internal
 7 construction truck traffic between improvement areas would generally use Congress Road, Lopez
 8 Road, or Forest Lake Road. As part of the proposed project, the Congress Road corridor would, as
 9 necessary, be improved to better accommodate trucks. Improvements would include channelization
 10 and sight distance improvements at Lopez Road.

1 **Construction Truck Access at Forest Gates**

2 The SR 1 and SFB Morse Gates would be used as the primary access for trucks during construction,
3 as illustrated in Figure 3.11-5. As indicated in Tables 3.11-22 and 3.11-23, truck traffic through the
4 gates is expected to peak at up to 114 haul trucks and 8 delivery trucks per day during two weeks
5 within Phase II of construction. This truck traffic would primarily use the SR 1 Gate and even at this
6 peak time represents about 3 percent of the total traffic using the gate.

7 **Haul Trucks**

8 Total net excavation for the entire project would be approximately 93,299 cubic yards exported and
9 47,480 cubic yards imported. Table 3.11-23 shows the total haul trucks expected throughout each
10 phase. The analysis assumes 10 cubic yard trucks would be used for importing and exporting.

11 Based on Table 3.11-22, haul truck traffic through the gates is expected to peak in Phases I and II.
12 During Phase I, a peak of 97 haul trucks is expected for one week in September 2012 due to
13 excavation, grading and tree removal for roadway improvements on Congress Road and Lopez Road,
14 and residential lots at the Collins Residence and Area U. The peak haul trucks are expected in Phase
15 II for two weeks when 114 haul trucks are needed for excavation of the Colton Building, the Special
16 Events area, and the residential lots in the Corporation Yard.

17 **Delivery and Construction Worker Traffic**

18 Table 3.11-23 summarizes delivery and construction worker traffic. The peak construction period
19 would be Phase IV when the New Resort Hotel would be constructed in Area M Spyglass Hill (if
20 Option 1 is selected). Construction truck traffic through the gates is expected to peak at up to 7
21 delivery trucks per day during this phase.

22 Construction workers would generally arrive to the work site prior to the morning peak hour of
23 traffic congestion and leave the work site prior to evening peak hour of traffic congestion,
24 minimizing traffic impacts to area streets and roads. Construction workers are expected to
25 contribute to congested traffic locations. The locations most likely to be impacted by construction
26 workers include the SR 68/SR 1 SB Off-Ramp and the SR 1 SB On Ramp/17-Mile Drive intersections.
27 These two intersections would be improved by PBC as part of the first phase of work, addressing
28 intersection operation impacts associated with the added construction worker traffic during the
29 shoulder peak hours (i.e., between 7:00 and 8:00 AM and 3:00 and 5:00 PM).

30 Construction worker impacts would be dependent on the New Resort Hotel construction phase.
31 During site preparation, construction workers on site are expected to peak at 30 workers per day.
32 During construction, the resort hotel is expected to yield 200 construction workers per day. Even at
33 this activity level, these workers represent only about 3 percent of the daily traffic entering the
34 Forest.

35 **Construction Traffic Characteristics by Development Site**

36 This section describes construction traffic characteristics by development site.

37 **Residential Lot Subdivisions**

38 Construction traffic has been projected for all new residential lot subdivisions and both on- and off-
39 site improvements, based on construction details and assumptions provided by PBC. The four

1 primary construction categories for the 90 new residential lots (88 net new units) being created
2 under the proposed project are:

- 3 • Earthwork and paving, including concrete gutter.
- 4 • Sewer and water.
- 5 • Storm drains.
- 6 • Utilities.

7 Although earthwork would generally occur first and paving last, all sewer and water, storm drains,
8 and utility work could occur simultaneously. Work for the first 66 lots would be complete in a 6-
9 month schedule (approximately 130 days, assuming a 5-day, Monday–Friday work week).

10 During the 6-month site preparation work, about 1,380 haul trucks for importing soil would be
11 required or approximately 22 trucks per day over a three-month excavation period. Construction
12 workers would, on average, number 56 per day during the 6-month site preparation period. The
13 remaining 24 lots would be built over the next three phases following Phase I. The 10 lots from the
14 Corporation Yard would require about 1,700 trucks, which over a 3-month excavation would result
15 in about 30 trucks per day. The 14 lots in Area V would require about 1,570 trucks, which over a 3-
16 month fill period would result in about 25 haul trucks per day. Under Option 2, Area M would add 10
17 lots. Total soil import would require about 100 trucks, which over a 3-month fill period would result
18 in about 15 trucks per day.

19 PBC would not control construction on each of the residential lot sites; however, a worst-case
20 scenario was developed. The worst-case scenario combines truck and labor traffic for 66 new homes
21 built over an 18-month period. Five workers per day are needed for each home construction on
22 average, and one truck delivery is made per week on average. Therefore, over an 18-month period,
23 330 workers per day and 13 trucks per day would be needed to construct 66 homes at the same
24 time.

25 ***The Lodge at Pebble Beach***

26 The four development sites in this area include: Meeting Facility Expansion, Fairway One
27 Reconstruction, New Colton Building, and Parking and Circulation Reconstruction.

28 **Parking and Circulation Reconstruction.** Work is scheduled to begin with construction of the
29 underground parking facility. Construction of the new guest room building at the Colton Building
30 would occur in the next phase, at the same time as renovations of The Lodge at Pebble Beach’s
31 meeting facility.

32 Construction traffic would include removal of soil for the underground parking facility at the area
33 referred to as the Upper Bank Parking Lot. Total excavation is estimated to be 8,400 cubic yards of
34 export. Using 10-cubic-yard trucks, this work would require approximately 840 truck round trips.
35 Over a 3-month excavation period, 13 trucks per day would be required to move the soil from the
36 site to the Marina Landfill.⁸ During this period and the subsequent 9-month construction period, 20
37 to 50 construction workers would be required per day and delivery activity is expected to be five
38 trucks per week. Construction workers would park on-site where possible; otherwise, they would
39 park off-site (but inside Pebble Beach) and be shuttled to the work site.

⁸ PBC has indicated a desire to balance cut/fill to minimize off-site hauling. To be conservative, this analysis assumes that off-site hauling will occur to the Marina Landfill.

1 **Fairway One Reconstruction.** Construction would require approximately 16 months. This
2 construction would occur in an area where required grading and excavation are minimal, with up to
3 300 cubic yards to be exported. Using 10-cubic-yard trucks, this work would require about 30 truck
4 round trips. Over a 1-week excavation period, 6 trucks per day would be required to move the soil
5 from the site to the Marina Landfill. Typically, there would be about 60 workers per day during the
6 16-month construction of the guest rooms. Delivery activity to the construction site is expected to
7 average 10 trucks per week. All deliveries would enter Del Monte Forest through the SR 1 Gate.
8 Construction workers would park on-site where possible; otherwise, they would park off-site (but
9 inside Pebble Beach) and be shuttled to the work site.

10 **Meeting Facility Expansion.** Construction is estimated to take 10 months. Construction would
11 include demolition and foundation work. During the 1-month demolition period, 15 trucks per day
12 would be required to remove construction debris from the site to the Marina Landfill.
13 Reconstruction of the meeting facility is estimated at 10 months and requires 40 construction
14 workers per day, while delivery activity to the site would average five trucks per week. All deliveries
15 would enter the Forest through the SR 1 Gate. Construction workers would park on-site where
16 possible; otherwise, workers would park off-site (but inside Pebble Beach) and be shuttled to the
17 work site.

18 **New Colton Building.** Construction would require approximately 10 months. This construction
19 would excavate about 5,500 cubic yards, during which up to 15 workers would be on-site. Using 10-
20 cubic-yard trucks, this work would require about 550 trucks. Over a 10-week period, about 11
21 trucks per day would be required to move the soil from the site to the Marina Landfill. Construction
22 of the new guest room building is estimated to take 10 months. During this period, the number of
23 construction workers would be approximately 40 per day. Delivery activity to the site is expected to
24 average 10 trucks per week. All deliveries would enter Del Monte Forest through the SR 1 Gate.
25 Construction workers would park on-site where possible; otherwise, they would park off-site (but
26 inside Pebble Beach) and be shuttled to the work site.

27 ***The Inn at Spanish Bay***

28 The three development sites in this area include: Conference Center Expansion, New Guest Cottages,
29 and New Employee Parking.

30 **New Employee Parking.** Construction would begin before other construction at The Inn at Spanish
31 Bay. This lot, located on Congress Road at 17-Mile Drive, would be used by inn employees and
32 construction workers. This construction would occur where the site import/export would generally
33 be balanced, requiring minimal haul activities. Construction would require about 4 months and an
34 average of 20 workers per day. Delivery activity to the construction site is expected to average one
35 truck per day.

36 **New Guest Cottages.** Construction at The Inn at Spanish Bay would require approximately 16
37 months. This construction would occur in an area where required grading and excavation are
38 minimal. Construction of these buildings would require an average of 60 workers per day,
39 depending on the activity. Delivery activity to the construction site is expected to average 10 trucks
40 per week (two per day). All deliveries to the site (other than those from Pacific Grove) would enter
41 Del Monte Forest through the SFB Morse Gate from SR 68 to minimize traffic through Pacific Grove.

42 **Conference Center Expansion.** Construction would require about 20 months. Construction would
43 occur in an area requiring minimal grading and excavation because this component is an addition to

1 an existing building. Construction of this addition would require an average of 20 workers per day,
2 and delivery activity to the construction site is expected to average five trucks per week (one per
3 day). Deliveries to the site (other than those from Pacific Grove) would enter Del Monte Forest
4 through the SFB Morse Gate from SR 68 to minimize traffic through Pacific Grove.

5 ***Collins Field—Equestrian Center—Special Events Area***

6 The three development sites in this area include: Pebble Beach Driving Range Relocation from Area
7 V to Collins Field, Equestrian Center Reconstruction, and Special Events Area Grading and
8 Expansion.

9 **Pebble Beach Driving Range Relocation.** Excavation and grading would require 3 months and
10 construction of the golf building would require 5 months. Grading activities for the driving range
11 would require approximately 8,700 cubic yards of exported material to the Collins Field site. Using
12 10-cubic-yard trucks, this work would generate about 870 truck round trips. Over a 3-month
13 excavation period, 14 trucks per day would be required to move the soil from the site to the Marina
14 Landfill. The number of on-site construction workers would average 30 employees per day,
15 depending on the activity, and employees would park on-site. Delivery activity to the construction
16 site is expected to average five trucks per week (one per day). Deliveries to the site would enter Del
17 Monte Forest through the SR 1 Gate.

18 The second phase of construction includes foundation and underground utility work required for
19 the golf facility building, and top-dressing for the driving range. This activity is expected to occur
20 over a 6-week period. Once the building is framed and exterior walls are in place, work would focus
21 on the interior components. The number of on-site workers would average 40 per day, and
22 employees would park on-site. Delivery activity to the construction site is expected to average five
23 truck trips per week and to occur via the SR 1 Gate.

24 **Equestrian Center Reconstruction.** Construction would be completed in 8 months. Initial site
25 development (clearing, grading, underground utilities, etc.) would require importing 1,000 cubic
26 yards. Using standard 10-cubic-yard trucks, importing the fill would result in 100 truck round trips.
27 Over a 1-week fill period, about 20 trucks per day would be required to move the soil to the site.

28 **Special Events Area Grading and Expansion.** This would require removal of approximately 8,300
29 cubic yards, which is equivalent to about 830 trucks. Over a 2-week construction period, 83 trucks
30 per day would be required to move the soil from the site to the Marina Landfill. During construction
31 of the buildings and facilities, the daily number of on-site workers would average approximately 50,
32 who would park on-site. Truck delivery activity is expected to average two per day during the
33 construction period through the SR 1 Gate.

34 ***Area M Spyglass Hill***

35 There are two options under consideration for Area M Spyglass Hill, New Resort Hotel (Option 1)
36 and New Residential Lots (Option 2). Option 1 would include 100 guest units, three-story parking
37 structure, restaurant/lounge, meeting room and spa facility. Option 2 would include 10 residential
38 lots, and the construction characteristics would be substantially less. Therefore, Option 1 is analyzed
39 as a worst-case scenario.

40 For New Resort Hotel (Option 1), construction traffic would include removal of soil for the
41 underground parking facility and excavation to prepare the site for the proposed project. Total
42 excavation is estimated to be 48,300 cubic yards for export. Using 10-cubic-yard trucks, this work

1 would require approximately 4,830 truck round trips. Over a 6-month excavation period, 40 trucks
2 per day would be required to move the soil from the site to the Marina Landfill. During this period,
3 80 construction workers would be required and delivery activity is expected to be five trucks per
4 week. Construction workers would park off-site at PBC's parking lot adjacent to the California
5 Department of Forestry and Fire Protection (CAL FIRE) station and be shuttled to the work site.
6 Deliveries to the site would enter Del Monte Forest through the SR 1 Gate.

7 Construction of the resort hotel, including the buildings, parking, and other facilities, would require
8 24 to 30 months. Construction would require up to 180 workers per day, depending on the activity.
9 Delivery activity to the construction site is expected to average 25 trucks per week (five per day). All
10 deliveries to the site (other than those from Pacific Grove) would enter Del Monte Forest through
11 the SR 1 Gate. Construction workers would park on-site where possible; otherwise, they would park
12 off-site (but inside Pebble Beach) and be shuttled to the work site.

13 ***Roadway Improvements***

14 Roadway improvements include the SR 1/SR 68/17-Mile Drive Intersection Reconstruction and four
15 internal intersection improvements at Congress Road/17-Mile Drive, Congress Road/Lopez Road,
16 Lopez Road/Sunridge Road, and Portola Road/Stevenson Drive. The roadway improvements are
17 expected to occur over construction Phases I and II.

18 The SR 1/SR 68/17-Mile Drive Intersection Reconstruction would require excavation and grading
19 over a 3-month period in Phase 1. Total excavation is estimated at 219 cubic yards. Using 10-cubic-
20 yard trucks, this work would generate about 25 trucks. Over a 3-month excavation period, no more
21 than one truck per day would be required to move the soil from the intersection to the Marina
22 Landfill. Construction would require about 20 workers on any given day, depending on the activity.

23 Roadway improvements within Pebble Beach are required to excavate an estimated 3,780 cubic
24 yards total. Phase 1 roadway improvements include the Congress Road and Lopez Road intersection.
25 Using 10 cubic-yard-trucks, this work would generate about 375 trucks. Over a 1-week excavation
26 period, about 75 trucks per day would be required to move the soil from the intersection to the
27 Marina Landfill. Roadway improvements at the Sunridge Road and Lopez Road intersection are
28 required to excavate an estimated 30 cubic yards total. Using 10-cubic-yard trucks, this work would
29 generate about 3 haul trucks. Over a 1-week excavation period, no more than 1 truck per day would
30 be required to move the soil from the intersection to the Marina Landfill. Construction would
31 require about 10 workers on any given day, depending on the activity.

32 ***Impact Analysis***

33 Construction traffic and workers, as described above would add traffic to locations that are already
34 experiencing deficient traffic operations, in particular along SR 1 and SR 68 (see discussion of
35 existing traffic conditions under Environmental Setting). This is considered a potentially significant
36 impact at all development sites, but would be reduced in severity with implementation of Mitigation
37 Measures TRA-A1 to TRA-A4. However, even with mitigation, it is possible that construction traffic
38 may exacerbate existing unacceptable conditions on certain roadways outside Del Monte Forest and
39 thus this impact is considered significant and unavoidable.

1 **Mitigation Measure TRA-A1: Schedule construction work and truck trips to comply with**
2 **Del Monte Forest Architectural Board Design Guidelines**

3 The construction contractor will limit construction activities to between 8 a.m. and 6 p.m.,
4 Monday through Saturday, per the Del Monte Forest Architectural Board Design Guidelines
5 (Pebble Beach Company 2002) imposed on development within Pebble Beach. No work is
6 permitted on Sundays or holidays. Workers may be on-site before 8 a.m. and after 6 p.m., but no
7 work will be performed that will disturb neighboring residents. This requirement will be
8 incorporated into the traffic control plan required by Mitigation Measures TRA-A2.

9 **Mitigation Measure TRA-A2: Develop and implement a traffic control plan**

10 A traffic control plan, including a comprehensive set of traffic control measures, will be prepared
11 by the construction contractor, submitted to Monterey County for review and approval, before
12 issuance of grading or building permits. The plan will include procedures for scheduling major
13 truck trips and deliveries to avoid special event activity in Del Monte Forest and minimize peak
14 hour activity on roads operating below LOS significance thresholds. Lane closure procedures,
15 including signs, cones, and other warning devices for drivers, will be identified as appropriate.
16 Use of steel plates to maintain through traffic on roads will be considered, and construction
17 access routes will be identified. Construction staging is anticipated to occur on-site for all
18 project components and will be verified by the County. On-site parking will be provided for all
19 construction workers to minimize the impact on area roads. When on-site parking cannot be
20 provided, alternative parking and shuttle systems will be developed and verified by the County.

21 **Mitigation Measure TRA-A3: Obtain approval for construction truck traffic routes from**
22 **Monterey County and include routes in all contracts**

23 PBC will provide a plan, which must be approved by the County, that ensures that, wherever
24 possible, construction truck travel will occur on collector and arterial roads, not on local or
25 resident streets. Traffic control will be used during major off-hauling activities. Any damage
26 attributable to haul trucks on haul routes will be repaired, to the satisfaction of the appropriate
27 agency, by PBC. Approved truck traffic routes will be included in the traffic control plan required
28 by Mitigation Measures TRA-2 and be reviewed and approved by Monterey County prior to
29 issuance of grading or building permits.

30 **Mitigation Measure TRA-A4: Implement SR 1/SR 68/17-Mile Drive Intersection**
31 **Reconstruction early in overall construction schedule**

32 To address the impacts of construction worker traffic on the surrounding road system, PBC will
33 seek to implement the SR 68/SR 1 southbound off-ramp intersection improvements within 6 to
34 12 months of beginning construction on the developments included in the proposed project.
35 With this improvement in place, traffic flow in and out of Del Monte Forest, as well as traffic flow
36 through the SR 1/SR 68/17-Mile Drive interchange, will improve over the current deficient
37 conditions. The exact timing of this measure will be based on more refined construction staging
38 during the permit review process and take into consideration factors outside the control of PBC,
39 such as Caltrans approval of the design and supporting documentation.

1 Traffic during Project Operations (2015)

2 The traffic impacts analysis presented below reflects the 2015 with-project conditions. All analysis
 3 in this section addresses Option 1 (New Resort Hotel). Appendix G.2 contains the results of the
 4 traffic analysis for Option 2 (New Residential Lots). Impacts of Option 2 on traffic are generally less
 5 than Option 1 because fewer trips are generated. Therefore, under 2015 conditions with Option 2,
 6 all disclosed impacts and mitigation remain the same as under 2015 conditions with Option 1. The
 7 assessment of cumulative conditions plus the proposed project (cumulative plus project) appears in
 8 the “Cumulative Impacts” discussion at the end of this section.

9 B. Del Monte Forest Gates

10 Impact TRA-B1: The project would result in a minor increase in traffic at the Del Monte
11 Forest gates. (Less than significant)

12 Del Monte Forest gates were analyzed under 2015 with-project conditions. The V/C results are
 13 presented in Table 3.11-24. The service levels represent traffic conditions experienced by the
 14 inbound traffic during the AM and PM peak hours. Under 2015 with-project conditions, all of the
 15 gates continue to operate at acceptable levels. This is a less-than-significant impact.

16 Table 3.11-24. Forest Gate Peak Hour Volumes and Levels of Service—2015 With-Project
17 Conditions

Gate	Peak Hour Volume/ Volume-to-Capacity Ratio ^a		
	Existing (2011)	2015 Without Project	2015 With Project ^b
AM Peak Period			
Pacific Grove	103/0.17	105/0.18	156/0.26
Carmel	128/0.14	132/0.15	139/0.15
SR 1	483/0.53	497/0.54	543/0.59
Country Club	189/0.32	194/0.32	197/0.33
SFB Morse	130/0.25	134/0.26	142/0.27
PM Peak Period			
Pacific Grove	135/0.23	139/0.23	173/0.29
Carmel	137/0.15	141/0.16	148/0.16
SR 1	328/0.36	337/0.37	387/0.42
Country Club	212/0.35	218/0.36	228/0.38
SFB Morse	132/0.25	136/0.26	144/0.28

Source:

Fehr & Peers 2011.

Notes:

^a The V/C ratio describes the inbound peak hour traffic flow as it relates to gate capacity. A ratio below 0.9 is considered acceptable.

^b Project conditions reflect Option 1 (New Resort Hotel).

18

1 **C. Impacts on Roadway Intersections and Segments**

2 **Impact TRA-C1: The project would add substantial traffic to intersections in Del Monte Forest**
3 **and the immediate vicinity to decrease from acceptable levels of service to unacceptable**
4 **levels or to worsen existing unacceptable levels of service. (significant and unavoidable with**
5 **mitigation)**

6 Traffic analysis results for 2015 with-project conditions at the intersections are shown in Table
7 3.11-25 and Table 3.11-26 (AM and PM peak hours, respectively). Appendix G.1 contains the
8 intersection traffic volumes used in this section.

9 **Intersections in Del Monte Forest and Immediate Vicinity**

10 As shown in Table 3.11-25 and Table 3.11-26, the project would have significant impacts at three
11 intersections compared to existing conditions: SR 68/Skyline Forest Drive, SR 68/Carmel Hill
12 Professional Center and SR 1/Ocean Avenue.

13

1 **Table 3.11-25. Intersection AM Peak Hour Levels of Service—2015 With-Project Conditions**

Intersection	Control^a	Existing (2011)^{b, c, d}	2015 Without Project^{b, c, d}	2015 With-Project^{b, c, d, e}
Sunset Drive (SR 68)/17-Mile Drive ^f	AWSC	6.9/A	7.3/A	8.4/A
Sunset Drive (SR 68)/Congress Road ^f	AWSC	11.8/B	16.3/C	21.2/C
Congress Avenue/Forest Lodge Road	AWSC	11.5/B	12.9/B	13.0/B
Congress Avenue/David Avenue	AWSC	10.9/B	11.9/B	12.0/B
Forest Avenue (SR 68)/David Avenue	Signal	24.8/C	25.8/C	26.6/C
SR 68/Prescott Avenue	Signal	11.2/B	12.7/B	12.8/B
SR 68/Presidio Boulevard ^f	SSSC	3.8 (4.3)/A(A)	4.2 (4.7)/A(A)	4.3 (4.6)/A(A)
SR 68/SFB Morse Gate	Signal	5.3/A	5.5/A	5.3/A
SR 68/Skyline Forest Drive	SSSC	21.4(>120)/C(F)	33.3(>120)/D(F)	37.3(>120)/E(F)^g
Skyline Forest Drive/Skyline Drive	AWSC	7.9/A	8.1/A	8.1/A
SR 68/Community Hospital	Signal	7.1/A	8.2/A	8.4/A
SR 68/Carmel Hill Professional Center	SSSC	64.6(>120)/F(F)	95.0(>120)/F(F)	93.0(>120)/F(F)^g
SR 68/SR 1 Southbound Off-Ramp	Signal	80.8/F	105.7/F	34.3/C
17-Mile Drive/SR 1 Southbound On-Ramp	SSSC	3.2 (14.1)/A(B)	3.5 (15.1)/A(C)	Eliminated ^h
SR 68/Aguaquito Road ^f	SSSC	2.6 (9.5)/A(A)	2.4 (11.8)/A(B)	3.0(15.4)/A(C)
SR 1/Carpenter Street	Signal	16.0/B	18.3/B	18.4/B
San Antonio Road/Ocean Avenue	AWSC	7.9/A	8.2/A	8.3/A
SR 1/Ocean Avenue	Signal	34.5/C	39.5/D	40.7/Dⁱ
SR 1/Carmel Valley Road	Signal	9.4/A	9.7/A	9.9/A
SR 1/Rio Road	Signal	30.5/C	32.3/C	32.3/C
17-Mile Drive/Congress Road	SSSC	4.8 (10.6)/A(B)	5.2 (11.2)/A(B)	5.3 (12.6)/A(B)
Forest Lodge Road/Congress Road	SSSC	2.0 (11.1)/A(B)	3.1 (11.8)/A(B)	3.3 (12.0)/A(B)
SFB Morse Drive/Congress Road	AWSC	7.7/A	7.8/A	7.9/A
17-Mile Drive/Forest Lodge Road/Sloat Road ^f	SSSC	4.5 (7.1)/A(A)	4.6 (7.4)/A(A)	5.0 (8.0)/A(A)
Lopez Road/Sloat Road	AWSC	8.0/A	8.2/A	8.6/A
Spyglass Hill Road/Stevenson Drive	SSSC	2.9 (8.6)/A(A)	3.2 (8.9)/A(A)	4.9 (9.7)/A(A)
Forest Lake Road/Stevenson Drive	SSSC	4.0 (11.9)/A(B)	4.8 (13.4)/A(B)	4.8 (15.3) A(C)
17-Mile Drive/Alvarado Lane	AWSC	9.4/A	9.9/A	11.1/B
17-Mile Drive/Palmero Way	SSSC	2.2 (15.5)/A(C)	3.1 (18.4)/A(C)	3.2(21.0)/A(C)

Intersection	Control^a	Existing (2011)^{b, c, d}	2015 Without Project^{b, c, d}	2015 With-Project^{b, c, d, e}
Sunridge Road/Ronda Road	SSSC	2.1 (10.0)/A(A)	2.6 (10.4)/A(B)	3.0 (10.7)/A(B)
Sunridge Road/Scenic Drive	SSSC	0.6 (9.8)/A(A)	0.9 (10.2)/A(B)	0.8 (10.3)/A(B)
Sunridge Road/Constanilla Way	SSSC	5.5 (9.5)/A(A)	5.6 (9.7)/A(A)	5.4 (9.8)/A(A)
Sunridge Road/Haul Road ^h	SSSC	0.8 (5.3)/A(A)	1.2 (7.4)/A(A)	1.4 (6.8)/A(A)

Source:

Fehr & Peers 2011.

Notes:

^a Signal = signalized intersection; SSSC = side-street stop-controlled intersection; AWSC = all-way stop-controlled intersection.

^b Average delay (in seconds) is listed first, followed by corresponding LOS.

^c For side-street stop-controlled intersections, average delay is listed first, followed by delay for worst approach.

^d Intersections that experience a significant project contribution are shown in bold.

^e Project conditions reflect Option 1 (New Resort Hotel).

^f Intersection analyzed using SimTraffic.

^g The 2015 With-Project conditions represent a significant change from existing conditions. The proposed project would contribute traffic to an intersection already operating at an unacceptable LOS F condition.

^h This intersection would be eliminated as part of the proposed project.

ⁱ The 2015 With-Project conditions represent a significant change from existing conditions. This signalized intersection experiences an increase of v/c of 0.01 or more with 2015 with-project conditions compared to 2015 without-project conditions.

1
2

1 **Table 3.11-26 Intersection PM Peak Hour Levels of Service—2015 With-Project Conditions**

Intersection	Control^a	Existing (2011)^{b, c, d}	2015 Without Project^{b, c, d}	2015 With Project^{b, c, d, e}
Sunset Drive (SR 68)/17-Mile Drive ^f	AWSC	5.6/A	6.0/A	6.8/A
Sunset Drive (SR 68)/Congress Road ^f	AWSC	9.6/A	11.4/B	13.0/B
Congress Avenue/Forest Lodge Road	AWSC	10.6/B	11.4/B	11.5/B
Congress Avenue/David Avenue	AWSC	10.5/B	11.5/B	11.6/B
Forest Avenue (SR 68)/David Avenue	Signal	30.1/C	32.4/C	33.4/C
SR 68/Prescott Avenue	Signal	19.2/B	21.4/C	21.5/C
SR 68/Presidio Boulevard ^f	SSSC	3.6 (3.8)/A(A)	3.7 (3.9)/A(A)	3.7 (3.9)/A(A)
SR 68/SFB Morse Gate	Signal	3.9/A	4.0/A	4.2/A
SR 68/Skyline Forest Drive	SSSC	15.9(>120)/C(F)	25.1(>120)/D(F)	28.3(>120)/C(F)^g
Skyline Forest Drive/Skyline Drive	AWSC	8.3/A	8.5/A	8.5/A
SR 68/Community Hospital	Signal	8.7/A	9.1/A	9.3/A
SR 68/Carmel Hill Professional Center	SSSC	23.4(>120)/C(F)	39.3(>120)/E(F)	>120(>120)/F(F)^g
SR 68/SR 1 Southbound Off-Ramp	Signal	70.1/E	79.0/E	40.2/D
17-Mile Drive/SR 1 Southbound On-Ramp	SSSC	8.7 (22.9)/A(C)	9.6 (25.7)/A(D)	Eliminated ^h
SR 68/Aguaquito Road ^f	SSSC	2.9 (11.0)/A(A)	3.3 (16.0)/A(C)	3.6 (17.7)/A(C)
SR 1/Carpenter Street	Signal	45.9/D	57.9/E	59.6/E ⁱ
San Antonio Road/Ocean Avenue	AWSC	8.8/A	9.2/A	9.3/A
SR 1/Ocean Avenue	Signal	45.4/D	51.8/D	52.9/Dⁱ
SR 1/Carmel Valley Road	Signal	17.4/B	18.7/B	19.0/B
SR 1/Rio Road	Signal	32.9/C	35.9/D	36.0/D ⁱ
17-Mile Drive/Congress Road	SSSC	5.5 (11.8)/A(B)	6.2 (12.9)/A(B)	7.2 (15.1)/A(C)
Forest Lodge Road/Congress Road	SSSC	3.5 (13.9)/A(B)	4.4 (15.4)/A(C)	4.7 (16.2)/A(C)
SFB Morse Drive/Congress Road	AWSC	7.9/A	8.1/A	8.2/A
17-Mile Drive/Forest Lodge Road/Sloat Road ^f	SSSC	4.1 (7.7)/A(A)	4.5 (7.8)/A(A)	4.9 (8.7)/A(A)
Lopez Road/Sloat Road	AWSC	8.0/A	8.5/A	9.1/A
Spyglass Hill Road/Stevenson Drive	SSSC	2.7 (9.0)/A(A)	3.1 (9.3)/A(A)	4.6 (10.1)/A(B)
Forest Lake Road/Stevenson Drive	SSSC	3.9 (11.7)/A(B)	4.4 (12.6)/A(B)	4.3 (14.2)/A(B)
17-Mile Drive/Alvarado Lane	AWSC	9.6/A	10.3/B	11.7/B
17-Mile Drive/Palmero Way	SSSC	3.5 (16.2)/A(C)	4.6 (17.7)/A(C)	4.8 (19.8)/A(C)

Intersection	Control^a	Existing (2011)^{b, c, d}	2015 Without Project^{b, c, d}	2015 With Project^{b, c, d, e}
Sunridge Road/Ronda Road	SSSC	3.7 (9.5)/A(A)	3.9 (9.8)/A(A)	4.0 (10.0)/A(B)
Sunridge Road/Scenic Drive	SSSC	0.8 (10.6)/A(B)	1.2 (10.5)/A(B)	1.1 (10.8)/A(B)
Sunridge Road/Constanilla Way	SSSC	2.5 (9.2)/A(A)	2.8 (9.4)/A(A)	3.2 (9.5)/A(A)
Sunridge Road/Haul Road ^f	SSSC	1.1 (5.6)/A(A)	1.4 (5.5)/A(A)	1.5 (5.8)/A(A)

Source:

Fehr & Peers 2011.

Notes:

^a Signal = signalized intersection; SSSC = side-street stop-controlled intersection; AWSC = all-way stop-controlled intersection.

^b Average delay (in seconds) is listed first, followed by corresponding LOS.

^c For side-street stop-controlled intersections, average delay is listed first, followed by delay for worst approach.

^d Intersections that experience a significant project contribution are shown in **bold**.

^e Project conditions reflect Option 1 (New Resort Hotel).

^f Intersection analyzed using SimTraffic.

^g The 2015 With-Project conditions represent a significant change from existing conditions. The proposed project would contribute traffic to an intersection already operating at an unacceptable LOS F condition.

^h This intersection would be eliminated as part of the proposed project.

ⁱ The 2015 With-Project conditions represent a significant change from existing conditions. However, the proposed project would not increase the critical movement v/c ratio by 0.01 or more with 2015 With-Project conditions compared to 2015 Without-Project conditions.

^j The 2015 With-Project conditions represent a significant change from existing conditions. The proposed project would increase the critical movement v/c ratio by 0.01 or more with 2015 With-Project conditions compared to 2015 Without-Project conditions.

1 SR 68/Skyline Forest Drive

2 This is an unsignalized intersection that currently operates at LOS F conditions for left-turns from
3 Skyline Drive onto SR 68. The left-turning traffic from Skyline Drive (the stop-controlled approach)
4 onto SR 68 will operate at LOS F during both the weekday AM and PM peak hours under 2015 with-
5 project conditions. This impact is considered significant because the proposed project adds more
6 than one vehicle trip to an intersection operating at LOS F without the proposed project. With the
7 construction of the measure described in MM TRA-C1, the intersection would operate at LOS A (7.7
8 seconds of delay) and LOS A (9.2 seconds of delay) during the AM and PM peak hours, respectively.

9 The existing conditions at this intersection would be mitigated by installing a traffic signal at the
10 intersection of SR 68/Skyline Forest Drive and by widening SR 68 from two to four lanes through
11 the intersection. Therefore, Mitigation Measure TRA-C1 requires the applicant be responsible for a
12 fair-share contribution to this mitigation based on total traffic as the intersection is already deficient
13 under existing conditions. The impact would remain significant and unavoidable during the interim
14 period between when the impact occurs and when the improvement is actually built. This impact
15 would also remain significant and unavoidable if sufficient funds are not derived from other sources
16 or if fair-share fees for this mitigation are instead concentrated to pay for other proposed mitigation.

**17 Mitigation Measure TRA-C1: Pay fair-share contribution to install a traffic signal at the
18 intersection of SR 68/Skyline Forest Drive and widen SR 68 from two to four lanes
19 through the intersection**

20 PBC will make a fair-share contribution for a traffic signal at the intersection of SR 68/Skyline
21 Forest Drive and to widen the intersection to four lanes. The contribution will be made prior to
22 issuance of the first project building permit. The widening is necessary to accommodate traffic
23 signal operations and minimize vehicle queues; it would generally occur within 500 to 600 feet
24 on either side of Skyline Forest Drive. This intersection meets the peak hour traffic signal
25 warrant with the proposed project under 2015 conditions.

26 Based on the project's contribution to this intersection over the total traffic, the project's
27 estimated share of impact is 1.68 percent. The estimated cost of this mitigation is \$2,444,000
28 (Fehr & Peers 2011). Thus, the estimated mitigation fair-share fee for this impact is \$41,000.

29 This mitigation measure is not included in any existing local or regional traffic improvement
30 program. The County shall have the discretion to concentrate funds derived from PBC's fair-
31 share contributions to other project mitigation measures to accelerate the funding and
32 implementation of one or more mitigation measures.

33 SR 68/Carmel Hill Professional Center

34 This is an unsignalized intersection that currently operates at LOS F for the left-turning traffic from
35 the professional center onto SR 68. The left-turning traffic from the professional center (the stop-
36 controlled approach) onto SR 68 will operate at LOS F during both the weekday AM and PM peak
37 hours under 2015 with-project conditions. The SR 68/Carmel Hill Professional Center intersection
38 meets the peak hour traffic signal warrant with the proposed project under 2015 conditions.

39 This impact is considered significant because the proposed project adds more than one vehicle trip
40 to an intersection operating at LOS F without the proposed project. With the construction of the

1 measure described in MM TRA-C2, the intersection would operate at LOS A (5.2 seconds of delay)
2 and LOS A (5.4 seconds of delay) during the AM and PM peak hours, respectively.

3 The existing conditions at this intersection would be mitigated by implementing the full SR 68
4 Widening Project. Therefore, Mitigation Measure TRA-C2 requires the applicant be responsible for a
5 fair-share contribution to this mitigation based on total traffic as the intersection is already deficient
6 under existing conditions. The impact would remain significant and unavoidable during the interim
7 period between when the impact occurs and when the improvement is actually built.

8 **Mitigation Measure TRA-C2: Pay fair-share contribution to construct the full SR 68**
9 **Widening Project**

10 PBC will make a fair-share contribution to constructing the full SR 68 Widening Project through
11 the TAMC Regional Impact Fee Program as the widening project is included in the TAMC
12 program.

13 The contribution will be made prior to issuance of the first project building permit. The full SR
14 68 Widening Project, as identified in the Regional Transportation Plan, extends from the SR 1
15 southbound off-ramp intersection to the Community Hospital intersection, and includes
16 signalization of the Carmel Hill Professional Center intersection.

17 The full SR 68 Widening Project identified in the RTP includes the following features:

- 18 ● Widen SR 68 from a two-lane to four-lane cross section from the ramp terminal intersection
19 with SR 1 through the Community Hospital intersection.
- 20 ● Widening the Highway 68 overcrossing at Highway 1.
- 21 ● Replace the Scenic Drive overcrossing to accommodate the four-lane SR 68.
- 22 ● Widen the SR 1 southbound off-ramp for more vehicle storage and provide a left-turn lane.
- 23 ● Reconfigure the SR 1 southbound on-ramp to separate Pebble Beach- and highway-related
24 traffic.
- 25 ● Extend the SR 1 southbound on-ramp merge from Pebble Beach.
- 26 ● Signalize the Carmel Hill Professional Center driveway at SR 68.

27 The 68 Widening Project has an estimated cost of \$25,000,000 (Fehr & Peers 2011). Based on
28 the project's portion of total traffic at the PM peak hour of 3.11 percent at the SR 1/SR 68
29 interchange, the fair share contribution for this mitigation would be approximately \$778,000.
30 The actual fair-share contribution will need to be determined by the County and TAMC, taking
31 into account the Regional Impact Fee Program requirements, the mitigation value of the Phase
32 1B improvements (which are part of the Highway 68 Widening project valued at approximately
33 \$4,000,000 (Fehr & Peers, 2011)), the local access benefit of the Phase 1B improvement to the
34 applicant (previously calculated as 25% for the prior 2005 project) and the calculation of the
35 project's fair-share.

36 Fair-share contribution to the TAMC Regional Impact Fee Program shall not be redirected to
37 other mitigation measures.

1 **SR 1/Ocean Avenue**

2 This is a signalized intersection that currently operates at an acceptable LOS C during the weekday
3 AM peak hour and an unacceptable LOS D in the PM peak hour. The intersection will operate at LOS
4 D (40.7 seconds of delay) and LOS D (52.9 seconds of delay) during the weekday AM and PM peak
5 hours under 2015 with-project conditions, respectively. The proposed project would increase the
6 delay by 0.8 seconds and 1.1 seconds in the AM and PM peak hours, respectively. This impact is
7 considered significant because the proposed project would contribute to a lowering of the level of
8 service from existing condition to an unacceptable LOS and because the proposed project would
9 increase the intersection's critical movement V/C ratio from 0.81 to 0.82 in the AM peak hour and
10 0.92 to 0.93 in PM peak hour, both of which are equal to the 0.01 threshold change. With the
11 construction of the measure described in MM TRA-C3, the SR 1/Ocean Avenue intersection would
12 improve to LOS C (24.5 seconds of delay) and LOS C (34.9 seconds of delay) during the AM and PM
13 peak hours, respectively.

14 The existing conditions at this intersection would be mitigated by constructing new turn lanes and
15 establishing new traffic signal timings at the SR 1/Ocean Avenue intersection. Therefore, Mitigation
16 Measure TRA-C3 requires that the applicant be responsible for a fair-share contribution to this
17 mitigation. The impact would remain significant and unavoidable during the interim period between
18 when the impact occurs and when the improvement is actually built. This impact would also remain
19 significant and unavoidable if sufficient funds are not derived from other sources or if fair-share fees
20 for this mitigation are instead concentrated to pay for other proposed mitigation.

21 **Mitigation Measure TRA-C3: Pay fair-share contribution to construct new turn lanes and** 22 **establish new traffic signal timings at the SR 1/Ocean Avenue intersection**

23 PBC will make a fair-share contribution to construct new turn lanes and establish new traffic
24 signal timing at the SR 1/Ocean Avenue intersection. The contribution will be made prior to
25 issuance of the first project building permit.

26 The new turn lanes included in this mitigation are right-turn lanes on Ocean Avenue westbound
27 and eastbound approach to SR 1. The eastbound right-turn lane at the SR 1/Ocean Avenue
28 intersection was also identified in the September Ranch EIR (County of Monterey 2004) as a
29 mitigation measure with the understanding that the September Ranch Project would contribute
30 its fair-share to construct the improvement.

31 PBC is responsible for a fair-share contribution to this mitigation based on total traffic as the
32 intersection is already deficient under existing conditions. Based on the project's contribution to
33 this intersection over the total traffic, the project's estimated share of impact is 0.66 percent.
34 The estimated cost of this mitigation is \$192,800 (Fehr & Peers 2011). Thus, the estimated
35 mitigation fair-share fee for this impact is \$1,200.

36 This mitigation measure is not included in any existing local or regional traffic improvement
37 program. The County shall have the discretion to concentrate funds derived from PBC's fair-
38 share contributions to other mitigation measures to accelerate the funding and implementation
39 of one or more mitigation measures.

40 **Regional Highway Sections**

41 Regional highway sections were evaluated for project impacts on traffic operations during typical
42 weekday AM and PM peak hour conditions in 2015. Tables 4-5 and 4-6 of the transportation study

1 (Fehr & Peers 2011) contain the 2015 with-project AM and PM peak hour traffic volumes used in
 2 this section.

3 **Impact TRA-C2: The project would add traffic to regional highway sections that are projected**
 4 **to operate at unacceptable levels of service. (Significant and unavoidable with mitigation)**

5 As shown in Table 3.11-27, 2015 with-project conditions show a decline from an acceptable LOS C to
 6 LOS D and the proposed project contributes to this decline at one location:

- 7 • SR 1 from Munras Street to Fremont Street (PM peak hour).

8 As shown in Table 3.11-27, the proposed project would add traffic to roadway sections already
 9 operating at an unacceptable LOS of F without the proposed project at the following locations:

- 10 • SR 1 from Fremont Street to Fremont Boulevard (AM and PM peak hours).
- 11 • SR 1 north of SR 156 (AM and PM peak hours).
- 12 • SR 68 east of Laguna Seca (AM and PM peak hours).
- 13 • SR 156 from SR 1 to US 101 (PM peak hour).

14 **Table 3.11-27. Regional Highway Section Levels of Service—2015 With-Project Conditions**

Highway	Section	Direction	Existing (2011) Conditions	2015 Without Project ^{a, b}	2015 With Project ^{a, b, c}
AM Peak Hour					
SR 1	SR 68 (west) to Munras Avenue	North	0.65/C	0.65/C	0.66/C
SR 1	Munras Avenue to Fremont Street	North	0.49/C	0.50/C	0.51/C
		South	0.72/D	0.74/D	0.75/D
SR 1	Fremont Street to Fremont Boulevard	North	0.48/C	0.50/C	0.50/C
		South	1.08/F	1.10/F	1.11/F
SR 1	Fremont Boulevard to Imjin Parkway	North	0.34/B	0.34/B	0.34/B
		South	0.72/D	0.73/D	0.74/D
SR 1	North of SR 156	North	0.70/D	0.73/D	0.74/D
		South	1.35/F	1.42/F	1.43/F
SR 68	West of Skyline Forest Drive	East	0.73/D	0.75/D	0.77/D
		West	0.50/C	0.52/C	0.54/C
SR 68	East of Olmstead Road	East	0.71/D	0.71/D	0.72/D
		West	0.75/D	0.75/D	0.77/D
SR 68	East of Laguna Seca	East	1.14/F	1.15/F	1.15/F
		West	0.77/D	0.78/D	0.79/D
US 101	South of Salinas	North	0.27/B	0.27/B	0.27/B
		South	0.25/B	0.25/B	0.25/B
US 101	North of SR 156	North	0.42/B	0.43/B	0.44/B
		South	0.56/C	0.58/C	0.58/C
SR 156	SR 1 to US 101	East	0.54/C	0.54/C	0.55/C
		West	0.89/E	0.89/E	0.90/E

Highway	Section	Direction	Existing (2011) Conditions	2015 Without Project ^{a, b}	2015 With Project ^{a, b, c}
PM Peak Hour					
SR 1	SR 68 (west) to Munras Avenue	North	0.86/D	0.86/D	0.88/D
SR 1	Munras Avenue to Fremont Street	North	0.68/C	0.68/D	0.70/D
		South	0.56/C	0.57/C	0.58/C
SR 1	Fremont Street to Fremont Boulevard	North	1.00/E	1.02/F	1.03/F
		South	0.77/D	0.78/D	0.79/D
SR 1	Fremont Boulevard to Imjin Parkway	North	0.83/D	0.84/D	0.84/D
		South	0.49/C	0.50/C	0.50/C
SR 1	North of SR 156	North	1.57/F	1.66/F	1.67/F
		South	0.98/E	1.04/F	1.04/F
SR 68	West of Skyline Forest Drive	East	0.60/C	0.62/C	0.64/C
		West	0.78/D	0.81/D	0.83/D
SR 68	East of Olmstead Road	East	0.73/D	0.73/D	0.74/D
		West	0.84/D	0.84/D	0.85/D
SR 68	East of Laguna Seca	East	0.90/E	0.91/E	0.92/E
		West	1.20/F	1.20/F	1.21/F
US 101	South of Salinas	North	0.35/B	0.36/B	0.36/B
		South	0.45/B	0.45/B	0.45/B
US 101	North of SR 156	North	0.61/C	0.62/C	0.63/C
		South	0.65/C	0.66/C	0.66/C
SR 156	SR 1 to US 101	East	1.18/F	1.19/F	1.20/F
		West	0.63/C	0.63/C	0.63/C

Source:

Fehr & Peers 2011.

Notes:

^a V/C ratio is listed first, followed by corresponding LOS.

^b Highway sections that experience a significant traffic impact due to the proposed project are shown in **bold**.

^c Project conditions reflect Option 1 (New Resort Hotel).

1
 2 This is a significant impact, and improvements to various parts of SR 1, SR 68, and SR 156 would be
 3 required, to reduce this impact to a less-than-significant level. Mitigation Measure TRA-C4 requires
 4 the applicant to pay a fair share contribution to TAMC’s Regional Development Impact Fee Program.
 5 This Fee Program (described under Regulatory Setting) would provide funding toward certain
 6 regional improvements projects, but other sources of funding would be required to fully fund the
 7 improvements. However, implementation of the Fee Program would not by itself fully address all of
 8 the identified operational deficiencies along SR 1, SR 68 east and SR 156 and this impact is
 9 considered significant and unavoidable with mitigation due to the lack of a regional transportation
 10 improvement program to address all regional highway deficiencies. This impact would also be
 11 significant and unavoidable between the completion of proposed project construction and the
 12 completion of regional highway improvements included in the TAMC regional program.

1 **Mitigation Measure TRA-C4. Pay fair-share traffic impact fee for various improvements to**
2 **SR 1, SR 68, and SR 156 based on the conditions described in TAMC's Regional**
3 **Development Impact Fee Program.**

4 PBC shall make a contribution to the TAMC Regional Development Impact Fee Program based on
5 the program requirements. The contribution will be made prior to issuance of the first project
6 building permit. Fair-share contribution to the TAMC Regional Impact Fee Program shall not be
7 redirected to other mitigation measures.

8 **SR 1/SR 68 Interchange Ramp Junctions**

9 The SR 1 ramps to and from SR 68 (west) were evaluated for project impacts on traffic operations
10 during typical weekday AM and PM peak hour conditions in 2015.

11 **Impact TRA-C3: The proposed project would add traffic to highway ramps operating at an**
12 **unacceptable level of service. (Significant and unavoidable with mitigation)**

13 As shown in Table 3.11-28, none of the studied ramps is anticipated to experience a deterioration
14 from an acceptable LOS to an unacceptable LOS or drop a LOS letter grade as a result of the
15 implementation of the proposed project. The only ramp that would experience deficient operations
16 (LOS D, which is less than the transition between LOS C and LOS D for state highway operations)
17 with the proposed project is the SR 1 northbound on-ramp merge from SR 68 (west). The proposed
18 project would increase the V/C ratio by more than 0.01. This impact is considered significant.

1 **Table 3.11-28. SR 1/SR 68 Interchange Ramp Junction Levels of Service—2015 With-Project**
 2 **Conditions**

Freeway Ramp	Section Type	Existing (2011)	2015 Without Project	2015 With Project^a
AM Peak Hour				
Density^b/LOS				
SR 1 Northbound On-Ramp from SR 68	Merge ^c	19.9/B	20.3/C	20.6/C
SR 1 Southbound On-Ramp from SR 68	Merge ^c	20.3/C	20.9/C	21.0/C
SR 1 Northbound Off-Ramp to SR 68	Diverge ^c	18.2/B	18.7/B	18.8/B
Weaving Speed (mph)/LOS				
SR 1 Southbound Off-Ramp to SR 68	Weave ^d	38.6/B	38.1/B	37.6/B
PM Peak Hour				
Density^b/LOS				
SR 1 Northbound On-ramp from SR 68	Merge ^c	29.3/D	30.0/D	30.0/D
SR 1 Southbound On-Ramp from SR 68	Merge ^c	21.1/C	21.5/C	21.6/C
SR 1 Northbound Off-Ramp to SR 68	Diverge ^c	21.1/C	21.5/C	21.6/C
Weaving Speed (mph)/LOS				
SR 1 Southbound Off-Ramp to SR 68	Weave ^d	35.3/C	34.9/C	34.7/C

Source:

Fehr & Peers 2011.

Notes:

^a Project conditions reflect Option 1 (New Resort Hotel).

^b Passenger cars per lane per mile.

^c HCM 2000 methodology.

^d Caltrans Highway Design Manual methodology.

3
 4 The deficient conditions at this ramp would be mitigated by adding an auxiliary lane. With
 5 Mitigation Measure TRA-C5, SR 1 northbound between SR 68 (west) and Munras Avenue would
 6 operate at LOS B and LOS C during the AM and PM peak hours, respectively, which would reduce the
 7 impact to a less-than-significant level. Therefore, Mitigation Measure TRA-C5 requires that the
 8 applicant be responsible for a fair-share contribution to this mitigation. The impact would remain
 9 significant and unavoidable during the interim period between when the impact occurs and when
 10 the improvement is actually built. This impact would also remain significant and unavoidable if
 11 sufficient funds are not derived from other sources or if fair-share fees for this mitigation are
 12 instead concentrated to pay for other proposed mitigation.

13 **Mitigation Measure TRA-C5: Pay fair-share contribution to replace the SR 1 northbound**
 14 **merge at SR 68 (west) with an auxiliary lane between SR 68 (west) and Munras Avenue.**

15 Prior to issuance of the first build permit for the proposed project, PBC will make a fair-share
 16 contribution to replace the SR 1 northbound merge at SR 68 (west) with an auxiliary lane
 17 between SR 68 (west) and Munras Avenue. An auxiliary lane between SR 68 (west) and Munras
 18 Avenue will alleviate operational problems in the future with the merge.

1 Based on the project's contribution to this intersection over the total traffic, the project's
2 estimated share of impact is 1.37 percent. The estimated cost of this mitigation is \$5,584,800
3 (Fehr & Peers 2011). Thus, the estimated mitigation fair-share fee for this impact is \$76,000.

4 This mitigation measure is not included in any existing local or regional traffic improvement
5 program. The County will have the discretion to concentrate funds derived from PBC's fair-share
6 contributions to several mitigation measures to accelerate the funding and implementation of
7 one or more mitigation measures.

8 **D. Access and Circulation**

9 **Impact TRA-D1: The project would create new roadways that do not meet the design criteria**
10 **established in the Del Monte Forest Transportation Policy Agreement, substantially increase**
11 **hazards because of roadway design or internal circulation patterns, or result in inadequate**
12 **emergency access. (Less than significant with mitigation)**

13 The analysis of site circulation and access for the proposed project is divided into six elements:

- 14 ● General Access and Circulation Issues (all sites).
- 15 ● The Lodge at Pebble Beach.
- 16 ● The Inn at Spanish Bay.
- 17 ● Spyglass Hotel.
- 18 ● Pebble Beach Driving Range.
- 19 ● Equestrian Center.

20 **General Access and Circulation Issues**

21 The analysis considers the site plans provided by PBC. Engineering judgment is applied to direct
22 subsequent site design efforts should the proposed project be approved. Pending final design, this is
23 considered a potentially significant impact that can be reduced to a less-than-significant level with
24 the implementation of the following measures, described below.

25 **Mitigation Measure TRA-D1: Ensure compliance with the Del Monte Forest** 26 **Transportation Policy Agreement.**

27 PBC will conform all subsequent site plan development and engineering design to the Del Monte
28 Forest Transportation Policy Agreement as it relates to intersections within the forest road
29 system (including driveways). General design criteria are described under "Regulatory Setting."
30 The County will conduct site plan review as part of the building permit process to ensure
31 compliance.

32 **Mitigation Measure TRA-D2: Incorporate a 25-foot transition between all driveways and** 33 **roadways that has no more than a 2% grade.**

34 PBC will design all driveway intersections to the Del Monte Forest road system to incorporate a
35 25-foot transition between the driveway and road that has no more than a 2% grade. This will
36 help to ensure that drivers have maximum sight distance. The County will conduct site plan
37 review as part of the building permit process to ensure compliance.

1 **The Lodge at Pebble Beach**

2 Proposed development that could result in access and circulation impacts includes Fairway One
3 Reconstruction, New Colton Building, and Parking and Circulation Reconstruction.

4 Parking and Circulation Reconstruction: The changes would provide additional parking and
5 improved circulation for visitors to the area. The current surface parking area would be redesigned,
6 providing a well-defined access road that connects three distinct parking areas. The site plan
7 illustrates two traffic circle-like features along 17-Mile Drive that are intended to focus pedestrian
8 crossings. The final design of these improvements should ensure that vehicle channelization is well-
9 defined and that all pedestrian crossings are clearly delineated to both the pedestrian and driver.

10 The circulation design at The Lodge at Pebble Beach may not meet design standards or may result in
11 unsafe vehicle or pedestrian movements. Pending final design, this is considered a potentially
12 significant impact that would be reduced to a less-than-significant level with the implementation of
13 the following mitigation measures.

14 **Mitigation Measure TRA-D3: At The Lodge at Pebble Beach, add a crosswalk to address a** 15 **pedestrian desire line (i.e., places pedestrians will walk) crossing the circulation road.**

16 PBC will install a crosswalk at The Lodge at Pebble Beach to facilitate safe pedestrian crossings.
17 The required design modification is shown in Appendix G.3 (see Figure “Lodge Circulation
18 Plan”). The County will conduct site plan review as part of the building permit process to ensure
19 compliance.

20 **Mitigation Measure TRA-D4: At The Lodge at Pebble Beach, modify the design of the two** 21 **traffic circles to facilitate efficient vehicle flow.**

22 PBC will modify the design of the two traffic circles to facilitate efficient vehicle flow. The
23 required design modifications to ensure that vehicle channelization is well-defined are shown in
24 Appendix G.3 (see Figures “Lodge Circulation Plan” and “Lodge Area Traffic Circle Review”). The
25 County will conduct site plan review as part of the building permit process to ensure
26 compliance.

27 **Mitigation Measure TRA-D5: At The Lodge at Pebble Beach, install yield signs to control** 28 **the three-legged traffic circle, while the other traffic circle should have no vehicle traffic** 29 **controls.**

30 PBC will add yield signs to control the three-legged traffic circle. The required design
31 modification is shown in Appendix G.3 (see Figure “Lodge Area Traffic Circle Review”). The
32 County will conduct site plan review as part of the building permit process to ensure
33 compliance.

34 Fairway One Reconstruction. This would involve new parking and circulation, and the design may
35 not meet design standards or may result in unsafe vehicle or pedestrian movements. The Fairway
36 One Complex, located along 17-Mile Drive, consists of a U-shaped drive with passenger loading and
37 28 parking spaces. This complex would contain 40 guest units. Many resort guests are shuttled to
38 the hotels from the local airport and therefore have no cars with them. If more than 28 guests drive
39 cars, additional cars would be valet-parked at the new parking facility. Curb extensions at the two
40 driveways to the complex provide a buffer for the on-street parking and maximize sight distance for

1 drivers turning to and from the driveways. The 28 parking spaces would generate a small number of
2 vehicle trips and have a negligible impact on 17-Mile Drive traffic flow.

3 There would be pedestrian desire lines between the Fairway One Complex, Peter Hay Golf Course,
4 and The Lodge at Pebble Beach; however, the proposed project does not include pedestrian facilities
5 to serve those needs. Pending final design, this is considered a potentially significant impact that can
6 be reduced to a less-than-significant level with the implementation of the following measure.

7 **Mitigation Measure TRA-D6: At The Lodge at Pebble Beach, add sidewalks or paths to**
8 **serve pedestrian movements between the Fairway One Complex, Peter Hay Golf Course,**
9 **and The Lodge at Pebble Beach.**

10 PBC will add sidewalks or paths to serve pedestrian movements between Fairway One Complex,
11 Peter Hay golf Course, and The Lodge at Pebble Beach. Sidewalks or paths along these desire
12 lines will facilitate pedestrian flows and enhance safety so that pedestrians do not need to walk
13 in the roadway. The required design modifications to connect pedestrian access at the Fairway
14 One site to the nearby crosswalk and other pedestrian facilities are shown in Appendix G.3 (see
15 Figure "Fairway One Complex"). The County will conduct site plan review as part of the building
16 permit process to ensure compliance.

17 New Colton Building. The circulation design at the Colton Building may not meet design standards
18 or may result in unsafe vehicle or pedestrian movements. The Colton Building, also part of The
19 Lodge at Pebble Beach, consists of replacing the 32 existing parking spaces with 20 guest units
20 above a parking structure with 31 parking spaces. This change would alter the existing driveway,
21 but its connection to Cypress Drive would remain the same. The proposed design does not improve
22 the sight distance at the driveway intersection, and the entry to the parking facility is too narrow.
23 The driveway grade would be 7%, while the grade at Cypress Drive would be about 6%, which could
24 compromise a driver's sight distance at the intersection. Pending final design, this is considered a
25 potentially significant impact that can be reduced to a less-than-significant level with the
26 implementation of the following measures.

27 **Mitigation Measure TRA-D7: At the Colton Building, improve sight distance at the**
28 **intersection between the existing driveway and Cypress Drive.**

29 PBC will ensure that sight distance at the intersections between the existing driveway and
30 Cypress Drive will be improved. Sight distance will be improved by providing a 2% grade for 25
31 feet connecting Cypress Drive to the driveway (see Appendix G.3, Figure "Colton Building"). The
32 County will conduct site plan review as part of the building permit process to ensure
33 compliance.

34 **Mitigation Measure TRA-D8: At the Colton Building, install a warning sign or lights at the**
35 **entry to the parking facility, or widen the opening to about 22 feet.**

36 PBC will improve signage or widen the entrance to the Colton Building parking lot. The
37 proposed entry to the parking facility is 18 feet wide, which is too narrow for two cars to pass
38 side by side. Because traffic flow into and out of the garage is expected to be infrequent, the
39 narrow width is adequate as long as a sign or warning light is provided that indicates a car is
40 coming. Alternatively, the opening would need to be increased to about 22 feet, given the
41 driveway grade and tight turning radii (Appendix G.3, Figure "Colton Building"). Subsequent site
42 plan development and engineering design will identify the preferred option between these two

1 alternatives. The County will conduct site plan review as part of the building permit process to
2 ensure compliance.

3 **The Inn at Spanish Bay**

4 Proposed development that could result in access and circulation impacts includes New Guest
5 Cottages and New Employee Parking. Circulation changes would include modifying the existing
6 parking on-site to accommodate the 40 new guest units and providing for the off-site surface
7 parking lot adjacent to the 17-Mile Drive/Congress Road intersection, across from The Inn at
8 Spanish Bay.

9 The plans provided by PBC indicate a continuous circulation road with a passenger drop-off/valet
10 area for the guest units. The off-site surface parking lot has one driveway connecting to 17-Mile
11 Drive and second driveway connecting to Congress Road. This surface parking lot would be used
12 primarily by employees at The Inn at Spanish Bay. Pedestrian facilities would be provided across 17-
13 Mile Drive at the Congress Road intersection, connecting the off-site parking lot with the pedestrian
14 system at The Inn at Spanish Bay. In addition, Americans with Disabilities Act-compliant ramps
15 would be provided.

16 The circulation design at The Inn at Spanish Bay may not meet design standards or may result in
17 unsafe vehicle or pedestrian movements. The proposed project would introduce additional vehicle
18 and pedestrian traffic at the 17-Mile Drive/Congress Road intersection. To accommodate additional
19 pedestrian traffic, the plans show installation of pedestrian facilities across 17-Mile Drive,
20 connecting the off-site parking lot with The Inn at Spanish Bay. The intersection currently operates
21 as a side-street stop-controlled intersection, and pedestrians using the planned crosswalk would
22 interfere with vehicles going through 17-Mile Drive. This represents a significant impact that can be
23 reduced to a less-than-significant level with the implementation of the following measure.

24 **Mitigation Measure TRA-D9: At The Inn at Spanish Bay, modify 17-Mile Drive/Congress 25 Road intersection to an all-way stop-controlled intersection, installing stop signs at all 26 approaches.**

27 PBC will modify the 17-Mile Drive/Congress Road intersections to an all-way stop-controlled
28 intersection. The design modifications for this intersection are illustrated on Appendix G.3,
29 Figure "The Inn at Spanish Bay". The County will conduct site plan review as part of the building
30 permit process to ensure compliance.

31 **Spyglass Hotel**

32 Under Option 1, the New Resort Hotel (also called the Spyglass Hotel) would be constructed at Area
33 M Spyglass Hill. The Spyglass Hotel includes three driveways to Spyglass Hill Road, plus two
34 emergency access-only driveways. Other than these driveways, there would be no circulation
35 changes to the roads. The first driveway is located about 150 feet from the Spyglass Hill
36 Road/Stevenson Drive intersection. This driveway is the primary entry to the hotel for guests. It
37 accesses the valet and passenger loading area at the hotel, as well as the parking for the hotel guest
38 parking. The entry would incorporate a large landscaped median to separate the in and out traffic
39 movements. The second driveway is a service entrance that would be used by service and delivery
40 trucks as needed for hotel operations. The third driveway is several hundred feet down Spyglass Hill
41 Road and provides access to the Spa at Pebble Beach and its parking. This driveway is adequate for
42 its intended use by spa patrons.

1 Through design development, the driveway grades would need to be reviewed to ensure that sight
2 distance requirements stated in the Del Monte Forest Transportation Policy Agreement are met and
3 that delivery trucks can maneuver into and out of the service area. In addition, sight distance can be
4 improved with a 25-foot transition between the driveways and Spyglass Hill Road that has no more
5 than a 2% grade.

6 The circulation design at the Spyglass Hotel may not meet design standards or may result in unsafe
7 vehicle or pedestrian movements. Pending final design, this is considered a potentially significant
8 impact that can be reduced to a less-than-significant level with the implementation of Mitigation
9 Measures TRA-D1 and TRA-D2, described earlier under “General Access and Circulation Issues.”

10 **Pebble Beach Driving Range**

11 The Pebble Beach Driving Range Relocation from Area V to Collins Field would not introduce any
12 changes to the circulation system, but would include a surface parking lot with a driveway to
13 Stevenson Drive, which is offset from the Peter Hay Golf Course. Although many patrons are
14 expected to either take a shuttle, drive a car, or use a golf cart to access the driving range, some may
15 want to use the other Peter Hay facilities as well.

16 The circulation design at the relocated Pebble Beach Driving Range may not meet design standards
17 or may result in unsafe vehicle or pedestrian movements. There is currently no crosswalk
18 connecting these two uses. Pending final design, this is considered a potentially significant impact
19 that can be reduced to a less-than-significant level with the implementation of the following
20 measure.

21 **Mitigation Measure TRA-D10: At the Pebble Beach Driving Range, add a pedestrian** 22 **crosswalk that connects the driving range to the Peter Hay Golf Course.**

23 PBC will add a pedestrian crosswalk to connect the driving range to the Peter Hay Golf Course.
24 The required design modifications to provide a pedestrian crosswalk that connects the two sites
25 are shown in Appendix G.3 (Figure “Driving Range”). The County will conduct site plan review as
26 part of the building permit process to ensure compliance.

27 **Equestrian Center**

28 The Equestrian Center Reconstruction would not introduce any changes to the circulation system,
29 but would include two gated access roads that intersect Portola Road. The existing Equestrian
30 Center on this site also has access from Portola Road. The new site layout and its connections to
31 Portola Drive have been designed to accommodate horse trailers and passenger cars. The parking
32 on-site is oriented along the internal circulation road, and drivers are able to circulate within the
33 site to find an available parking space, rather than using Portola Road.

34 The circulation design at the new Equestrian Center may not meet design standards or may result in
35 unsafe vehicle or pedestrian movements. With the proposed design, this is considered a less-than
36 significant impact, and no design modifications are required at this time.

1 **E. Parking**

2 **Impact TRA-E1: Project land uses would create a need for additional parking. (Less than** 3 **significant)**

4 The proposed project includes visitor-serving land uses that require parking. For each development
5 site, the analysis evaluated whether the proposed project provides sufficient parking to meet
6 requirements based on the Monterey County Code (Chapter 20.58). With the exception of the New
7 Resort Hotel (Spyglass Hotel), all sites were found to contain enough parking spaces to meet the
8 code's requirements. At the Spyglass Hotel, the proposed project was found to include a surplus of
9 parking spaces when accounting for shared parking opportunities. Therefore, the project would not
10 require the construction of additional parking facilities that might have secondary impacts on the
11 environment, and thus the impact on parking is considered less than significant.

12 The parking analysis for the proposed project is divided into five sites:

- 13 ● The Lodge at Pebble Beach.
- 14 ● The Inn at Spanish Bay.
- 15 ● Area M Spyglass Hill.
- 16 ● Pebble Beach Driving Range.
- 17 ● Equestrian Center.

18 For each site, the analysis evaluates whether the proposed new uses provide sufficient parking to
19 meet requirements based on the Monterey County Code (Chapter 20.58). Existing parking supply at
20 the development sites is considered adequate under prior approvals and is therefore not considered
21 in this analysis. This section addresses parking needs on typical weekdays; special event conditions
22 are discussed under F. Special Events.

23 **The Lodge at Pebble Beach**

24 Proposed development that could result in parking impacts includes Fairway One Reconstruction,
25 New Colton Building, and Parking and Circulation Reconstruction.

26 The Lodge at Pebble Beach includes development of 20 guest rooms in the Colton Building,
27 construction of 40 guest rooms at Fairway One (replacing five existing units), and an additional
28 2,100 square feet of meeting space. The Monterey County Code would require 125 parking spaces
29 for these uses, as shown in Table 3.11-29.

30 The proposed project would reconfigure existing parking spaces adjacent to the existing lodge
31 conference center and retail uses to provide 23 short-term parking spaces and a 224-space two-
32 level parking facility, for a total of 247 spaces to serve guests, visitors, and employees—a net
33 increase of 113 spaces. The Colton Building would include 31 underground parking spaces, but 32
34 existing spaces would be removed—a net loss of one space. The surface parking area at Fairway One
35 would increase the supply from eight spaces to 28 spaces—an increase of 20 spaces.

36 Overall, an additional 132 parking spaces would be provided at The Lodge at Pebble Beach, which is
37 seven more than the 125 spaces required by the Monterey County Code. No additional improvement
38 is necessary beyond the proposed parking program.

1 **Table 3.11-29. The Lodge at Pebble Beach Parking Analysis**

Development Site	Parking Ratios	Parking Spaces Required
New Colton Building (20 guest rooms)	1 space/1 room 1 employee space/2 rooms	30
Fairway One Reconstruction (40 guest rooms—35 new)	1 space/1 room 1 employee space/2 rooms	53
Meeting Facility Expansion (2,100 square feet)	1 space/50 square feet	42
Total Spaces Required		125
Total Spaces Provided		132
Total Spaces Added/Removed		+7

Source:
Fehr & Peers 2011.

2

3 **The Inn at Spanish Bay**

4 Proposed development that would increase parking demand at The Inn at Spanish Bay includes
5 Conference Center Expansion and New Guest Cottages. The Monterey County Code would require
6 182 parking spaces for these uses, as shown in Table 3.11-30.

7 As part of the proposed project, a surface parking lot would be constructed to provide 285 parking
8 spaces at the 17-Mile Drive/Congress Road intersection, across from The Inn at Spanish Bay’s main
9 entry. This adds to the existing 492 parking spaces available on-site. Development of additional
10 guest rooms by the 11th fairway would eliminate 30 existing parking spaces. In total, the net
11 increase in parking at The Inn at Spanish Bay is expected to be 242 parking spaces. The proposed
12 project is expected to have a parking surplus of 73 spaces as shown in Table 3.11-30.

13 A shuttle and valet system would remain as part of the parking management system, and wayfinding
14 signs are incorporated into the development plan. Additionally, pedestrian paths are provided
15 within the proposed project to connect the off-site parking lot with The Inn at Spanish Bay.

1 **Table 3.11-30. The Inn at Spanish Bay Parking Analysis**

Development Site	Parking Ratios	Parking Spaces Required
New Guest Cottages(40 guest rooms)	1 space/1 room 1 employee space/2 rooms	60
Conference Center Expansion (4,660 square feet meeting rooms)	1 space/50 square feet	93
Total Spaces Required		182
Total Spaces Provided		242
Total Spaces Added/Removed		+ 73

Source:
Fehr & Peers 2011.

2

3 **Area M Spyglass Hill**

4 At Area M Spyglass Hill, there are two development options, New Resort Hotel (Option 1) and New
5 Residential Lots (Option 2).

6 Under Option 1, the New Resort Hotel (also called the Spyglass Hotel) would be constructed at Area
7 M Spyglass Hill. The New Resort Hotel would be located across from the Spyglass Hill Golf Course at
8 Spyglass Hill Road and Stevenson Drive. The development would includes 100 guest rooms, 5,120
9 square feet of meeting facilities, 6,677 square feet of restaurant space, and 17,000 square feet of spa
10 services. The Monterey County Code would require 384 parking spaces for these uses, as shown in
11 Table 3.11-31. Parking would be provided via a three-level parking structure (301 spaces) near the
12 main hotel and 41 underground and surface parking spaces at the spa for a total supply of 342
13 parking spaces, 22 less than required by the Monterey County Code.

14 The code assumes that each use at the New Resort Hotel is independent of the others (e.g., a hotel
15 guest would not use the restaurant, meeting room, or spa). According to PBC, the restaurant,
16 meeting rooms, and spa would be used almost exclusively (up to 75%) by hotel guests. For this
17 analysis, the use of these facilities by hotel guests was assumed to be 50%, while the remaining
18 users were assumed to drive from off the site. Making the same assumption regarding parking yields
19 an adjusted code requirement of 308 parking spaces. Adjusting for shared parking opportunities, the
20 proposed project would have a parking surplus of 34 spaces at the New Resort Hotel site.

1 **Table 3.11-31. New Resort Hotel Parking Analysis**

Development Component	Parking Ratios	Parking Spaces Required	Adjusted Parking Spaces Required^a
Spyglass Hotel (100 guestrooms)	1 space/1 room 1 employee space/2 rooms	150	150
Meeting Facilities (5,120 square feet)	1 space/50 square feet	103	52
Restaurant (6,677 square feet)	1 space/50 square feet	134	67
Spa (17,000 square feet)	1 space/250 square feet	68	39
Total Spaces Required		384	308
Total Spaces Provided		342	342
Total Spaces Added/Removed		-22	+34

Source:

Fehr & Peers 2011.

Notes:

^a Adjusted parking requirements to account for shared parking opportunities.

2

3 **Pebble Beach Driving Range**

4 The Pebble Beach Driving Range would be relocated from its current location within residential
 5 planning Area V to Collins Field at the Portola Road/Stevenson Drive intersection, and it would have
 6 25 tees. The Monterey County Code requires one space per tee, and the driving range would include
 7 26 surface lot parking spaces.

8 **Equestrian Center**

9 Equestrian Center Reconstruction would demolish the existing Equestrian Center at Portola Drive
 10 and rebuild it at the same location. Table 3.11-32 provides a breakdown of new Equestrian Center
 11 parking requirements based on the Monterey County Code. It is required to provide 93 parking
 12 spaces, while the proposed project would construct 95. No additional improvement is necessary
 13 beyond the proposed parking program.

1 **Table 3.11-32. Equestrian Center Parking Analysis**

Development Component	Parking Ratios	Parking Spaces Required
Social Club (2,107 square feet)	1 space/50 square feet	43
Office (1,635 square feet)	1 space/250 square feet	7
Manager Unit/Assistant Manager Unit	2 spaces/1 unit	4
Public Stable (116 stalls)	1 space/3 horses	39
Total Spaces Required		93
Total Spaces Provided		95
Total Spaces Added/Removed		+2

Source:
Fehr & Peers 2011.

2

3 **F. Special Events**

4 **Impact TRA-F1: The project could change traffic volumes at Del Monte Forest gates during**
5 **special events. (Less than significant)**

6 The proposed project would not increase the size or change the nature or frequency of the events
7 taking place in Del Monte Forest. There are currently 459 guest rooms in Del Monte Forest, and the
8 proposed project would increase the total room count to 654. These rooms would be available for
9 day-to-day hotel use, as well as for special events in the forest. With additional rooms available,
10 more people attending special events could stay in Del Monte Forest and would be less likely to
11 drive during the event activities, instead using shuttles provided by PBC to travel to and from the
12 events. Therefore, the traffic volumes at the Del Monte Forest gates would likely experience a slight
13 decrease.

14 The impact of the proposed project on traffic at the gates is considered less than significant and
15 beneficial because of the negligible reduction in traffic volumes that could occur. The increased
16 number of rooms in Del Monte Forest is not expected to change the character or nature of the
17 special events because the events can attract thousands of people who stay in hotels, motels, and
18 rentals throughout the Monterey Peninsula and beyond.

19 **Impact TRA-F2: The project could change traffic volumes on internal roads during special**
20 **events. (Less than significant)**

21 Overall, the proposed project is not expected or proposed to change the character or nature of the
22 special events, but with an increased number of guest rooms in Del Monte Forest, the amount of
23 driving during events could be slightly reduced, as more people attending special events could stay
24 in the forest and could walk or use the shuttles provided by PBC to travel to and from the event. In
25 addition, some elements of the proposed project would be used to better organize the special event
26 activities, including the Special Events Area Grading and Expansion. The Special Events Area
27 adjacent to the Equestrian Center is currently used for parking or staging of some special events,
28 such as the AT&T Pebble Beach National Pro-Am, Pebble Beach Food & Wine, Pebble Beach
29 Concours d’Elegance, and U.S. Open Championship. The grading and expansion would improve event

1 parking or staging of special events. Although the special event activities would be better organized
2 with the improved facilities, the overall traffic impact on this area is expected to remain the same
3 with or without the proposed project.

4 PBC recognized many years ago the importance of managing special event traffic and parking
5 congestion. At the expense of the event, PBC and event sponsors have provided a contracted shuttle
6 bus connection between large off-site parking areas, such as in the former Fort Ord California State
7 University, Monterey Bay area and in the Del Monte Forest when needed during major special
8 events (e.g., AT&T Pebble Beach National Pro-Am, U.S. Open Championship). PBC took this approach
9 for several reasons, including:

- 10 ● Ability to work and coordinate directly with event sponsors.
- 11 ● Ability to coordinate traffic and parking operations as one system.
- 12 ● Ability to make immediate operational changes to address transportation issues.
- 13 ● Continuity from one event to the next, in that PBC designates the same executive committee to
14 oversee event traffic and parking activities.

15 Special event traffic and parking management activities also include:

- 16 ● Promotional materials.
- 17 ● Wayfinding signage.
- 18 ● Shuttle buses.
- 19 ● Coordination with MST.
- 20 ● Coordination with local chambers of commerce (Monterey, Pacific Grove, and Carmel) to
21 provide shuttle buses between local hotels and the events.
- 22 ● Traffic and parking control using the California Highway Patrol, Monterey County Sheriff's
23 Office, and trained staff.

24 This impact is considered less than significant, and no mitigation is required beyond the special
25 event programs already in place to address special event activity within Del Monte Forest.

26 **Impact TRA-F3: The project could change parking conditions during special events. (Less**
27 **than significant)**

28 The proposed project includes parking supply changes at The Lodge at Pebble Beach and The Inn at
29 Spanish Bay, as well as new parking supply at the New Resort Hotel. Changes at The Lodge and The
30 Inn improve parking supplies, layout, and circulation, while the New Resort Hotel parking is well
31 organized into three parking levels. These changes would mean better parking management during
32 special events because parking would be consolidated into structures that are easier to control and
33 monitor and supply would increase.

34 The management of special event parking activities and the occurrence of special events, would not
35 significantly change with the proposed project. PBC and event organizers would continue to use off-
36 site parking and shuttles for some events. They would also continue to shuttle patrons from area
37 hotels in Monterey, Pacific Grove, and Carmel, so that patrons would not need to drive and park.
38 Parking along Del Monte Forest roads, at the Special Events Staging Area, at the driving range, and

1 other locations in the forest would continue to be an integral part of managing parking during
2 events.

3 Historically, during special event activity, employees park along Congress Road and are shuttled to
4 work. The new employee surface parking lot at The Inn at Spanish Bay would provide needed
5 parking, and parking along Congress Road would no longer be allowed. The valet system during
6 these events also uses special areas on-site for valet parking. These operations have been successful
7 in managing unique conditions.

8 Although parking for the special event activities would be better organized with the improved
9 facilities, the overall parking impact on the area is expected to remain the same with or without the
10 proposed project. Therefore, this impact is considered less than significant, and no mitigation is
11 necessary beyond the programs already in place to address event parking activities.

12 **G. Transit and Alternative Transportation**

13 **Impact TRA-G1: The project would be inconsistent, in part, with Del Monte Forest Land Use** 14 **Plan alternative transportation policies and Monterey County trip reduction requirements.** 15 **(Less than significant with mitigation)**

16 A shuttle and valet system is already in place at The Inn at Spanish Bay. If parking congestion occurs,
17 employees at The Inn at Spanish Bay park in remote parking areas and are shuttled to work. These
18 operations have been successful in managing the unique conditions at The Inn at Spanish Bay. This
19 system would remain in place as part of the parking management system, and wayfinding signs are
20 incorporated into the development plan.

21 As described under "Regulatory Setting," PBC is subject to the requirements of Monterey County
22 Code Section 20.64.250 (Regulations for Reductions in Vehicle Trips) and LUP policies related to
23 alternative transportation and transit. PBC is required to submit a trip reduction checklist to identify
24 the proposed design elements and facilities that encourage alternative transportation use by
25 residents, employees, and customers. In preparing this checklist, PBC should:

- 26 ● Include any specific provisions for expanding opportunities for transit connections as part of the
27 expansion of visitor-serving accommodations.
- 28 ● Provide sufficient details regarding trip reduction measures for visitor-serving developments.
- 29 ● Provide any trip-reduction measures for residential development or employee housing.

30 Until PBC submits the checklist, the proposed project is inconsistent with applicable LUP policies
31 and county requirements and represents a significant impact. This impact can be reduced to a less-
32 than-significant level with implementation of Mitigation Measures TRA-G1 and TRA-G2.

33 **Mitigation Measure TRA-G1: Prepare and implement an alternative transportation plan,** 34 **emphasizing specific trip reduction measures for proposed visitor, resident, and** 35 **employee uses.**

36 The applicant will prepare and implement an alternative transportation plan, emphasizing
37 specific trip reduction measures for proposed visitor, resident, and employee uses. The plan
38 must be submitted and reviewed by the county prior to issuance of the first building permit.

1 **Mitigation Measure TRA-G2: Expand existing shuttle and valet system to incorporate the**
2 **Spyglass Hotel as part of overall parking management system (Option 1 only).**

3 If Option 1 New Resort Hotel is approved and constructed, the applicant will expand the existing
4 shuttle and valet system, and incorporate the new Spyglass Hotel in the overall parking
5 management system. Similar to employees at The Inn at Spanish Bay, employees at the Spyglass
6 Hotel would park in remote parking areas and be shuttled to work when parking congestion
7 occurs. The valet system would use special areas on the site for valet parking to increase parking
8 utilization. The applicant will submit a plan for the expanded shuttle and valet system to the
9 County for review and approval prior to issuance of the building permit for the Spyglass Hotel.

10 **H. Bicycles and Trails**

11 **Impact TRA-H1: The project would introduce additional traffic along 17-Mile Drive between**
12 **Spanish Bay Drive and the Pacific Grove Gate, which could compromise the effectiveness of**
13 **existing bicycle signage. (Less than significant with mitigation)**

14 The proposed project would introduce additional traffic along 17-Mile Drive between Spanish Bay
15 Drive and the Pacific Grove Gate. As a result, the existing bicycle symbols used to guide bicycle riders
16 may be more difficult to see and understand. This represents a significant impact on bicycle travel,
17 which would be reduced to less-than-significant with the implementation of the following measure.

18 **Mitigation Measure TRA-H1. Stencil “Route” after the bicycle symbols on the designated**
19 **route for bicycling between the Pacific Grove Gate and Stevenson Drive at Ondulado**
20 **Road.**

21 PBC would be required to further outline the bike route on the pavement between the Pacific
22 Grove Gate and Stevenson Drive at Ondulado Road to help bicyclists follow and stay on the bike
23 route. Plans for this improvement would be provided to the County for review and approval
24 prior to issuance of the first building permit for the proposed project.

25 **Impact TRA-H2: The project would not conflict with adopted policies, plans, or programs**
26 **supporting trails. (Less than significant)**

27 The proposed project includes several additions and changes to the trail system in Del Monte Forest.
28 Recreation trails are discussed in more detail in Section 3.8, Land Use and Recreation. The LUP
29 contains trail maintenance guidance, and the Pebble Beach Riding and Trails Association and PBC
30 conduct monthly trail day activities to maintain and improve the existing trails. Trail crossings of the
31 road system would fall within the design guidelines of the Del Monte Forest Transportation Policy
32 Agreement, which indicate general stopping site distance criteria for forest roads.

33 The trail crossings at forest roads would be designed based on the guidance in the Del Monte Forest
34 Transportation Policy Agreement. In addition, PBC is working with the California Coastal
35 Commission to incorporate design elements from the California Coastal Trail network into the Del
36 Monte Forest network. Therefore, the impact on trails is considered less than significant, and no
37 mitigation is required.

1 Cumulative Impacts

2 The traffic impact zone for cumulative development is the Monterey Peninsula and primary regional
3 highways through Monterey County. This section discusses cumulative transportation conditions in
4 the project area in a regional and site-specific context. The traffic analysis for 2030 with-project
5 conditions represents cumulative conditions because 2030 traffic volume forecasts account for
6 projects included in the 2010 General Plan. The traffic forecasting methodology and 2030 traffic
7 conditions without the proposed project are described under “Environmental Setting.”

8 The traffic impacts analysis presented in this section uses the cumulative conditions (2030) plus the
9 proposed project (cumulative plus project). Appendix G.1 contains the intersection traffic volumes
10 used in this section.

11 All analysis in this section addresses Option 1 (New Resort Hotel). Appendix G.2 contains the
12 detailed results of the traffic analysis for Option 2 (New Residential Lots). Impacts of Option 2 (New
13 Residential Lots) on traffic are generally less than Option 1 because fewer trips are generated. Most
14 of the impacts and mitigation described below for Option 1 would also apply under Option 2, with
15 the following exceptions:

- 16 • At the Sunset Drive/Congress Road intersection, there is no longer an impact from the proposed
17 project, and no mitigation would be required.
- 18 • At the SR 68/Aguajito Road intersection, the project impact would occur under PM conditions
19 only; the same mitigation would be required.

20 A. Traffic during Project Construction

21 **Impact TRA-A1 (C): Construction traffic combined with cumulative traffic would result in** 22 **short-term increases in traffic volumes that would affect level of service and intersection** 23 **operations. (Significant and unavoidable with mitigation)**

24 Construction traffic and workers, as described above under the project analysis would add traffic to
25 locations that are already experiencing deficient traffic operations, in particular along SR 1 and SR
26 68. Cumulative traffic would also contribute traffic to these deficient traffic operations. The project’s
27 contribution would be reduced in severity with implementation of Mitigation Measures TRA-A1 to
28 TRA-A4. However, even with mitigation, it is possible that construction traffic would still contribute
29 to unacceptable conditions on certain roadways outside Del Monte Forest and thus the project’s
30 contribution to cumulative traffic impacts during construction is considered significant and
31 unavoidable.

32 B. Del Monte Forest Gates

33 **Impact TRA-B1(C): The project would not considerably contribute to significant cumulative** 34 **traffic volumes at the Del Monte Forest gates. (Less than significant)**

35 Del Monte Forest gates were analyzed under cumulative plus project conditions. The results are
36 presented in Table 3.11-33. The service levels represent traffic conditions experienced by the
37 inbound traffic during the AM and PM peak hours. Under cumulative plus project conditions, all of
38 the gates continue to operate at acceptable levels. This is a less-than-significant impact.

1 **Table 3.11-33. Forest Gate Peak Hour Volumes and Levels of Service—Cumulative Plus-Project**
 2 **Conditions (2030)**

Gate	Peak Hour Volume/ Volume-to-Capacity Ratio ^a		
	Existing (2011)	2030 Without Project	2030 With Project ^b
AM Peak Period			
Pacific Grove	103/0.17	117/0.20	168/0.28
Carmel	128/0.14	146/0.16	153/0.17
SR 1	483/0.53	550/0.60	596/0.65
Country Club	189/0.32	215/0.36	218/0.36
SFB Morse	130/0.25	148/0.28	156/0.30
PM Peak Period			
Pacific Grove	135/0.23	154/0.26	188/0.31
Carmel	137/0.15	156/0.17	163/0.18
SR 1	328/0.36	373/0.41	423/0.46
Country Club	212/0.35	242/0.40	252/0.42
SFB Morse	132/0.25	150/0.29	158/0.30

Source:
Fehr & Peers 2011.

Notes:
^a The V/C ratio describes the inbound peak hour traffic flow as it relates to gate capacity. A ratio below 0.9 is considered acceptable.
^b Project conditions reflect Option 1 (New Resort Hotel).

3

4 **C. Intersections in Del Monte Forest and Immediate Vicinity**

5 Intersections in Del Monte Forest and immediate vicinity were evaluated for project impacts on
 6 traffic operations during typical weekday AM and PM peak hour conditions in 2030.

7 **Impact TRA-C1(C): The project would considerably contribute to significant cumulative**
 8 **traffic impacts for intersections. (Significant and unavoidable with mitigation)**

9 Traffic analysis results for cumulative plus project conditions at the intersections are shown in Table
 10 3.11-34 and Table 3.11-35 (AM and PM peak hours, respectively). As shown in the tables, seven
 11 intersections are expected to experience a significant traffic impact under cumulative plus project
 12 conditions.

1 **Table 3.11-34. Intersection AM Peak Hour Levels of Service—2030 With Project Conditions**

Intersection	Control^a	Existing (2011)^{b, c, d}	2030 Without Project^{b, c, d}	2030 With Project^{b, c, d, e}	2030 With Project Significant?^f	Project Contribution Significant?^g
Sunset Drive (SR 68)/17-Mile Drive ^h	AWSC	6.9/A	8.0/A	9.3/A	No	
Sunset Drive (SR 68)/Congress Road ^h	AWSC	11.8/B	18.1/C	25.2/D	Yes	Yes^j
Congress Avenue/Forest Lodge Road	AWSC	11.5/B	12.2/B	12.3/B	No	
Congress Avenue/David Avenue	AWSC	10.9/B	11.3/B	11.4/B	No	
Forest Avenue (SR 68)/David Avenue	Signal	24.8/C	26.5/C	27.1/C	No	
SR 68/Prescott Avenue	Signal	11.2/B	15.7/B	15.7/B	No	
SR 68/Presidio Boulevard ^h	SSSC	3.8 (4.3)/A(A)	12.8 (21.6)/B(C)	13.9 (24.1)/B(C)	No	
SR 68/SFB Morse Gate	Signal	5.3/A	12.8/B	12.9/B	No	
SR 68/Skyline Forest Drive	SSSC	21.4(>120)/C(F)	>120(>120)/F(F)	>120(>120)/F(F)	Yes	Yes^k
Skyline Forest Drive/Skyline Drive	AWSC	7.9/A	8.2/A	8.2A	No	
SR 68/Community Hospital	Signal	7.1/A	9.5/A	9.7/A	No	
SR 68/Carmel Hill Professional Center	SSSC	64.6(>120)/F(F)	98.6(>120)/F(F)	97.2(>120)/F(F)	Yes	Yes^k
SR 68/SR 1 Southbound Off-Ramp	Signal	80.8/F	>120/F	>120/F	Yes	Yes^l
17-Mile Drive/SR 1 Southbound On-Ramp	SSSC	3.2 (14.1)/A(B)	3.7 (16.8)/A(C)	Eliminated ⁱ	No	
SR 68/Aguaquito Road ^h	SSSC	2.6 (9.5)/A(A)	3.1 (17.4)/A(C)	3.4 (27.9)/A(D)	No	
SR 1/Carpenter Street	Signal	16.0/B	18.3/B	18.3/B	No	
San Antonio Road/Ocean Avenue	AWSC	7.9/A	8.2/A	8.2/A	No	
SR 1/Ocean Avenue	Signal	34.5/C	45.0/D	46.3/D	Yes	No ^m
SR 1/Carmel Valley Road	Signal	9.4/A	10.2/B	10.3/B	No	
SR 1/Rio Road	Signal	30.5/C	33.7/C	33.9/C	No	
17-Mile Drive/Congress Road	SSSC	4.8 (10.6)/A(B)	5.2 (11.2)/A(B)	5.3 (12.5)/A(B)	No	
Forest Lodge Road/Congress Road	SSSC	2.0 (11.1)/A(B)	2.8 (11.5)/A(B)	3.0 (11.7)/A(B)	No	
SFB Morse Drive/Congress Road	AWSC	7.7/A	7.8/A	7.9/A	No	
17-Mile Drive/Forest Lodge Road/Sloat Road ^h	SSSC	4.5 (7.1)/A(A)	4.8 (7.5)/A(A)	5.1 (7.9)/A(A)	No	
Lopez Road/Sloat Road	AWSC	8.0/A	8.1/A	8.5/A	No	
Spyglass Hill Road/Stevenson Drive	SSSC	2.9 (8.6)/A(A)	3.2 (8.8)/A(A)	4.8 (9.5)/A(A)	No	
Forest Lake Road/Stevenson Drive	SSSC	4.0 (11.9)/A(B)	4.6 (12.8)/A(B)	4.5 (14.2)/A(B)	No	

Intersection	Control^a	Existing (2011)^{b, c, d}	2030 Without Project^{b, c, d}	2030 With Project^{b, c, d, e}	2030 With Project Significant?^f	Project Contribution Significant?^g
17-Mile Drive/Alvarado Lane	AWSC	9.4/A	9.9/A	10.9/B	No	
17-Mile Drive/Palmero Way	SSSC	2.2 (15.5)/A(C)	2.9 (17.3)/A(C)	2.9 (19.2)/A(C)	No	
Sunridge Road/Ronda Road	SSSC	2.1 (10.0)/A(A)	2.4 (10.2)/A(B)	2.8 (10.4)/A(B)	No	
Sunridge Road/Scenic Drive	SSSC	0.6 (9.8)/A(A)	0.8 (10.1)/A(B)	0.8 (10.2)/A(B)	No	
Sunridge Road/Constanilla Way	SSSC	5.5 (9.5)/A(A)	5.6 (9.6)/A(A)	5.5 (9.7)/A(A)	No	
Sunridge Road/Haul Road ^h	SSSC	0.8 (5.3)/A(A)	1.2 (7.3)/A(A)	1.3 (6.5)/A(A)	No	

Source:

Fehr & Peers 2011.

Notes:

^a Signal = signalized intersection; SSSC = side-street stop-controlled intersection; AWSC = all-way stop-controlled intersection.

^b Average delay (in seconds) is listed first, followed by corresponding LOS.

^c For side-street stop-controlled intersections, average delay is listed first, followed by delay for worst approach.

^d Intersections that experience a significant project contribution are shown in bold.

^e Project conditions reflect Option 1 (New Resort Hotel).

^f Column evaluates difference between 2030 With Project conditions and Existing conditions against significance criteria.

^g Column evaluates whether proposed project contributes adversely to 2030 With Project conditions where 2030 With Project represents a significant change from Existing conditions.

^h Intersection analyzed using SimTraffic.

ⁱ This intersection would be eliminated as part of the proposed project.

^j This intersection would change operations from LOS C to LOS D under 2030 With-Project conditions compared to 2030 Without-Project conditions.

^k This unsignalized intersection experiences an increase of the v/c ratio on the worst approach under 2030 With-Project conditions compared to 2030 Without-Project conditions.

^l The proposed project adds traffic to a signalized intersection that would operate at LOS F under 2030 Without-Project conditions.

^m This signalized intersection does not experience an increase of v/c of 0.01 or more with 2030 With-Project conditions compared to 2030 Without-Project conditions.

1 **Table 3.11-35 Intersection PM Peak Hour Levels of Service—2030 With Project Conditions**

Intersection	Control^a	Existing (2011)^{b, c, d}	2030 Without Project^{b, c, d}	2030 With Project^{b, c, d, e}	2030 With Project Significant?^f	Project Contribution Significant?^g
Sunset Drive (SR 68)/17-Mile Drive ^f	AWSC	5.6/A	6.6/A	7.4/A	No	
Sunset Drive (SR 68)/Congress Road ^f	AWSC	9.6/A	18.2/C	26.3/D	Yes	Yes^j
Congress Avenue/Forest Lodge Road	AWSC	10.6/B	12.6/B	12.8/B	No	
Congress Avenue/David Avenue	AWSC	10.5/B	12.6/B	12.7/B	No	
Forest Avenue (SR 68)/David Avenue	Signal	30.1/C	38.9/D	40.4/D	Yes	Yes^k
SR 68/Prescott Avenue	Signal	19.2/B	24.0/C	24.2/C	No	
SR 68/Presidio Boulevard ^f	SSSC	3.6 (3.8)/A(A)	5.2 (5.6)/A(A)	5.3 (5.9)/A(A)	No	
SR 68/SFB Morse Gate	Signal	3.9/A	17.8/B	18.1/B	No	
SR 68/Skyline Forest Drive	SSSC	15.9(>120)/C(F)	>120(>120)/F(F)	>120(>120)/F(F)	Yes	Yes^l
Skyline Forest Drive/Skyline Drive	AWSC	8.3/A	8.8/A	8.8/A	No	
SR 68/Community Hospital	Signal	8.7/A	23.7/C	26.2/C	No	
SR 68/Carmel Hill Professional Center	SSSC	23.4(>120)/C(F)	>120(>120)/F(F)	>120(>120)/F(F)	Yes	Yes^l
SR 68/SR 1 Southbound Off-Ramp	Signal	70.1/E	>120/F	>120/F	Yes	Yes^m
17-Mile Drive/SR 1 Southbound On-Ramp	SSSC	8.7 (22.9)/A(C)	18.8(56.6)/C(F)	Eliminated ^g	No	
SR 68/Aguajito Road ^f	SSSC	2.9 (11.0)/A(A)	32.4(>120)/D(F)	39.7 (>120)/E(F)	Yes	Yes^l
SR 1/Carpenter Street	Signal	45.9/D	74.1/E	76.0/E	Yes	Yes^k
San Antonio Road/Ocean Avenue	AWSC	8.8/A	9.4/A	9.5/A	No	
SR 1/Ocean Avenue	Signal	45.4/D	63.9/E	65.7/E	Yes	No ⁿ
SR 1/Carmel Valley Road	Signal	17.4/B	21.7/C	22.0/C	No	
SR 1/Rio Road	Signal	32.9/C	38.3/D	38.3/D	Yes	No ⁿ
17-Mile Drive/Congress Road	SSSC	5.5 (11.8)/A(B)	6.1 (12.6)/A(B)	7.0 (14.7)/A(C)	No	
Forest Lodge Road/Congress Road	SSSC	3.5 (13.9)/A(B)	4.2 (15.4)/A(C)	4.5 (16.1)/A(C)	No	
SFB Morse Drive/Congress Road	AWSC	7.9/A	8.1/A	8.2/A	No	
17-Mile Drive/Forest Lodge Road/Sloat Road ^f	SSSC	4.1 (7.7)/A(A)	4.6 (8.2)/A(A)	5.1 (9.1)/A(A)	No	
Lopez Road/Sloat Road	AWSC	8.0/A	8.4/A	9.0/A	No	

Intersection	Control ^a	Existing (2011) ^{b, c, d}	2030 Without Project ^{b, c, d}	2030 With Project ^{b, c, d, e}	2030 With Project Significant? ^f	Project Contribution Significant? ^g
Spyglass Hill Road/Stevenson Drive	SSSC	2.7 (9.0)/A(A)	2.9 (9.3)/A(A)	4.4 (10.0)/A(B)	No	
Forest Lake Road/Stevenson Drive	SSSC	3.9 (11.7)/A(B)	4.5 (12.3)/A(B)	4.4 (13.7)/A(B)	No	
17-Mile Drive/Alvarado Lane	AWSC	9.6/A	10.5/B	11.8/B	No	
17-Mile Drive/Palmero Way	SSSC	3.5 (16.2)/A(C)	4.4 (18.1)/A(C)	4.6 (20.2)/A(C)	No	
Sunridge Road/Ronda Road	SSSC	3.7 (9.5)/A(A)	4.0 (9.8)/A(A)	4.1 (10.1)/A(B)	No	
Sunridge Road/Scenic Drive	SSSC	0.8 (10.6)/A(B)	1.1 (10.6)/A(B)	1.1 (10.9)/A(B)	No	
Sunridge Road/Constanilla Way	SSSC	2.5 (9.2)/A(A)	3.0 (9.4)/A(A)	3.2 (9.5)/A(A)	No	
Sunridge Road/Haul Road ^f	SSSC	1.1 (5.6)/A(A)	1.6 (5.9)/A(A)	1.6 (5.8)/A(A)	No	

Source:

Source for traffic data: Fehr & Peers 2011.

Notes:

^a Signal = signalized intersection; SSSC = side-street stop-controlled intersection; AWSC = all-way stop-controlled intersection.

^b Average delay (in seconds) is listed first, followed by corresponding LOS.

^c For side-street stop-controlled intersections, average delay is listed first, followed by delay for worst approach.

^d Intersections that experience a significant project contribution are shown in **bold**.

^e Project conditions reflect Option 1 (New Resort Hotel).

^f Column evaluates difference between 2030 With-Project conditions and Existing conditions against significance criteria.

^g Column evaluates whether proposed project contributes adversely to 2030 With-Project conditions where 2030 With-Project conditions represent a significant change from Existing conditions.

^h Intersection analyzed using SimTraffic.

ⁱ This intersection would be eliminated as part of the project.

^j This intersection would change operations from LOS C to LOS D under 2030 With-Project conditions compared to 2030 Without-Project conditions.

^k This signalized intersection experiences an increase of the v/c ratio of 0.01 or more under 2030 With-Project conditions compared to 2030 Without-Project Conditions.

^l This unsignalized intersection experiences an increase of the v/c ratio on the worst approach under 2030 With-Project conditions compared to 2030 Without-Project Conditions.

^m The project adds traffic to a signalized intersection that would operate at LOS F under 2030 Without-Project conditions.

ⁿ This signalized intersection does not experience an increase of v/c of 0.01 or more with 2030 With-Project conditions compared to 2030 Without-Project conditions.

1 **Sunset Drive/Congress Avenue**

2 As shown in Table 3.11-34 and Table 3.11-35, one intersection is anticipated to experience a
3 deterioration from an acceptable LOS to an unacceptable one as a result of cumulative plus project
4 conditions in 2030 due to the project's contribution —Sunset Drive/Congress Road, which would
5 operate at LOS C without the project and LOS D with the proposed project, during both the AM and
6 PM peak hours. This is considered a significant impact. With the construction of the measure
7 described in MM TRA-C6(C), the Sunset Drive/Congress Avenue intersection operations would
8 improve to an acceptable level (LOS C) during the AM and PM peak hours.

9 The impact would remain significant and unavoidable during the interim period between when the
10 impact occurs and when the improvement is actually built. This impact would also remain
11 significant and unavoidable if sufficient funds are not derived from other sources or if fair-share fees
12 for this mitigation are instead concentrated to pay for other proposed mitigation.

13 **Mitigation Measure TRA-C6(C): Pay fair-share contribution to restripe the westbound** 14 **approach at the Sunset Drive/Congress Avenue intersection to provide a left-turn pocket.**

15 PBC will pay a fair-share contribution to restripe the westbound approach at the Sunset
16 Drive/Congress Avenue intersection to provide a left-turn pocket. PBC is responsible for its fair-
17 share contribution to this mitigation based on new traffic growth because the intersection
18 operates at acceptable levels under existing conditions. The contribution will be made prior to
19 issuance of the first building permit for this development.

20 Based on the project's contribution to this intersection over new traffic growth, the project's
21 estimated share of impact is 20.50 percent. The estimated cost of this mitigation is \$4,200 (Fehr
22 & Peers 2011). Thus, the estimated mitigation fair-share fee for this impact is \$861.

23 This mitigation measure is not included in any existing local or regional traffic improvement
24 program. The County will have the discretion to concentrate funds derived from PBC's fair-share
25 contributions to several mitigation measures to accelerate the funding and implementation of
26 one or more mitigation measures.

27 **Forest Avenue/David Avenue (PM Peak Hour)**

28 This is a signalized intersection. The intersection would operate at LOS D (38.9 seconds of delay)
29 without the proposed project and LOS D (40.4 seconds of delay) with the proposed project under
30 2030 weekday PM peak hour conditions. This impact is considered significant because the proposed
31 project would increase the intersection's critical movement V/C ratio from 0.78 to 0.79 in the PM
32 peak, which is equal to the 0.01 threshold change. With the construction of the measure described in
33 MM TRA-C7(C), this intersection would improve to LOS C (29.6 seconds of delay) during the PM
34 peak hour.

35 The impact would remain significant and unavoidable during the interim period between when the
36 impact occurs and when the improvement is actually built. This impact would also remain
37 significant and unavoidable if sufficient funds are not derived from other sources or if fair-share fees
38 for this mitigation are instead concentrated to pay for other proposed mitigation.

39

1 **Mitigation Measure TRA-C7(C): Pay fair-share contribution to optimize signal timings and**
2 **phasing at the Forest Avenue/David Avenue intersection.**

3 PBC will pay a fair-share contribution for new traffic signal timings and phasing for the Forest
4 Avenue/David Avenue intersection to allow protected left turns (with lead/lag operations) from
5 the westbound and eastbound approaches after the visitor-serving uses of the proposed project
6 have been developed. The timings will be adjusted, while maintaining the same offsets to the
7 adjacent signalized intersections in the corridor.

8 PBC is responsible for its fair-share contribution to this mitigation based on new traffic growth
9 because the intersection operates at acceptable levels under existing conditions. The
10 contribution will be made prior to issuance of the first building permit for this development.

11 Based on the project's contribution to this intersection over new traffic growth, the project's
12 estimated share of impact is 10.73 percent. The estimated cost of this mitigation is \$143,800
13 (Fehr & Peers 2011). Thus, the estimated mitigation fair-share fee for this impact is \$15,000.

14 This mitigation measure is not included in any existing local or regional traffic improvement
15 program. The County will have the discretion to concentrate funds derived from PBC's fair-share
16 contributions to several mitigation measures to accelerate the funding and implementation of
17 one or more mitigation measures.

18 **SR 68/Skyline Forest Drive (AM and PM Peak Hours)**

19 This is an unsignalized intersection. The left-turning traffic from Skyline Drive (stop-controlled
20 approach) onto SR 68 would operate at LOS F during both the weekday AM and PM peak hours
21 under cumulative conditions. This impact is considered significant because the proposed project
22 adds more than one vehicle trip to an intersection already operating at LOS F without the proposed
23 project. With the construction of the measure described in MM TRA-C1 (described above), the
24 intersection would operate at LOS A (9.7 seconds of delay) and LOS A (9.2 seconds of delay) during
25 the AM and PM peak hours, respectively.

26 This impact would remain significant and unavoidable during the interim period between when the
27 impact occurs and when the improvement is actually built. This impact would also remain
28 significant and unavoidable if sufficient funds are not derived from other sources or if fair-share fees
29 for this mitigation are instead concentrated to pay for other proposed mitigation.

30 **SR 68/Carmel Hill Professional Center (AM and PM Peak Hours)**

31 This is an unsignalized intersection. The left-turning traffic from the Carmel Hill Professional Center
32 (stop-controlled approach) onto SR 68 operates at LOS F during both the weekday AM and PM peak
33 hours under cumulative conditions. This impact is considered significant because the proposed
34 project adds more than one vehicle trip to an intersection already operating at LOS F without the
35 proposed project. With the construction of the measure described in MM TRA-C2 (described above),
36 the SR 68/Carmel Hill Professional Center intersection would operate at LOS A (4.7 seconds of
37 delay) and LOS A (5.7 seconds of delay) during the AM and PM peak hours, respectively. This impact
38 would remain significant and unavoidable during the interim period between when the impact
39 occurs and when the improvement is actually built.

1 **SR 68/SR 1 Southbound Off-Ramp (AM and PM Peak Hours)**

2 This is a signalized intersection. The operations would be LOS F under cumulative conditions
3 without or with the proposed project. The intersection's critical V/C ratio would improve from 1.56
4 to 1.38 during the AM peak hour and from 1.54 to 1.28 during the PM peak hour. The improved
5 ratios occur as a result of the proposed project's road improvements proposed as part of the
6 proposed project. Even with the improved ratios, this impact is considered significant because the
7 proposed project adds traffic to an intersection that would already operate at LOS F. With the
8 construction of the measures described in MM TRA-C8(C), the SR 68/SR 1 southbound off-ramp
9 intersection would operate at LOS C (20.4 seconds of delay) and LOS B (18.3 seconds of delay)
10 during the AM and PM peak hours, respectively.

11 The impact would remain significant and unavoidable during the interim period between when the
12 impact occurs and when the improvement is actually built. This impact would also remain
13 significant and unavoidable if sufficient funds are not derived from other sources or if fair-share fees
14 for this mitigation are instead concentrated to pay for other proposed mitigation.

15 **Mitigation Measure TRA-C8(C): Pay fair-share contribution to construct the full SR 68** 16 **Widening Project (as identified in the Mitigation Measure TRA-C2) and to construct a** 17 **third eastbound lane on SR 68 from east of the Carmel Hill Professional Center driveway** 18 **through the SR 1 intersection, with one lane going to the SR 1 southbound on-ramp and** 19 **two lanes proceeding across the SR 68 overcrossing.**

20 PBC will pay a fair-share contribution to construct the full SR 68 Widening Project and to
21 construct a third eastbound lane on SR 68 from the Scenic Drive overcrossing through the SR1
22 intersection. Of the three eastbound lanes on SR 68, one would become a dedicated lane to the
23 SR 1 southbound on-ramp, and the other two would continue across a widened SR 68
24 overcrossing and merge into a single lane before the Aguajito Road intersection.

25 PBC is responsible for its fair-share contribution to this mitigation based on total traffic because
26 this intersection is deficient under existing conditions. The contribution will be made prior to
27 issuance of the first building permit for this development.

28 The 68 Widening Project is part of the Regional Impact Fee Program with an estimated cost of
29 \$25,000,000 (Fehr & Peers 2011). The estimated cost of the Widening Project with the
30 additional third eastbound lane would be \$26,690,000 (Fehr & Peers 2011) for an additional
31 cost of \$1,690,000 for the third eastbound lane. Based on the project's portion of total traffic at
32 the PM peak hour of 3.11 percent at the SR 1/SR 68 interchange, the fair share contribution for
33 this mitigation would be approximately \$830,000. The actual fair-share contribution will need
34 to be determined by the County and TAMC, taking into account the Regional Impact Fee
35 Program requirements, the mitigation value of the Phase 1B improvements (which are part of
36 the Highway 68 Widening project valued at approximately \$4,000,000), the local access benefit
37 of the Phase 1B improvement to the applicant (previously calculated as 25% for the prior 2005
38 project) and the calculation of the fair-share.

39 The third eastbound lane is not included in any existing local or regional traffic improvement
40 program. The County, in consultation with TAMC, will have the discretion to concentrate funds
41 derived from PBC's fair-share contributions to several mitigation measures to accelerate the
42 funding and implementation of one or more mitigation measures.

1 SR 68/Aguajito Road (PM Peak Hour

2 This is an unsignalized intersection. The left-turning traffic from Aguajito Road (stop-controlled
3 approach) onto SR 68 operates at LOS E and F during the weekday AM and PM peak hours under
4 cumulative conditions, respectively. This impact is considered significant because the proposed
5 project adds more than one vehicle trip to an intersection already operating at LOS F without the
6 proposed project. With the construction of the measures described in MM TRA-C9(C), the SR
7 68/Aguajito Road intersection would operate at LOS A (2.5 seconds of delay) and LOS C (20.9
8 seconds of delay) during the AM and PM peak hours, respectively.

9 The impact would remain significant and unavoidable during the interim period between when the
10 impact occurs and when the improvement is actually built. This impact would also remain
11 significant and unavoidable if sufficient funds are not derived from other sources or if fair-share fees
12 for this mitigation are instead concentrated to pay for other proposed mitigation.

13 Mitigation Measure TRA-C9(C): Pay fair-share contribution to construct a refuge lane on
14 SR 68 for traffic turning left out of the Aguajito Road intersection.

15 PBC will make a fair-share contribution to construct a refuge lane on SR 68 for traffic turning left
16 out of the Aguajito Road intersection with SR 68. PBC is responsible for its fair-share
17 contribution to this mitigation based on new traffic because the intersection operates at
18 acceptable levels under existing conditions. The contribution will be made prior to issuance of
19 the first building permit for this development.

20 Based on the project's contribution to this intersection over new traffic growth, the project's
21 estimated share of impact is 7.31 percent. The estimated cost of this mitigation is \$201,400
22 (Fehr & Peers 2011). Thus, the estimated mitigation fair-share fee for this impact is \$15,000.

23 This mitigation measure is not included in any existing local or regional traffic improvement
24 program. The County will have the discretion to concentrate funds derived from PBC's fair-share
25 contributions to several mitigation measures to accelerate the funding and implementation of
26 one or more mitigation measures.

27 SR 1/Carpenter Street (PM Peak Hour)

28 This is a signalized intersection. The intersection would operate at LOS E (74.1 seconds of delay)
29 during the weekday PM peak hour and at LOS E (76.0 seconds of delay) with the proposed project.
30 The impact is considered significant because the proposed project would increase the intersection's
31 critical movement V/C ratio from 0.98 to 0.99 in the PM peak hour, which is equal to the 0.01
32 threshold change. With the construction of the measures described in MM TRA-C10(C), the
33 SR 1/Carpenter Street intersection would improve to LOS E (63.4 seconds of delay) during the PM
34 peak hour.

35 The construction of the measure described in MM TRA-C10(C) would offset the impact of the
36 proposed project, but the deficiency would remain. Therefore, the impact is considered significant
37 and unavoidable. The impact would also remain significant and unavoidable during the interim
38 period between when the impact occurs and when the improvement is actually built. This impact
39 would also remain significant and unavoidable if sufficient funds are not derived from other sources
40 or if fair-share fees for this mitigation are instead concentrated to pay for other proposed mitigation.

1 **Mitigation Measure TRA-C10(C): Pay fair-share contribution to optimize signal timings at**
2 **the SR 1/Carpenter Street intersection.**

3 PBC will pay a fair-share contribution to optimize signal timings at the SR1/Carpenter Street
4 intersection. New traffic signal timings will be established by the County and Caltrans at the SR
5 1/Carpenter Street intersection after the visitor-serving uses of the proposed project have been
6 developed. The timings will be adjusted, while maintaining the same offsets to the adjacent
7 signalized intersection at Ocean Avenue.

8 PBC is responsible for its fair-share contribution to this mitigation based on total traffic because
9 the intersection operates at deficient levels under existing conditions. The contribution will be
10 made prior to issuance of the first building permit for this development.

11 Based on the project's contribution to this intersection over total traffic growth, the project's
12 estimated share of impact is 0.61 percent. The estimated cost of this mitigation is \$16,900 (Fehr
13 & Peers 2011). Thus, the estimated mitigation fair-share fee for this impact is \$100.

14 This mitigation measure is not included in any existing local or regional traffic improvement
15 program. The County will have the discretion to concentrate funds derived from PBC's fair-share
16 contributions to several mitigation measures to accelerate the funding and implementation of
17 one or more mitigation measures.

18 **SR 1/Ocean Street (AM and PM Peak Hours)**

19 This is a signalized intersection. The intersection would operate at LOS D (46.3 seconds of delay)
20 during the weekday AM peak hour and at LOS E (65.7 seconds of delay) under cumulative plus
21 project conditions compared to existing conditions of LOS C and LOS D for AM and PM peak hours
22 respectively. The cumulative change of LOS to a lower unacceptable level is a cumulatively
23 significant impact. However, the proposed project's contribution to this critical movement V/C ratio
24 in both the AM and PM peak hour would be less than 0.01 threshold, and thus the proposed project's
25 contribution is not considerable and is less than significant.

26 **SR 1/Rio Road (PM Peak Hour)**

27 This is a signalized intersection. The intersection would operate at LOS D (38.3 seconds of delay)
28 during the weekday PM peak hour compared to existing conditions of LOS C for the PM peak hour.
29 The cumulative change of LOS to a lower unacceptable level is a cumulatively significant impact.
30 However, the proposed project's contribution to this critical movement V/C ratio in the PM peak
31 hour would be less than 0.01 threshold, and thus the project's contribution is not considerable and
32 is less than significant.

33 **Regional Highway Sections**

34 Regional highway sections were evaluated for cumulative plus project impacts on traffic operations
35 during typical weekday AM and PM peak hour conditions in 2030.

**1 Impact TRA-C2(C): The project would contribute considerably to cumulative traffic on
2 regional highway sections that would operate at unacceptable levels of service. (Significant
3 and unavoidable with mitigation)**

4 As shown in Table 3.11-36, the proposed project would contribute more than 0.01 increase to the
5 V/C ratio at the following locations where the cumulative plus project conditions would result in a
6 lowering of the existing LOS from either LOS C to D or LOS D to LOS E:

- 7 • SR 1 from SR 68 (west) to Munras Avenue (AM peak hour).
- 8 • SR 1 from Munras Avenue to Fremont Street (AM and PM peak hours).
- 9 • SR1 from Fremont Boulevard to Imjin Parkway (PM peak hour)
- 10 • SR 1 north of SR 156 (AM peak hour).
- 11 • SR 68 east of Olmsted (AM and PM peak hours)
- 12 • US 101 north of SR 156 (PM peak hour).

13 As shown in Table 3.11-36, the proposed project would contribute traffic to roadway sections
14 already operating at an unacceptable LOS F without the proposed project at the following locations:

- 15 • SR 1 from SR 68 (west) to Munras Avenue (PM peak hour).
- 16 • SR 1 from Fremont Street to Fremont Boulevard (AM and PM peak hours).
- 17 • SR 1 north of SR 156 (AM and PM peak hours).
- 18 • SR 68 west of Skyline Forest Drive (AM and PM peak hours).
- 19 • SR 68 east of Laguna Seca (AM and PM peak hours).
- 20 • SR 156 from SR 1 to US 101 (PM peak hour).

21 **Table 3.11-36. Regional Highway Section Levels of Service—Cumulative Plus Project Conditions**
22 **(2030)**

Highway	Section	Direction	2011 (Existing)	2030 ^{a, b}	2030 Plus Project ^{a, b, c}
AM Peak Hour					
SR 1	SR 68 (west) to Munras Avenue	North	0.65/C	0.69/D	0.70/D
SR 1	Munras Avenue to Fremont Street	North	0.49/C	0.55/C	0.56/C
		South	0.72/D	0.89/E	0.91/E
SR 1	Fremont Street to Fremont Boulevard	North	0.48/C	0.54/C	0.55/C
		South	1.08/F	1.25/F	1.26/F
SR 1	Fremont Boulevard to Imjin Parkway	North	0.34/B	0.36/B	0.36/B
		South	0.72/D	0.79/D	0.79/D
SR 1	North of SR 156	North	0.70/D	0.90/E	0.91/E
		South	1.35/F	1.77/F	1.78/F
SR 68	West of Forest Lake Road	East	0.73/D	0.92/E	0.94/E
		West	0.50/C	1.01/F	1.04/F

Highway	Section	Direction	2011 (Existing)	2030 ^{a, b}	2030
					Plus Project ^{a, b, c}
SR 68	West of Forest Lake Road	East	0.73/D	0.92/E	0.94/E
		West	0.50/C	1.01/F	1.04/F
SR 68	East of Olmsted Road	East	0.71/D	0.74/D	0.75/D
		West	0.75/D	0.89/E	0.90/E
SR 68	East of Laguna Seca	East	1.14/F	1.18/F	1.18/F
		West	0.77/D	0.87/D	0.87/D
US 101	South of Salinas	North	0.27/B	0.28/B	0.28/B
		South	0.25/B	0.25/B	0.25/B
US 101	North of SR 156	North	0.42/B	0.48/C	0.48/C
		South	0.56/C	0.65/C	0.65/C
SR 156	SR 1 to US 101	East	0.54/C	0.56/C	0.56/C
		West	0.89/E	0.94/E	0.95/E
PM Peak Hour					
SR 1	SR 68 (west) to Munras Avenue	North	0.86/D	1.02/F	1.03/F
SR 1	Munras Avenue to Fremont Street	North	0.68/C	0.84/D	0.85/D
		South	0.56/C	0.62/C	0.63/C
SR 1	Fremont Street to Fremont Boulevard	North	1.00/E	1.16/F	1.17/F
		South	0.77/D	0.85/D	0.86/D
SR 1	Fremont Boulevard to Imjin Parkway	North	0.83/D	0.90/E	0.90/E
		South	0.49/C	0.52/C	0.52/C
SR 1	North of SR 156	North	1.57/F	2.06/F	2.07/F
		South	0.98/E	1.27/F	1.27/F
SR 68	West of Skyline Forest Drive	East	0.60/C	1.13/F	1.15/F
		West	0.78/D	0.99/E	1.01/F
SR 68	East of Olmsted Road	East	0.73/D	0.86/D	0.87/D
		West	0.84/D	0.87/D	0.88/E
SR 68	East of Laguna Seca	East	0.90/E	0.99/E	1.00/E
		West	1.20/F	1.23/F	1.24/F
US 101	South of Salinas	North	0.35/B	0.36/B	0.36/B
		South	0.45/B	0.45/B	0.45/B
US 101	North of SR 156	North	0.61/C	0.70/D	0.70/D
		South	0.65/C	0.73/D	0.73/D
SR 156	SR 1 to US 101	East	1.18/F	1.24/F	1.25/F
		West	0.63/C	0.64/C	0.65/C

Source:

Fehr & Peers 2011.

Notes:

^a V/C ratio is listed first, followed by corresponding LOS.

^b Highway sections that experience a significant impact due to the proposed project's contribution are shown in **bold**.

^c Project conditions reflect Option 1 (New Resort Hotel).

1 This is a significant impact. Implementation of Mitigation Measure TRA-C4 (described above as
 2 contribution to the Regional Impact Fee Program) would reduce this impact, but would not by itself
 3 fully address all operational deficiencies along regional highways. However, implementation of the
 4 Regional Impact Fee Program would not by itself fully address all of the identified operational
 5 deficiencies along SR 1, SR 68 east and SR 156 and this impact is considered significant and
 6 unavoidable with mitigation due to the lack of a regional transportation improvement program to
 7 address all regional highway deficiencies. This impact would also be significant and unavoidable
 8 between the completion of proposed project construction and the completion of regional highway
 9 improvements included in the TAMC regional program.

10 **SR 1/SR 68 Interchange Ramp Junctions**

11 **Impact TRA-C3(C): The project would contribute considerably to cumulative traffic on**
 12 **highway ramp sections that are projected to operate an unacceptable levels of service.**
 13 **(Significant and unavoidable with mitigation)**

14 The SR 1 northbound on-ramp merge from SR 68 (west) would operate at LOS E during the PM peak
 15 hour under cumulative plus project conditions compared to LOS D under existing conditions (Table
 16 3.11-37). This represents a significant impact at this merge location because the project would
 17 contribute considerably to a decline of deficient conditions.

18 **Table 3.11-37. SR 1/SR 68 Interchange Ramp Junction Levels of Service—Cumulative plus Project**
 19 **Conditions (2030)**

Freeway Ramp ^a	Section Type	Existing	2030	2030 plus Project ^b
AM Peak Period				
Density^c/LOS				
SR 1 Northbound On-Ramp from SR 68	Merge ^d	19.9/B	20.9/C	21.2/C
SR 1 Southbound On-Ramp from SR 68	Merge ^d	20.3/C	21.3/C	21.4/C
SR 1 Northbound Off-Ramp to SR 68	Diverge ^d	18.2/B	19.1/B	19.2/B
Weaving Speed (miles per hour)/LOS				
SR 1 Southbound Off-Ramp to SR 68	Weave ^e	38.6/B	33.1/C	32.8/C
PM Peak Period				
Density^c/LOS				
SR 1 Northbound On-Ramp from SR 68	Merge ^d	29.3/D	35.4/E	35.8/E
SR 1 Southbound On-Ramp from SR 68	Merge ^d	21.1/C	22.5/C	22.6/C
SR 1 Northbound Off-Ramp to SR 68	Diverge ^d	21.1/C	22.5/C	22.6/C
Weaving Speed (miles per hour)/LOS				
SR 1 Southbound Off-Ramp to SR 68	Weave ^e	35.3/C	34.0/C	33.7/C

Source:

Fehr & Peers 2011.

Notes:

^a Sections that experience a significant impact due to the project contribution are shown in **bold**.

^b Project conditions reflect Option 1 (New Resort Hotel).

^c Passenger cars per lane per mile.

^d HCM 2000 methodology.

^e Caltrans Highway Design Manual methodology.

1 With the construction of Mitigation Measure TRA-C5 (described above), SR 1 northbound between
2 SR 68 (west) and Munras Avenue would operate at LOS B and LOS C during the AM and PM peak
3 hours, respectively. The impact would remain significant and unavoidable during the interim period
4 between when the impact occurs and when the improvement is actually built. This impact would
5 also remain significant and unavoidable if sufficient funds are not derived from other sources or if
6 fair-share fees for this mitigation are instead concentrated to pay for other proposed mitigation.

7 **D. Access and Circulation**

8 **Impact TRA-D1 (C): The project would create new roadways that do not meet the design**
9 **criteria established in the Del Monte Forest Transportation Policy Agreement, substantially**
10 **increase hazards because of roadway design or internal circulation patterns, or result in**
11 **inadequate emergency access but no other projects would contribute to this impact. (No**
12 **cumulative impact)**

13 The project's direct impacts related to access and circulation can be mitigated to a less than
14 significant impact with mitigation identified above. There are no cumulative projects that would
15 change the design of the project roadways. Thus, there is no cumulative impact for access and
16 circulation.

17 **E. Parking**

18 **Impact TRA-E1 (C): Project land uses would create a need for additional parking but no other**
19 **projects would contribute to parking demand at the same location as the project. (No**
20 **cumulative impact)**

21 The project's direct impacts related to parking are less than significant. There are no cumulative
22 projects that would affect parking at the same locations as the project. Thus, there is no cumulative
23 impact for parking.

24 **F. Special Events**

25 **Impact TRA-F1(C), F2(C) and F3(C): Cumulative traffic during special events could result in**
26 **deficient gate conditions, traffic conditions on internal roads, or deficient parking, but the**
27 **project would result in a small but beneficial reduction in gate and internal traffic and an**
28 **increase in available parking. (No cumulative contribution)**

29 Cumulative traffic (both existing and future cumulative) would result in high levels of traffic at Del
30 Monte Forest gates and on internal roadways in Del Monte Forest during special events. The
31 proposed project would result in a small reduction in traffic volumes during special events by
32 increasing the number of hotel rooms in Del Monte Forest and would also add available parking.
33 Therefore the project would not contribute to increases in traffic at Del Monte Forest gates or on
34 internal roadways or to any parking deficiency during special events.

35 **G. Transit and Alternative Transportation**

36 **Impact TRA-G1(C): Cumulative development in Del Monte Forest other than the project**
37 **would be required to be consistent with Del Monte Forest transit and alternative**
38 **transportation requirements and the project would be consistent with mitigation. (No**

1 **cumulative impact)**

2 Future cumulative development in Del Monte Forest would be required to be consistent with del
3 Monte Forest transit and alternative transportation requirements. Thus, no cumulative significant
4 impact is identified. As described above, the project's direct impact relative to transit and alternative
5 transportation can be reduced to a less-than-significant level with implementation of Mitigation
6 Measures TRA-G1 and TRA-G2 but there is no significant cumulative impact for the project to
7 contribute to.

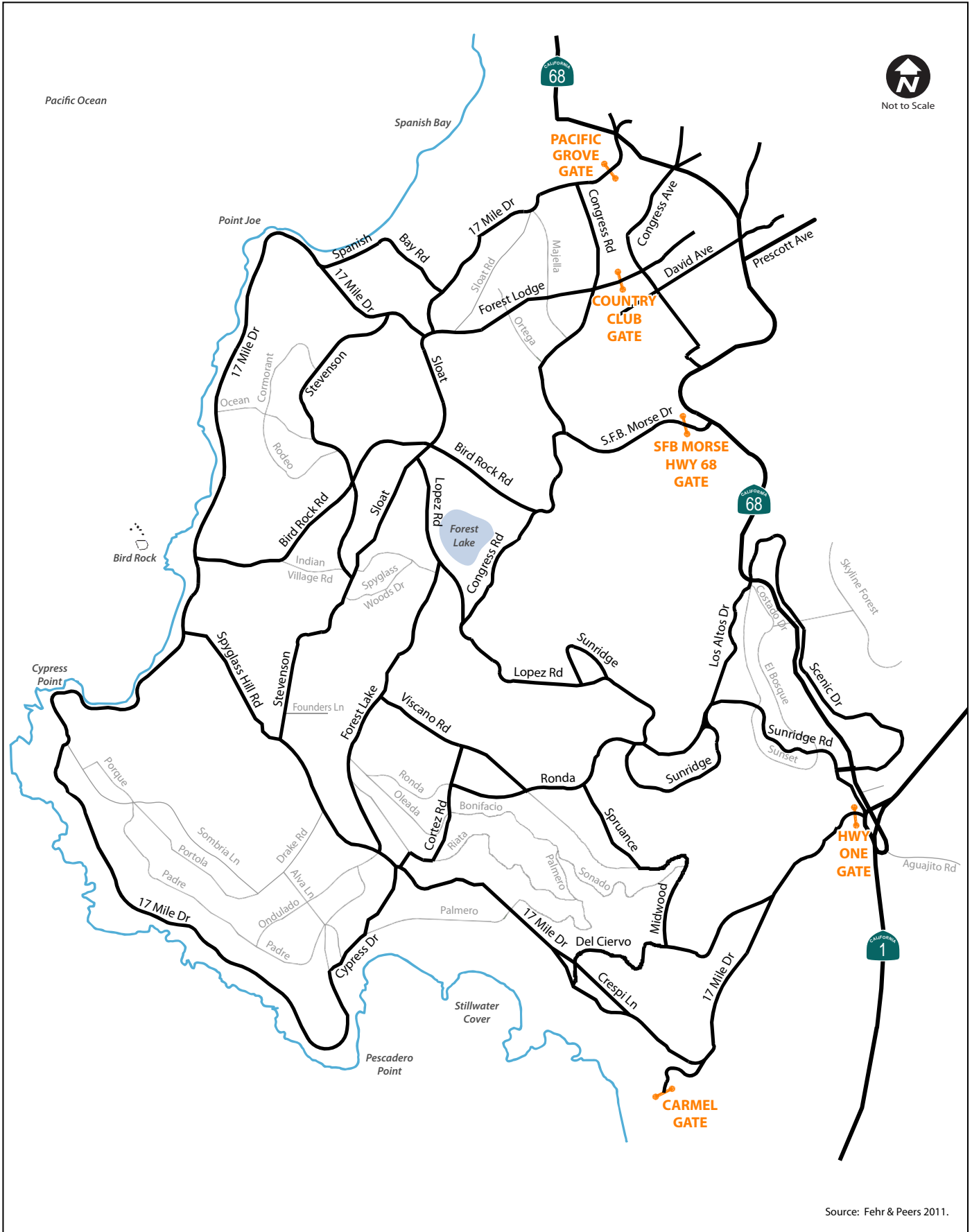
8 **H. Bicycles and Trails**

9 **Impact TRA-H1(C): Cumulative development with the project would introduce additional**
10 **traffic along 17-Mile Drive between Spanish Bay Drive and the Pacific Grove Gate, which**
11 **could compromise the effectiveness of existing bicycle signage. (Less than significant with**
12 **mitigation)**

13 Cumulative development with the proposed project would introduce additional traffic along 17-Mile
14 Drive between Spanish Bay Drive and the Pacific Grove Gate. As a result, the existing bicycle symbols
15 used to guide bicycle riders may be more difficult to see and understand. This represents a
16 significant impact on bicycle travel, which would be reduced to less-than-significant with the
17 implementation of Mitigation Measure TRA-H1 described above.

18 **Impact TRA-H2 (C): Cumulative development with the project would not conflict with**
19 **adopted policies, plans, or programs supporting trails. (No cumulative impact)**

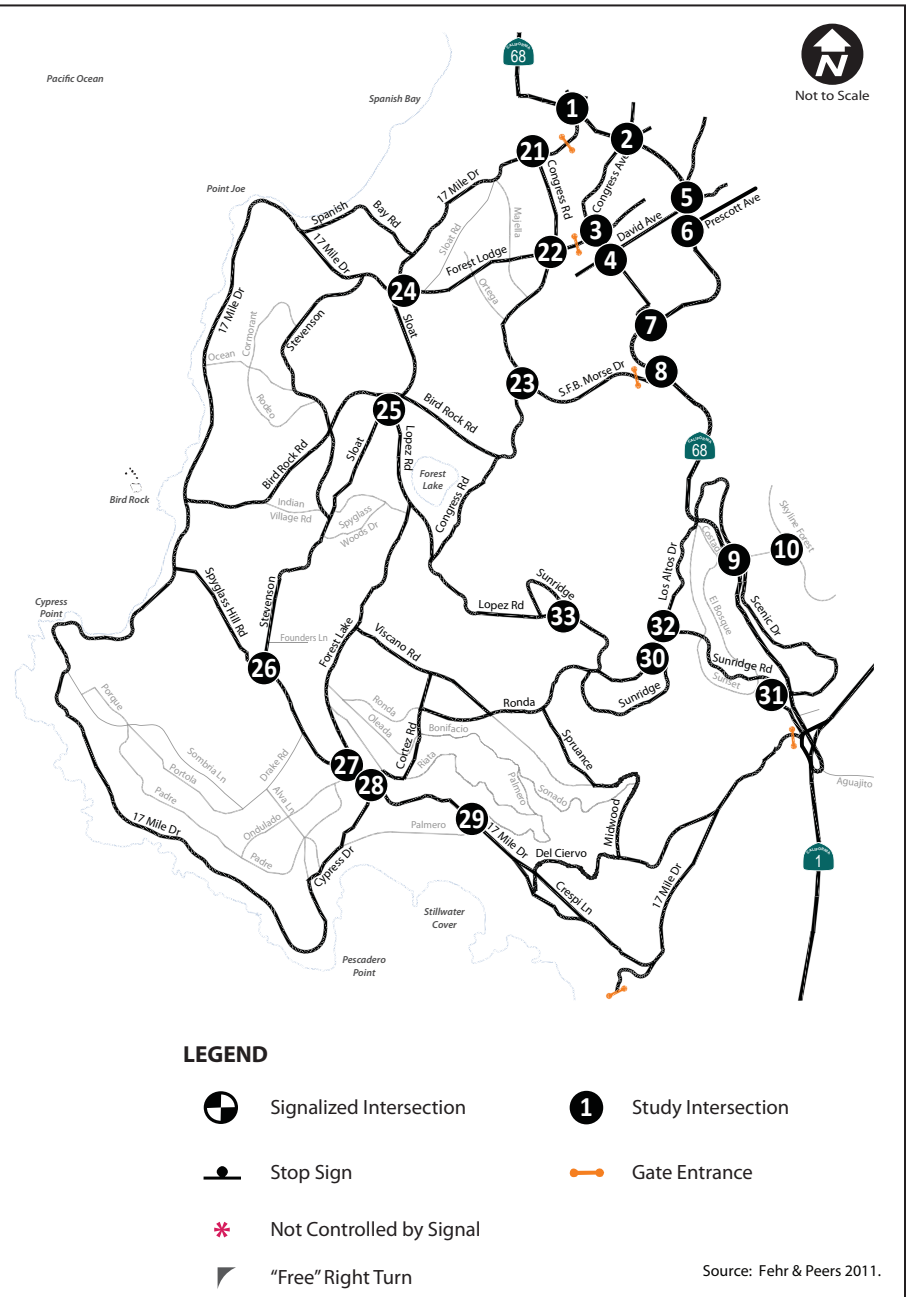
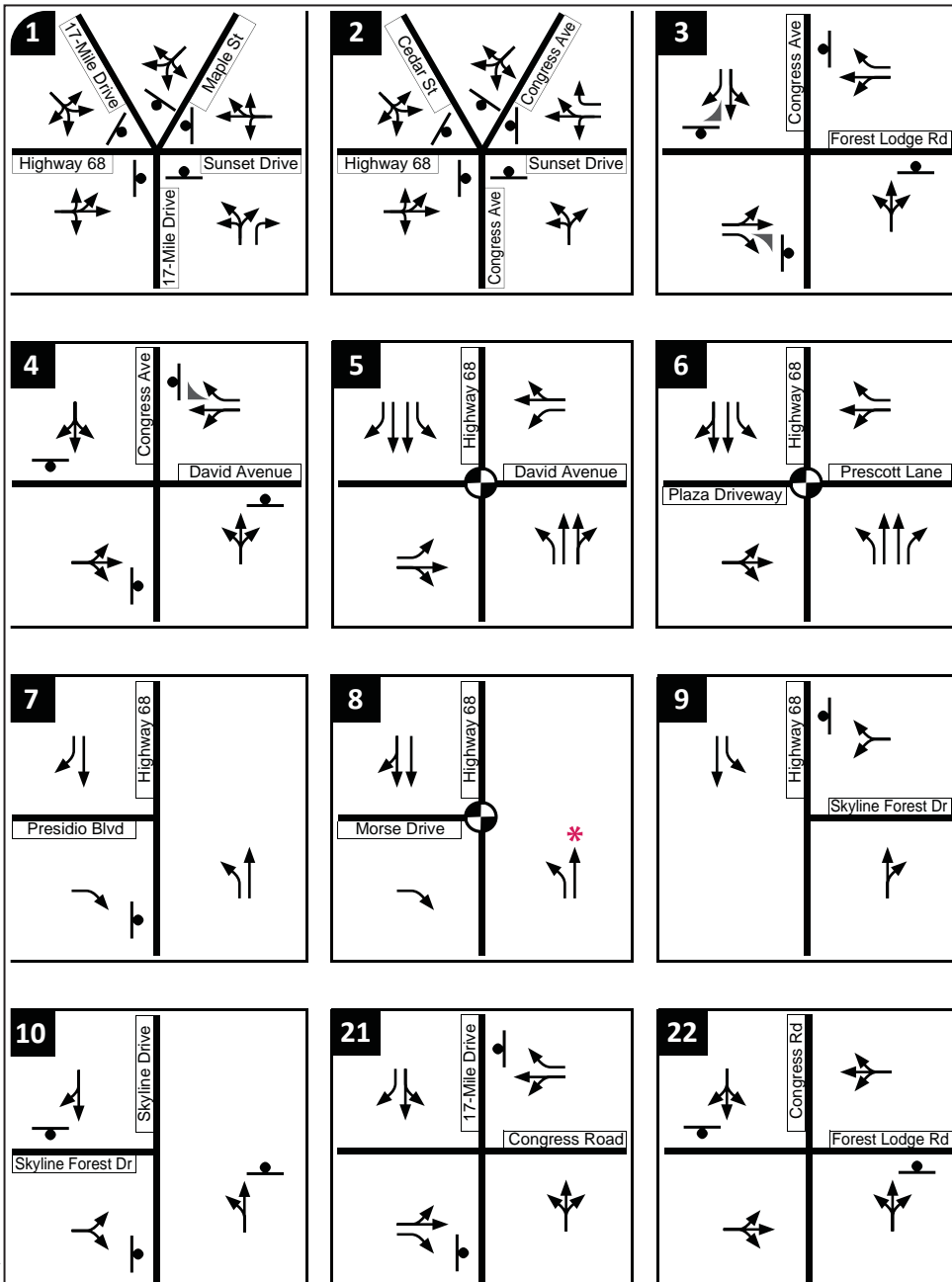
20 Future cumulative development in Del Monte Forest would be required to be consistent with Del
21 Monte Forest trail policies, plans and programs. Thus, no cumulative significant impact is identified.
22 As described above, the project would have a less than significant project-level impact on trails; no
23 contribution to a cumulative impact would occur because no significant cumulative impact has been
24 identified.
25



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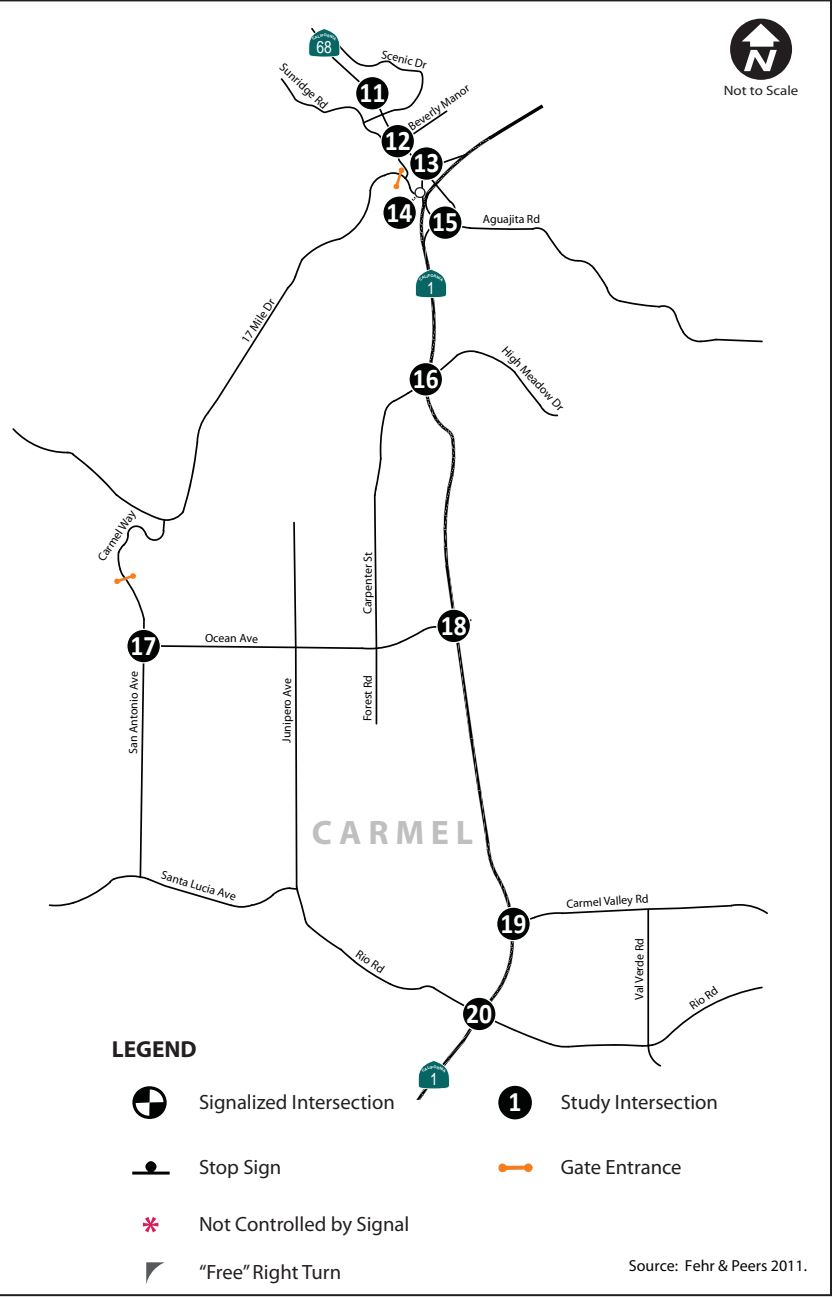
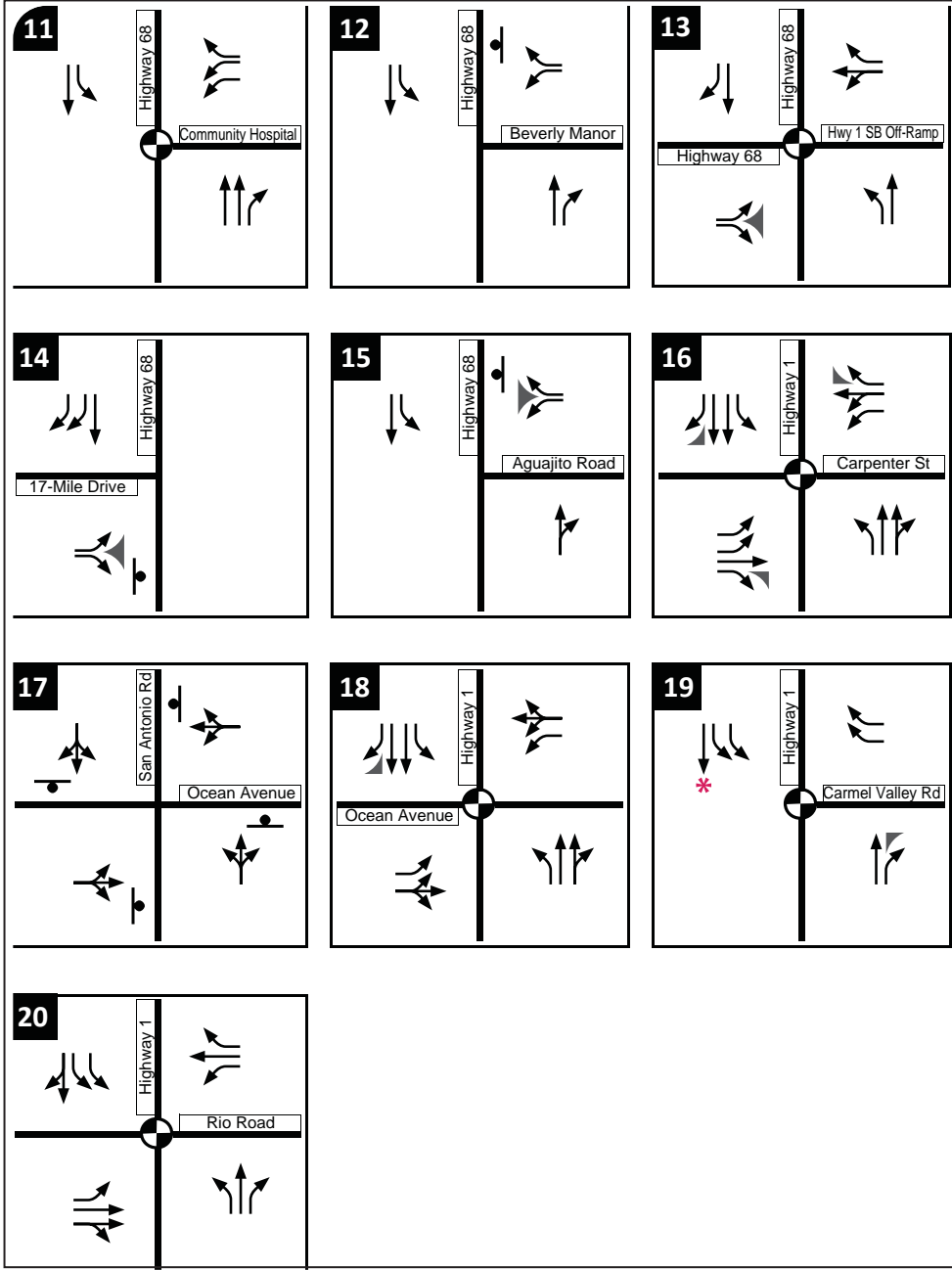
Source: Fehr & Peers 2011.

Figure 3.11-1
Roadways in Del Monte Forest and Vicinity



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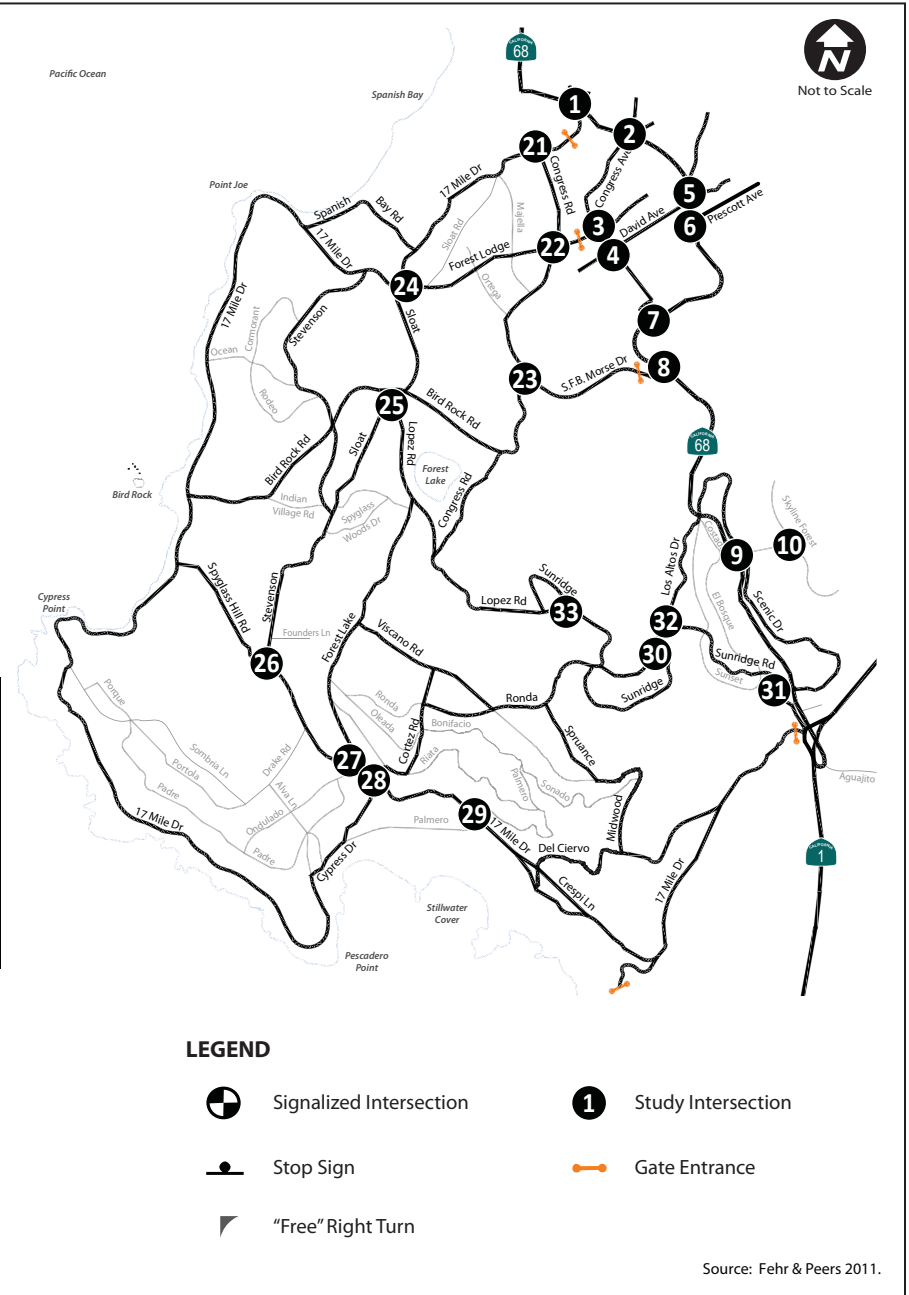
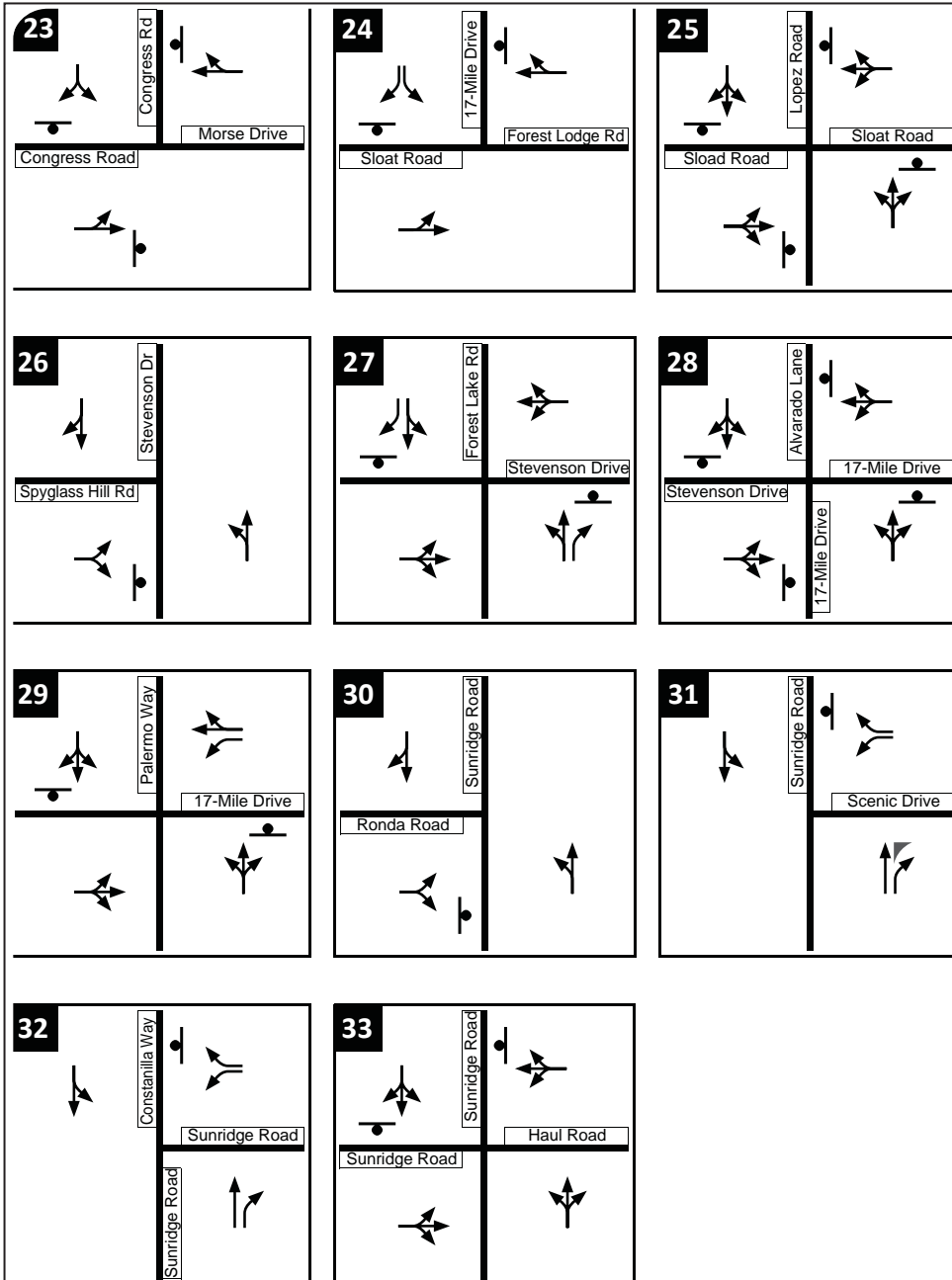
Figure 3.11-2a
Intersection Control and Lane Configurations



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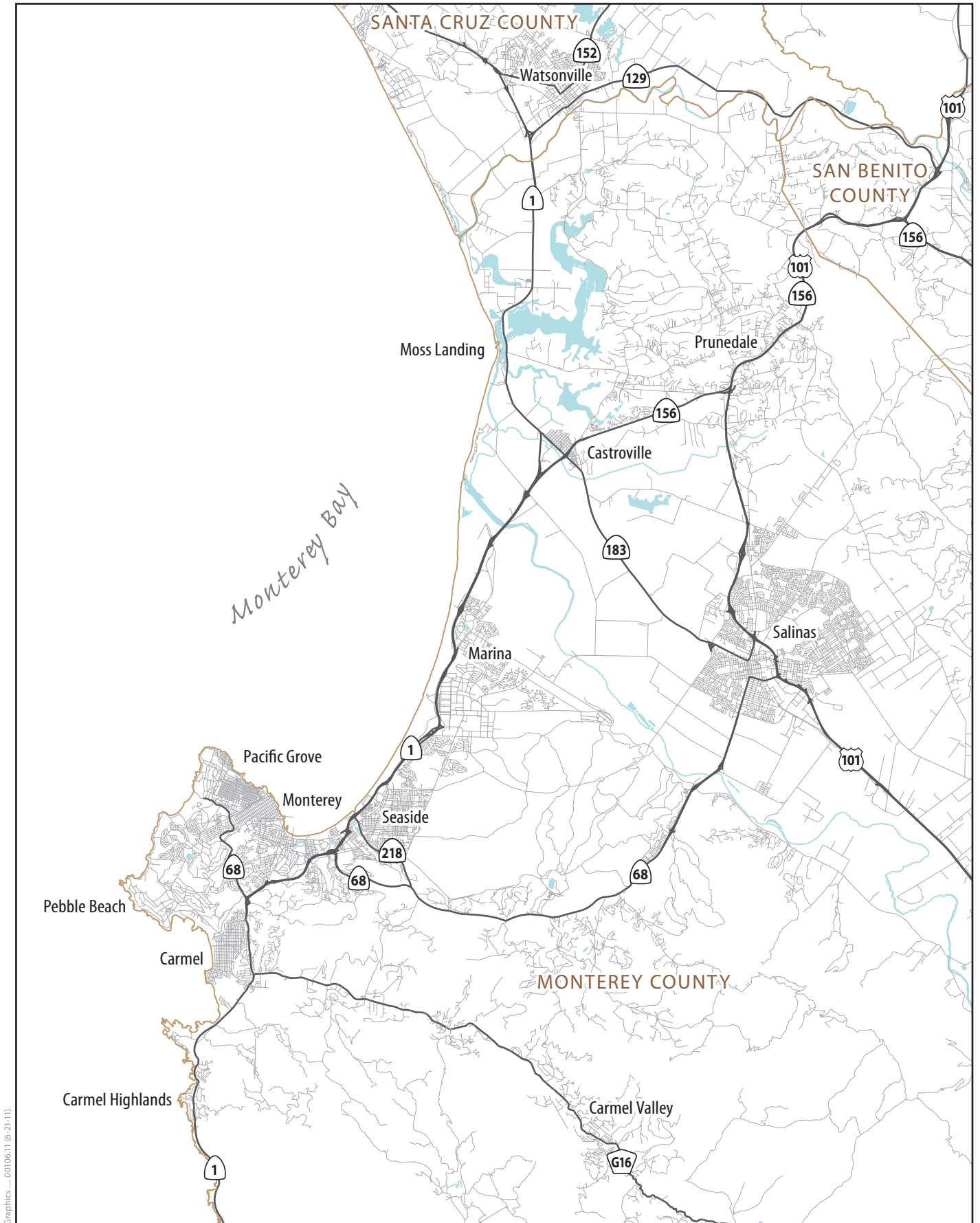
Figure 3.11-2b
Intersection Control and Lane Configurations

Source: Fehr & Peers 2011.



Graphics ... 00106.11 (6-21-11)

Figure 3.11-2c
Intersection Control and Lane Configurations



Graphics ... 0010611 (6-21-11)

Figure 3.11-3
Highways in Monterey County

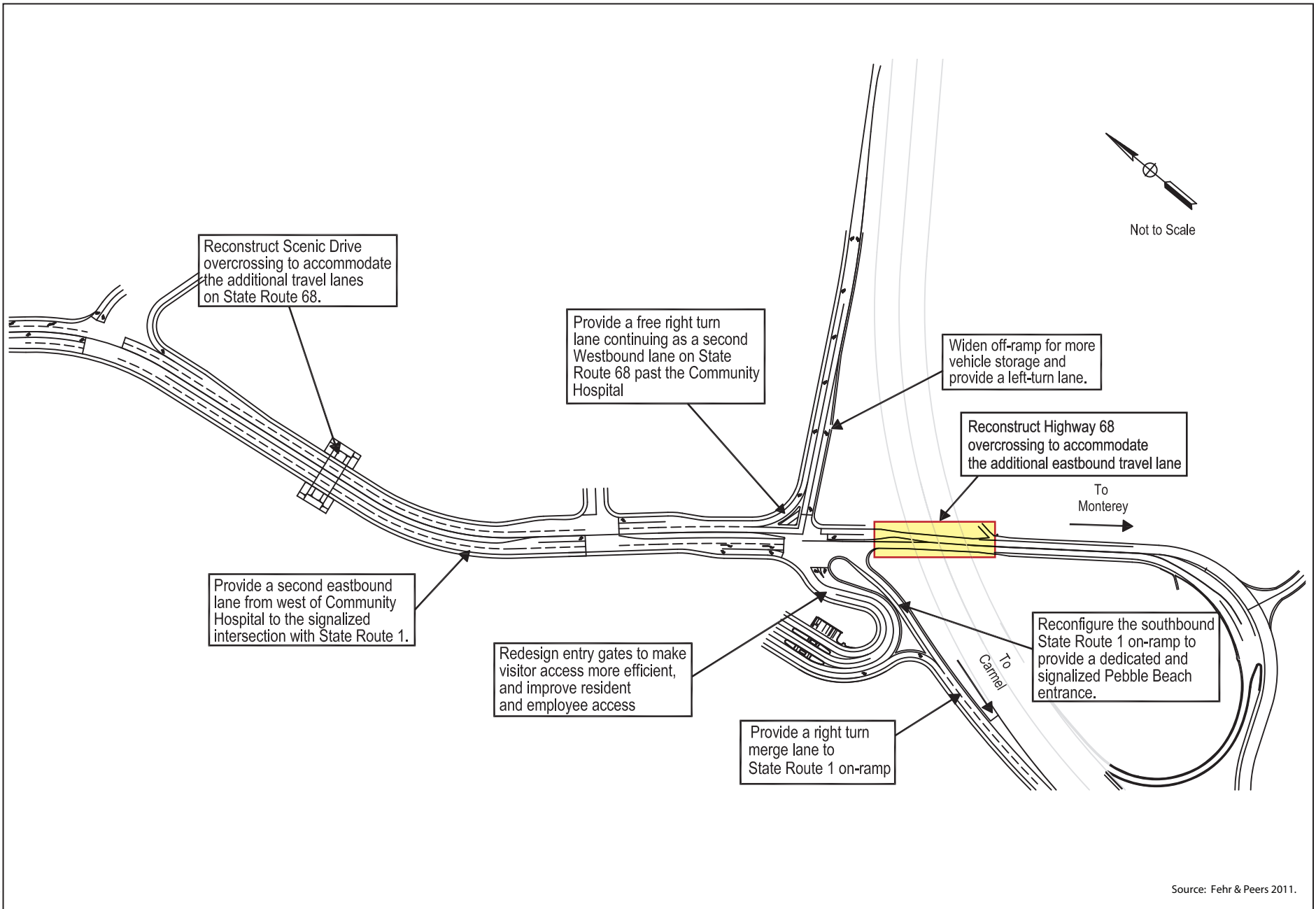


Figure 3.11-4
Route 68 Widening Project (Ultimate 4-Lane Facility)

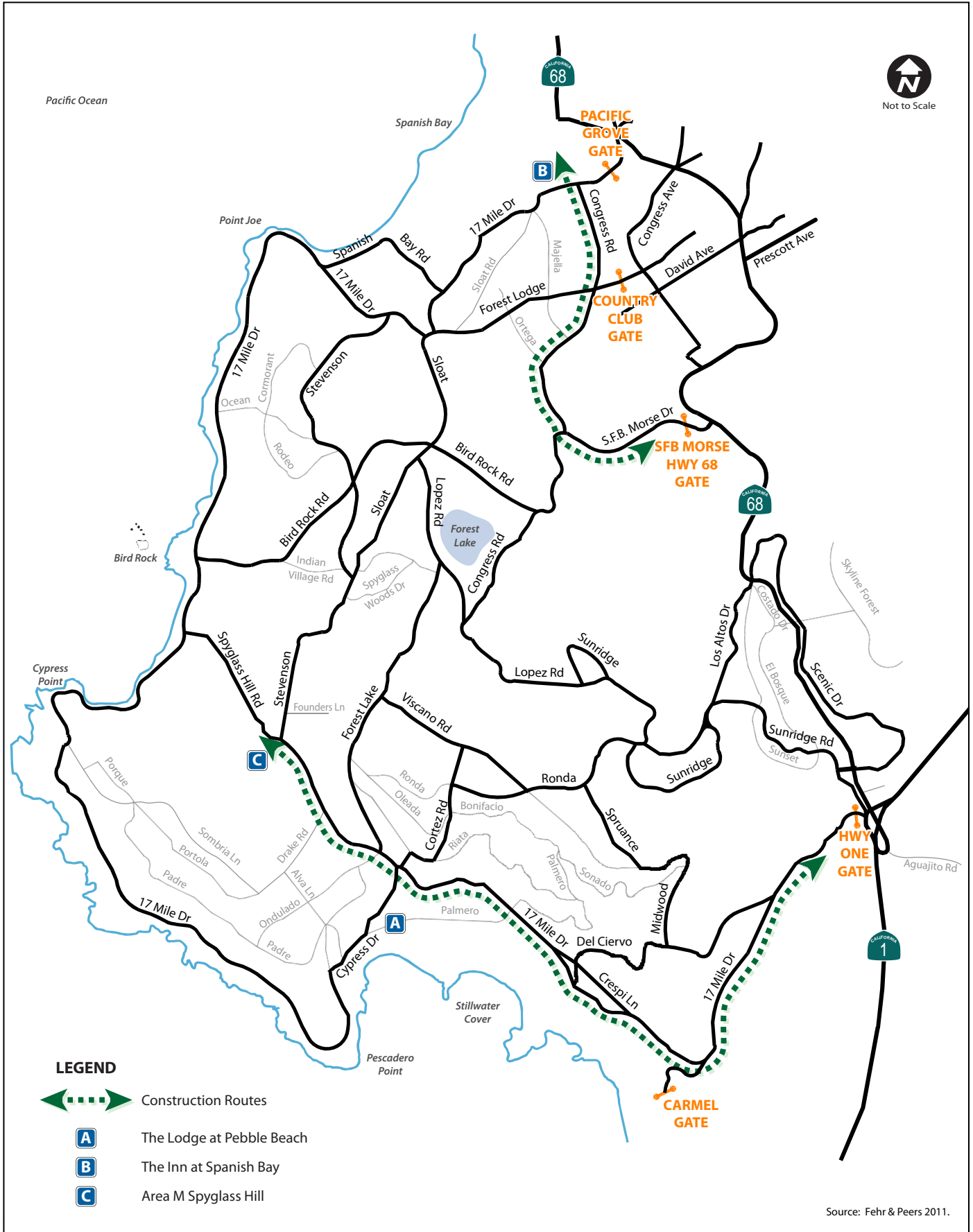


Figure 3.11-5
Construction Truck Routing

Section 3.12

Water Supply and Demand

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Section 3.12 Water Supply and Demand

This section presents a discussion of relevant regulations and existing water supplies in the project area; and it identifies potential impacts of the project related to water supply and demand, including impacts on water supply, water supply infrastructure, and the Carmel River biological resources. A summary of impacts is presented in Table 3.12-1.

Table 3.12-1. Summary of Project Impacts on Water Supply and Demand

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
A. Water Supply and Demand										
WSD-A1. The project's water demand would represent an increase in water use above the 2011 Existing Conditions, but would be within the Applicant's current entitlement and could be legally supplied by Cal-Am through 2016. However, given the current uncertain nature of regional water supplies, the additional project water demand could intensify water supply shortfalls and rationing starting in 2017, if the Regional Project (or its equivalent) is not built by then.	● (Applies to project as a whole)									●
Mitigation Measures:	Mitigation is not feasible because any additional mitigation would be disproportionate to the impact of proposed project given Applicant's prior financing of the Recycled Water Project. The Applicant's use of water for this project is pursuant to a valid, legal water entitlement affirmed by MPWMD, Cal-Am, and SWRCB.									
B. Water Infrastructure Capacity										
WSD-B1. Local water infrastructure is included to serve the proposed project, and existing supply infrastructure outside the project area is adequate to serve the project through 2016. The Regional Project (or its equivalent) will need to be built by 2017 to serve existing demand and the increase in demand from the project; regional water supply infrastructure and operations will have secondary environmental impacts.	● (Applies to project as a whole)									●
Mitigation Measures:	Mitigation is not feasible because any additional mitigation would be disproportionate to the impact of proposed project given Applicant's prior financing of the infrastructure for the Recycled Water Project. The Applicant's use of water for this project is pursuant to a valid, legal water entitlement affirmed by MPWMD, Cal-Am, and SWRCB.									

Project Impacts	Project Elements									Cumulative
	PBL	SBI	COL-EQC	Area M		RES SUB	RD	TRA	INF	
				MH	MR					
C. Carmel River Biological Resources										
WSD-C1. The project's water demand would result in increased withdrawals from the Carmel River through 2016 and thus would have a significant and unavoidable impact on Carmel River biological resources. After 2017, SWRCB mandated reductions in Cal-Am withdrawals from the Carmel River will not be changed by the project demand.						●				●
(Applies to project as a whole)										
Notes: ● = Significant unavoidable impact. ◎ = Significant impact that can be reduced to less than significant. ○ = Less-than-significant impact. – = No impact or not applicable to the development site. PBL – The Lodge at Pebble Beach; SBI – The Inn at Spanish Bay; COL-EQC – Collins Field–Equestrian Center–Special Events Area; MH – Area M Spyglass Hill—New Resort Hotel (Option 1); MR – Area M Spyglass Hill—New Residential Lots (Option 2); RES SUB – Residential Lot Subdivisions; RD – Roadway Improvements; TRA – Trail Improvements; INF – Infrastructure Improvements; Cumulative – Proposed Project's Contribution to Cumulative Impacts										

1

2 Overview

3 The water supply situation on the Monterey Peninsula is complex. The majority of the existing
 4 public water supply has been derived primarily from two sources: (1) the Carmel River alluvial
 5 aquifer and (2) the Seaside aquifer. Cal-Am is the regulated water utility that derives supply from
 6 both of these sources. In 1995, the State Water Resources Control Board (SCWRCB) found Cal-Am to
 7 be extracting water from the Carmel River in amounts far greater than its legal water rights to
 8 provide water to the local community. Cal-Am is required to cease all extractions beyond its legal
 9 rights by 2016. The Seaside Aquifer is also oversubscribed resulting in an adjudication of the basin
 10 and actions to reduce basin withdrawals to a sustainable level over time. A Regional Project
 11 (referred to as the Regional Project), whose principal element is a desalination plant, is planned to
 12 be completed by 2016 to replace the water that Cal-Am will no longer be able to withdraw from the
 13 Carmel River and the Seaside Aquifer, and to address both current water shortfalls and future
 14 planned growth. Although the Regional Project has completed environmental review and has been
 15 approved by the California Public Utilities Commission (CPUC), it is facing substantial challenges in
 16 implementation including issues surrounding permitting from the California Coastal Commission,
 17 cost concerns by ratepayers, and governance issues regarding the structure of project control and
 18 actions of one of the principal project consultants. Thus, the Regional Project is considered uncertain
 19 for the purposes of this analysis. Alternatives to the Regional Project are currently being proposed,
 20 but none of them have completed environmental review and are thus speculative at this time.

1 The applicant has previously funded a Recycled Water Project that treats wastewater to provide an
2 irrigation source for golf courses and other large landscape areas within the Del Monte Forest in
3 order to completely replace the use of potable water for these large irrigation uses. The applicant
4 derived a water entitlement for a portion of the reduction in water use that it has used for several
5 prior commercial developments. The applicant proposes to utilize this water entitlement for the
6 proposed project.

7 This section also analyzes the impact of the project's increased demand for water on the water
8 supplies in the Carmel River, on the need for new water infrastructure, and on the biological
9 resources of the Carmel River. The analysis does not presume any new supply for this project from
10 the Seaside Aquifer due to the existing adjudication mandating a substantial reduction in Cal-Am's
11 withdrawals from this aquifer. This project is somewhat unique in that new development is
12 inextricably related to a water entitlement derived from the prior reduction of water use due to the
13 applicant's prior financing of the Recycled Water Project. This broader context is a fundamental part
14 of the impact analysis used in this EIR. This section also analyzes cumulative demand due to other
15 residential development in the Del Monte Forest and on the Monterey Peninsula in general that
16 currently use water from the Carmel River and the Seaside Aquifer, in combination with the
17 project's water demand.

18 Unlike other impact sections, this section describes the environmental setting before the description
19 of the regulatory setting as an understanding of current water supply conditions is essential to
20 understand the regulatory situation concerning water supply.

21 Environmental Setting

22 This setting describes the existing water supply sources, the history of the applicant's water
23 entitlement, and the operational history of the CAWD/PBCSD Recycled¹ Water Project.

24 Water Supply Sources

25 Public potable water supply and distribution for the proposed project area are supplied by Cal-Am.
26 Current water sources include wells in the Carmel Valley alluvial aquifer and wells in the Seaside
27 Aquifer. Recycled water for the proposed project area is supplied by the CAWD/PBCSD Recycled
28 Water Project.

29 Cal-Am Production History

30 Figure 3.12-1 shows the history of water production by source from Cal-Am and its predecessor
31 companies. Table 3.12-2 shows the recent history of water production from the Carmel River and
32 the Seaside Aquifer by Cal-Am between 1995 and 2010.

¹ The terms "recycled" and "reclaimed" in describing water are used interchangeably.

1 **Table 3.12-2. Cal-Am Withdrawals, Carmel River Basin and Seaside Coastal Basin, 1995–2010**

Water Year	Seaside Coastal Basin	Carmel River Basin			Total
	Ground Water	Ground Water	Surface Water	Subtotal	
1995	3,794	5,874	4,162	10,036	13,830
1996	4,319	8,174	3,527	11,701	16,020
1997	4,025	9,688	3,159	12,847	16,872
1998	3,910	8,597	1,557	10,154	14,064
1999	3,982	9,195	1,385	10,580	14,562
2000	3,754	11,092	258	11,350	15,104
2001	3,444	10,700	98	10,798	14,242
2002	3,521	10,893	175	11,068	14,589
2003	3,507	11,299	242	11,541	15,048
2004	3,918	11,282	0	11,282	15,200
2005	3,002	11,036	0	11,036	14,039
2006	3,264	10,954	0	10,954	14,218
2007	3,626	10,486	0	10,486	14,112
2008	3,390	10,835	0	10,835	14,225
2009	2,631	10,286	0	10,286	12,917
2010	3,284	9,786	0	9,786	13,069

Source: See Appendix H.

Notes:

Units are acre-feet per year (AFY). Production values for post water year 1998 are recorded values and include water produced from Carmel River Basin between January 1 and May 1 for injection into Seaside Groundwater Basin.

2

3 **Carmel River**

4 The water supply setting for the Carmel River presented below is based on the conditions described
 5 in the *Monterey Peninsula Long Term Water Supply Contingency Plan, Component Screening Report*
 6 (*Plan B*) (Monterey County 2005).

7 **Hydrologic Setting**

8 The Carmel River originates in the Ventana Wilderness at an elevation of approximately 5,000 feet
 9 and flows northwest for 35 miles before reaching the Pacific Ocean at Carmel Bay. The Carmel River
 10 Basin is comprised of the main stem of the Carmel River plus seven major tributaries and drains an
 11 area of approximately 250 square miles (see Figure 3.12-2).

12 Flows in the river rise rapidly in response to significant rainfall and fall quickly after rainfall ceases.
 13 Flows can peak in a matter of hours after rainfall begins, and very high flows seldom persist longer
 14 than three days.

15 The first significant rains of the season typically begin in November, but significant changes in
 16 instream flow resulting from these rains normally do not occur until December or January. Fall rains
 17 replenish soils that have dried out during summer; consequently little run-off occurs during this
 18 period.

1 The Carmel Valley aquifer is unconfined (there are no impermeable barriers between the
2 groundwater surface and the atmosphere) and is highly permeable (laterally and vertically),
3 recharging rapidly after extended dry periods. The aquifer is under the direct influence of the
4 Carmel River. Due to the close connection between the alluvial aquifer and surface flows in the
5 Carmel River, the SWRCB defines the alluvial aquifer as surface water. Historically, due to heavy
6 reliance on the Carmel Valley aquifer as a source of water supply, the return flow from the aquifer to
7 the river has decreased.

8 **Surface Water Diversions**

9 There are two dams on the Carmel River: San Clemente Dam and Los Padres Dam. Both are owned
10 and operated by Cal-Am and have been used to regulate streamflow and supply water to users on
11 the Monterey Peninsula. Diversions have been made from the San Clemente Reservoir through the
12 Carmel Valley Filter Plant (CVFP) in the past. In 2003, the California Division of Safety of Dams
13 (DSOD) required San Clemente Dam to be drawn down year-round, essentially eliminating the
14 surface diversion from the reservoir. In 2008, the California State Coastal Conservancy (CSCC), Cal-
15 Am, and National Marine Fisheries Service (NMFS) entered into a Memorandum of Understanding
16 (MOU) to indicate their intent to jointly seek implementation of dam removal and rerouting the
17 river. In 2010, another MOU between these parties was entered into for dam removal and rerouting
18 the river. Removing the dam would address DSOD safety concerns and remove the barrier to
19 threatened Central Coast steelhead trout. Dam removal is anticipated to start in 2013 and be
20 completed by 2016.

21 **Instream Flows**

22 Unimpaired Carmel River flows at the San Clemente Reservoir site, as reconstructed by MPWMD,
23 indicate the variable nature of the hydrology of the basin. The average annual unimpaired Carmel
24 River flows at the San Clemente Reservoir site are approximately 69,700 AFY (Monterey County
25 2005). Reconstructed unimpaired annual flows ranged from as low as 2,855 AFY in 1977 to as high
26 as 318,987 AFY in 1983. Prior reservoir operations and aquifer pumping have a great impact on the
27 actual Carmel River flows at various reaches along the river (Monterey County 2005).

28 **Seaside Aquifer**

29 Within the Seaside Basin, the major Cal-Am and other significant water wells serving the local
30 community are located in the Coastal Subareas portion of the Seaside Aquifer. The Seaside Coastal
31 Subareas include the Northern Coastal and Southern Coastal portions of the Seaside Groundwater
32 Basin and are shown in Figure 3.12-3. Roughly 25% of the Cal-Am municipal supply currently is
33 extracted from the Basin (See Appendix H). Table 3.12-3 shows water production from the Seaside
34 Coastal Subareas.

35 A lesser portion of Cal-Am's water and community water is derived from the Laguna Seca and
36 Northern Inland⁴ subareas which are located inland of the Coastal Subareas.

1 **Table 3.12-3. Seaside Coastal Basin Water Production (1995-2010)**

Year	Cal-Am	Other	Total
Reporting Year 1995	2,800	479	3,279
Reporting Year 1996	4,429	636	5,065
Reporting Year 1997	4,651	797	5,448
Reporting Year 1998	3,563	588	4,151
Reporting Year 1999	3,578	659	4,237
Reporting Year 2000	4,013	1,011	5,024
Reporting Year 2001	3,307	979	4,286
Water Year 2002	3,522	903	4,425
Water Year 2003	3,507	959	4,466
Water Year 2004	3,918	953	4,871
Water Year 2005	3,002	848	3,850
Water Year 2006	3,264	841	4,105
Water Year 2007	3,626	722	4,348
Water Year 2008	3,390	931	4,321
Water Year 2009	2,631	888	3,519
Water Year 2010	3,284	399	3,683
Average 1995 - 2010	3,530	787	4,317

Source:

Appendix H

Note:

Units are acre-feet per year (AFY).

2

3 **CAWD/PBCSD Recycled Water Project**

4 The CAWD/PBCSD Recycled Water Project is a cooperative effort involving the CAWD, PBCSD,
5 MPWMD and the Pebble Beach Company.

6 The Recycled Water Project involved the construction of a new tertiary treatment plant located on
7 the site of the existing CAWD secondary wastewater treatment plant, the construction of a new
8 distribution system and storage tank used to distribute the recycled water to the receptor sites in
9 Pebble Beach, and irrigation system improvements. The tertiary treatment plant produces water
10 which meets Title 22 standards specified by the California Department of Health Services (CDHS),
11 and which is a quality acceptable for human contact.

12 Certificates of Participation (COPs) were executed and delivered at the direction of the MPWMD in
13 December 1992 in the amount of \$33,900,000 to finance construction of the Recycled Water Project.
14 The MPWMD owns the recycled water for the purpose of resale of such water and agreed to provide
15 all revenues from recycled water sales to fund operating costs of the Recycled Water Project as well
16 as principal and interest on the COPs. To the extent of any shortfall in revenues, Pebble Beach
17 Company has guaranteed payment of principal and interest on the COPs as well as any operating
18 deficiencies. Because of PBC’s guarantee, no other assets or revenues of MPWMD are at risk due to
19 the Recycled Water Project. Construction of Phase I of the Project was completed in October, 1994.

1 The Recycled Water Project began supplying treated water in late 1994 (Water Year 1995). Between
2 1995 and 2010, the Recycled Water Project supplied between 550 and 1,000 AFY for irrigation of
3 eight golf courses, athletic fields and other landscaped areas in the Del Monte Forest. Irrigation was
4 supplemented with potable water usage of approximately 110 to 430 AFY. Use is highest in summer
5 and lowest in winter. Summaries of water supplied from the plant are presented in Appendix H.

6 Prior to 2009, the Recycled Water Project had to supplement recycled water with potable water for
7 turf irrigation for three reasons: wastewater availability, peak demand, and recycled water quality.
8 Prior to 2009, there were insufficient storage facilities for treated wastewater, peak demand would
9 often exceed recycled plant production capacity, and recycled water was too high in salt content to
10 irrigate sensitive turf areas (in particular golf course greens) without periodically flushing these
11 areas with potable water. Phase II of the project was implemented between 2006 and 2009 and
12 consisted of two elements: 1) the rehabilitation of Forest Lake Reservoir to provide a large recycled
13 water storage facility, and 2) the installation of an additional microfiltration/reverse osmosis
14 treatment facility at the Recycled Water Project to reduce the salt content of the recycled water.
15 Phase II of the project relieved the constraints on the plant in regard to wastewater availability (by
16 producing recycled water during low demand months and then storing in the reservoir), peak
17 demand (by storing backup supply in the reservoir), and water quality (through additional
18 treatment). In 2009, supplemental potable water was reduced to just 6% of the overall irrigation
19 water supplied through the plant. In 2010 and 2011 (to date), no potable water has been necessary
20 for irrigation and this is expected to continue in the future.

21 To help finance the eventual \$33 million cost of Phase II, MPWMD adopted Ordinance 109 on May
22 27, 2004. Ordinance 109 allowed Pebble Beach Company to sell up to 175 AF of the Company's
23 remaining unused water entitlement to interested Del Monte Forest residential property owners,
24 with the proceeds from such sales to be used to pay for Phase II. Since 2004, Pebble Beach Company
25 has sold approximately 130 AF of its remaining 355 AF water entitlement to Del Monte Forest
26 residents, of which such residents connected are using approximately 30 AF. Therefore there is
27 approximately 225 AF of unused water entitlement for Pebble Beach Company and residents have
28 100 AF of unused water entitlement, for a total remaining unused water entitlement of 325 AF.

29 Table 3.12-4 provides a summary of Recycled Water Project production between 1995 and 2010.

1 **Table 3.12-4. CAWD/PBCSD Recycled Water Project, Water Production, Water Years 1995-2010**

Water Year	Recycled	Potable	Total Used	% of Total Used that is Recycled Water	Rainfall	Rainfall Year Type
1995	615	178	792	78%	28.4	Wet
1996	552	384	936	59%	21.0	Average
1997	782	327	1109	71%	21.7	Average
1998	590	111	701	84%	47.4	Wet
1999	667	235	902	74%	20.1	Average
2000	769	299	1068	72%	21.0	Average
2001	599	373	972	62%	19.2	Average
2002	734	303	1037	71%	15.6	Dry
2003	721	308	1030	70%	18.4	Average
2004	791	435	1226	65%	16.4	Dry
2005	674	207	881	77%	30.5	Wet
2006	768	152	920	83%	24.8	Wet
2007	918	160	1078	85%	14.1	Critically Dry
2008	1023	110	1133	90%	14.4	Critically Dry
2009	991	64	1055	94%	17.5	Average
2010	903	0	903	100%	23.9	Wet
1995 to 2010 Average	756	228	984	77%	22.1	
1950 to 2010 Average					19.4	
Wet Condition	710	129	839		25.8	Rainfall more than 15% above 1950 - 2010 Average
Average Year Condition	726	284	1010		19.9	Rainfall Within 15% of 1950 - 2010 Average
Dry Condition	762	369	1132		16.0	Rainfall More than 15% below 1950 - 2010 Average
Critically Dry Condition	971	135	1106		14.3	Rainfall More than 25% below 1950 - 2010 Average

Source: CAWD/PBCSD Production Reports, 1995 - 2010
 Rainfall data from sources in Appendix B

2

3 **Effect of Recycled Water Project on Carmel River Withdrawals**

4 The Recycled Water Project has reduced the amount of withdrawals from the Carmel River to serve
 5 irrigation demand in the Del Monte Forest starting in Water Year 1995 through the use of recycled

1 water. Table 3.12-5 and Figure 3.12-4 shows the historic effect of the Recycled Water Project on Cal-
 2 Am withdrawals from the Carmel River. ²

3 **Table 3.12-5. Carmel River Withdrawals with and without the Recycled Water Project**

Year	Type	Cal-Am Carmel River Withdrawals	RWP Historic Reductions	Historic Carmel River without the RWP
1995	Wet	10,036	615	10,651
1996	Average	11,701	552	12,253
1997	Average	12,847	782	13,629
1998	Wet	10,154	590	10,744
1999	Average	10,580	667	11,247
2000	Average	11,350	769	12,119
2001	Average	10,798	599	11,397
2002	Dry	11,068	734	11,802
2003	Average	11,541	721	12,262
2004	Dry	11,282	791	12,073
2005	Wet	11,036	674	11,710
2006	Wet	10,954	768	11,722
2007	Critically Dry	10,486	918	11,404
2008	Critically Dry	10,835	1023	11,858
2009	Average	10,286	991	11,277
2010	Wet	9,786	903	10,689
Avg.	All	10,921	756	11,677

Source:
 Appendix H

4

² Prior to the Recycled Water Project originally coming on line in 1994, golf course irrigation in the Del Monte Forest was consuming 850 to over 1,000 AF per year (See Appendix H). Between 1994 and 2005, the Recycled Water Project offset 550 to 780 AFY of Carmel River withdrawals through production of recycled water for turf irrigation. With completion of the Forest Lake Reservoir improvements (in 2006) and the Reverse Osmosis plant at the CAWD WWTP (in 2009), the Recycled Water Project can now offset all turf irrigation demands from the golf courses in the Del Monte Forest (as well as a few other users). At present, the Recycled Water Project offsets Carmel River withdrawals through provision of recycled water in the amount of 839 AF to 1132 AF, depending on water year type (see Appendix H). This total is approximately two to three times the total entitlement amount of 380 AF, including 15 AF for two parties other than the Applicant. As such, the water entitlement is directly related to the offset of a documented prior potable water use of up to more than 1,000 AFY in exchange for a water entitlement of 380 AF. However, as discussed below this EIR discloses impacts relative to existing conditions, not to a prior year baseline before the Recycled Water Project became operations.

1 Carmel River Biological Resources Setting

2 Introduction

3 The Carmel River and its watershed are shown on Figure 3.12-2.

4 Existing diversions from the Carmel River have had an adverse effect on:

- 5 • The riparian corridor along the river below San Clemente Reservoir (River Mile (RM) 18.5 -
- 6 river miles represent distances measured upstream of the mouth of the Carmel River).
- 7 • Steelhead and other fish that inhabit the river.
- 8 • The wildlife which depend on riparian and riverine habitat (SWRCB 1995)

9 The focus of this setting is on the same resources, in particular, riparian vegetation, steelhead, and
10 the California red-legged frog. These resources are the most obvious indicators of the river's
11 biological health. Riparian (streamside) vegetation often defines a stream's presence to the human
12 eye and provides habitat to a broad array of vertebrate and invertebrate species. The steelhead
13 trout that occupy the river are the largest aquatic species in the system and are sought after by both
14 fishermen and vertebrate predators. The riparian vegetation and the steelhead are also excellent
15 indicators of water quality and flow conditions in the river. Past water supply project impact
16 analyses on the Carmel River have identified potential significant effects on riparian vegetation and
17 the steelhead trout (MPWMD 1990 and the red-legged frog (MPWMD 1998). The California
18 Department of Fish and Game (CDFG) considers riparian vegetation a sensitive plant community
19 because of its long-term loss to agriculture and development, and because of the species diversity it
20 supports. The steelhead trout and the red-legged frog are the focus of analyses because ESA protects
21 them as threatened species.

22 The biological resources setting related to water supply impacts focuses on these three resources.
23 Other biological resources dependent on the Carmel River are noted below as well.

24 Riparian Vegetation

25 Vegetation Composition

26 Vegetation along all portions of the Carmel River generally consists of the same species; however,
27 the relative species abundance and canopy structure differs between the river segments in the
28 Upper, Middle, and Lower Carmel Valley.

29 The Upper Carmel Valley, upstream of San Clemente Dam (RM 18.6), consists mostly of narrow
30 canyons with a narrow strip of riparian forest generally conforming to Holland's (1986) Central
31 Coast Cottonwood-Sycamore Riparian Forest. Dominant species include western sycamore
32 (*Platanus racemosa*), black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), white alder (*Alnus*
33 *rhombifolia*), coast live oak (*Quercus agrifolia*), California bay (*Umbellularia californica*), California
34 buckeye (*Aesculus californicus*), and willows (*Salix species*). Understory species typically include
35 poison oak (*Toxicodendron diversilobum*), coffeeberry (*Rhamnus californica*), blackberries (*Rubus*
36 *species*), and others. Marshy vegetation occurs along slower reaches of the river (Monterey County
37 2005).

38 Riparian vegetation in the Middle Carmel Valley (San Clemente Dam to The Narrows) (RM 9.5) and
39 in the Lower Carmel Valley (the Narrows to the river mouth) conforms generally to Holland's (1986)

1 Central Coast Arroyo Willow Riparian Forest. It is dominated by arroyo willow (*S. lasiolepis*), with
2 red willow (*S. laevigata*), shining willow (*S. lucida* ssp. *lasiandra*), and narrow-leaved willow (*S.*
3 *exigua*); and with black cottonwood as an important component of the overstory and with sycamore,
4 box elder (*Acer negundo*) the other species listed above. In the drier outer floodplains of this region,
5 coast live oak may dominate and the riparian vegetation conforms generally to Central Coast Live
6 Oak Riparian Forest (Holland 1986). The Middle Carmel Valley has a steeper gradient and a more
7 braided, less stable channel than the Lower Carmel Valley (Kondolf and Curry 1984). The vegetation
8 in the Middle Carmel Valley tends to be more discontinuous than in the Lower Carmel Valley, where
9 a more continuous riparian woodland or forest has developed (Monterey County 2005).

10 McNiesh's mapping of the riparian corridor downstream from San Clemente Dam, based on 1986
11 aerial photographs, showed that the riparian zone was on average 271 feet wide, 86 feet being
12 channel and 185 feet being riparian vegetation (Monterey County 2005). The total area of riparian
13 vegetation was 410 acres, with 299 acres made up of riparian woodlands and 111 acres of non-
14 continuous cover.

15 **Riparian Vegetation along the Carmel River**

16 Riparian vegetation along the Carmel River has been affected by a number of important natural and
17 human-induced events.

18 The most important natural events that have affected riparian vegetation include floods and
19 droughts. Major floods occurred in 1862, 1911, 1914, 1995, and 1998 (Kondolf and Curry 1986,
20 Monterey County 2005). Major floods caused bank erosion and loss of riparian vegetation, but
21 perhaps more importantly may also affect channel form and depth.

22 Droughts have probably had a substantial effect on riparian vegetation; however, the effect of
23 droughts cannot be separated fully from human activities. For example, the drought of 1976-1977
24 led to extremely heavy groundwater pumping and unprecedented drawdown in the lower Carmel
25 Valley (Monterey County 2005). To what extent the drawdown was the result of pumping or of the
26 natural effects of drought cannot be determined. However, an analysis of simulated unimpaired
27 flows for 1977, using the MPWMD's Carmel Valley Simulation Model (CVSIM) model, shows that the
28 river would have been dry at the USGS "Near Carmel" gauge site (RM 3.6) without the presence of
29 dams and pumping wells. McNiesh points out that drought alone cannot be blamed for vegetation
30 decline in the Carmel Valley, because vegetation decline occurred prior to the 1970's drought and
31 continued after the water table recovery that followed the drought (Monterey County 2005).

32 The major human-induced changes that have affected the riparian vegetation include encroachment
33 on the riparian vegetation as the result of farming, housing development, and golf course
34 construction, construction of San Clemente (1921) and Los Padres (1948) Dams, and groundwater
35 pumping (Monterey County 2005). In addition, installation of bank protection has reduced lateral
36 movement of the river (Monterey County 2005). The dams have relatively small reservoirs that have
37 relatively little effect on flood peaks. Diversions and groundwater pumping have caused the once
38 perennial river to become characteristically dry in late summer. However, reservoir releases also
39 periodically cause increased flows in reaches below the dams that otherwise would have been dry.
40 The dams also trap sediment which has led to downstream channel incision (Kondolf and Curry
41 1984). Groundwater pumping by Cal-Am and others has been identified as a major impact on
42 riparian vegetation (Monterey County 2005).

1 McNiesh, Zinke, and others have demonstrated that groundwater pumping has led to local riparian
2 vegetation mortality (Monterey County 2005). This mortality has been associated with local bank
3 erosion. McNiesh has shown that not only total drawdown, but also the rate of drawdown, is critical
4 for survival of riparian trees. The precise amount of drawdown that can be tolerated by vegetation
5 cannot be defined, because it is dependent on a large number of interrelated factors (Monterey
6 County 2005). However, a general model outlined by McNiesh can be used to predict thresholds of
7 damage to vegetation. Mild stress of riparian trees occurs if drawdown is between 4 and 8 feet in a
8 season or between 1 and 2 feet per week. Severe stress occurs when seasonal drawdown is greater
9 than 8 feet, or drawdown in a week exceeds 2 feet. These are drawdown rates in excess of the
10 normal seasonal fluctuation in groundwater levels.

11 **Steelhead**

12 NMFS has listed steelhead trout in the Carmel River Basin as a threatened species. NMFS considers
13 these fish to be part of a broader population designated as the south-central California Coast Distinct
14 Population Segment (DPS). The steelhead population within the California Central Coast was listed
15 as threatened under the federal Endangered Species Act in 1997 and critical habitat was designated
16 in 2005, including the Carmel River

17 **Life History**

18 Steelhead are anadromous (sea-run) rainbow trout that spawn in freshwater, spend the first year
19 (or years) of life in freshwater, and then migrate to the ocean where they continue to grow and
20 mature before returning to spawn.

21 Following upstream migration, the female establishes a territory and digs a redd (gravel nest) with
22 her tail, usually in areas where there is sufficient subsurface flow to sustain eggs and alevins (yolk-
23 sac fry) through the incubation period (usually the lower ends of pools or heads of riffles). She then
24 lays the eggs in the redd where they are fertilized by one or more males. Eggs buried in redds hatch
25 in 3-4 weeks (at 10-15 degrees Celsius), and fry emerge from the gravel 2-3 weeks later. The fry
26 initially live in quiet waters close to shore and soon establish feeding territories that they defend
27 against other juveniles. As they grow during spring and summer, juvenile steelhead move to faster,
28 deeper water in riffles, runs, and pools. They typically maintain positions near swift currents that
29 carry drifting aquatic and terrestrial insects on which they feed. Some juveniles may move
30 downstream to the lower reaches of streams or lagoons during the summer and fall to complete
31 their freshwater rearing phase.

32 After one year of stream residence, most juveniles become smolts (juveniles adapted to seawater)
33 and migrate downstream to the ocean in late winter and spring. Some juveniles remain in fresh
34 water 1-2 more years before they enter the ocean. Because juvenile steelhead rear for a year or
35 more in freshwater, juveniles of different age groups are usually present year-round in California
36 coastal streams.

37 Most steelhead spend 1-3 years in the ocean before returning to spawn. Some adults return to the
38 ocean after spawning (kelts) and return to spawn again. Occasionally, juvenile steelhead mature in
39 freshwater and spawn without migrating to the ocean. This occurs most frequently during droughts
40 when juveniles are trapped in the river and cannot migrate to the ocean.

1 **Steelhead within the Carmel River**

2 The upstream migration of adults in the lower Carmel River primarily occurs from mid-December
3 through mid-April in response to flows of sufficient magnitude and duration to stimulate movement
4 of adults, permit passage of adults past critical riffles in the lower river, and keep the river mouth
5 open between storms. Although suitable migration conditions may occur earlier, adults typically do
6 not begin arriving at San Clemente Dam until late December or January. Depending on migration
7 opportunities later in the season, the migration of adults may continue into April.

8 The primary spawning season for steelhead in the Carmel River is February through March, but
9 spawning may continue through mid-April. Downstream of San Clemente Dam, the highest
10 concentration of redds generally occurs upstream of the Narrows but redds have been observed
11 further downstream.

12 In the Carmel River, most steelhead fry emerge from the gravel in April-June and rear for at least one
13 year in the river before migrating to the ocean as smolts. Juveniles may migrate downstream to
14 lower reaches of the Carmel River in late spring or early summer of their first year of life (young-of-
15 the-year or age 0+ juveniles) or in late fall and early winter of their first, second, or third years (as
16 yearling and older juveniles). Juveniles of all age classes may migrate as far downstream as the
17 lagoon in years when flows to the lagoon are sustained through the summer and fall. Substantial
18 downstream movement of juveniles in late fall and early winter appears to be associated with the
19 initial storms of the season that result in spill and increased flows downstream of San Clemente
20 Dam. Viable steelhead populations in the Carmel River depend on sufficient attraction flows, passage
21 flows for adults and smolts, suitable spawning and egg-incubation conditions, and good rearing
22 conditions (Monterey County 2005).

23 Many juvenile steelhead in the Carmel River become smolts and enter the ocean in late winter and
24 spring after one year in the river. A small number remains for two to three years before emigrating.

25 The steelhead run in the Carmel River at the time of the Spanish explorers was believed to be
26 upwards of 12,000 fish (SWRCB 1995). The river was overfished during the mid-to-late 1800s, and
27 the runs subsequently declined. Snider (1983) reported annual runs of 1,200 adult steelhead at the
28 San Clemente Dam fishway during the mid-1970s. During droughts in 1976-77 and the late 1980s,
29 no steelhead passed San Clemente Dam. The Lagoon never opened during the four years from 1987
30 to 1990. The density of rearing juvenile steelhead reached very low levels by 1989 but has increased
31 in subsequent years. After lows of zero returning adult steelhead in 1989-90, one fish in 1991, and
32 15 in 1992, the run has increased to an average of a few hundred fish.

33 **California Red-Legged Frog**

34 The CRLF is listed as threatened under the federal Endangered Species Act. It has been extirpated
35 from 70% of its former range and now is found primarily in coastal drainages of central California,
36 from Marin County, California, south to northern Baja California, Mexico. CRLF has been reported
37 from several relatively isolated, although widely distributed locations, along the Carmel River. This
38 Carmel River population has been identified by USFWS as a core population, and is targeted for
39 development and implementation of a management plan (USFWS 2002).

40 Information on CRLF occurrences in the lower Carmel River floodplain, between approximately RM
41 28 (above Los Padres Dam reservoir) and the Carmel River Lagoon, was taken primarily from
42 information provided in the Draft Interim Biological Assessment for the Carmel River Dam and

1 Reservoir Project (Monterey County 2005), although other sources such as the Recovery Plan for the
2 CRLF (USFWS 2002) were also reviewed.

3 The USFWS most recently updated designated critical habitat for the CRLF in 2010 (USFWS 2010).
4 Most of the lower Carmel River watershed was included in critical habitat. Only a few localities in
5 California have been identified with more than 350 adults; one of these is Rancho San Carlos, a
6 private ranch on the upper portion of the Carmel River Valley (USFWS 2002).

7 As part of their efforts to characterize habitat for CRLF, EcoSystems West Consulting Group (2001)
8 identified a total of 100 potential reproductive sites along the Carmel River floodplain. Twenty-two
9 of these occurred in the main stem of the river and 78 occurred in off-channel sites. Numerous
10 additional non-reproductive habitats were also identified. Incidental observations of CRLF in the
11 Carmel River floodplain made during the habitat characterization and critical habitat mapping
12 efforts included observations of adults at 69 sites, sub-adults at 22 sites, young of the year at 15
13 sites, and tadpoles at 13 sites (Monterey County 2005). The majority of potential reproductive sites
14 tend to cluster in two general locations: behind the two existing reservoirs and below RM 1 in the
15 Carmel River lagoon. Surveys conducted by Mullen (1996) indicate that CRLF populations occur in
16 several tributaries of the Carmel River in addition to those identified in the main stem and its
17 floodplain.

18 Other Biological Resources

19 The fish community in the Carmel River is diverse relative to other Central Coast streams. Twenty
20 species have been identified within the river and lagoon, including 12 native and 8 introduced
21 species. Sculpin (*Leptocottus armatus*), brown trout (*Salmo trutta*), hitch (*Lavinia exilicauda*),
22 stickleback (*Gasterosteus aculeatus*), and steelhead are the most abundant species. Species
23 composition in the lower river and lagoon may change as a function of the connectivity of the mouth
24 of the river with the ocean (Monterey County 2005).

25 While other biological resources of interest (such as birds, benthic invertebrates, amphibians) are
26 also dependent on the overall health of the river system, impacts on these groups can be assessed
27 with some reliability by considering impacts on flow on riparian vegetation, steelhead, and CRLFs.
28 Riparian vegetation provides habitat for numerous wildlife species including neotropical song birds
29 and raptors. Special-status birds that may occur in the area and nest and forage in riparian habitat
30 along the river include the federal and state endangered least Bell's vireo (*Vireo bellii*), the yellow
31 warbler (*Dendroica petechia brewsteri*), and the yellow-breasted chat (*Icteria virens*) (Monterey
32 County 2005). Special-status raptors that may utilize riparian vegetation in the Carmel Valley
33 include sharp-shinned hawks (*Accipiter striatus*) and Cooper's hawk (*Accipiter cooperi*) (Monterey
34 County 2005). Other sensitive amphibian and reptile species that could be affected by increased
35 diversions include the southwestern pond turtle (*Clemmys marmorata pallida*) and possibly the
36 foothill yellow-legged frog (*Rana boylei*) (MPWMD 1998).

37 Historic Effect of the Recycled Water Project on Carmel River Biological 38 Resources

39 As discussed above, the Recycled Water Project has reduced withdrawals from the Carmel River to
40 serve irrigation uses in the Del Monte Forest from late 1994 to the present, which has benefitted
41 (and will continue to benefit) biological resources dependent on the river as follows:

- 1 • **Riparian vegetation:** A reduction in groundwater pumping reduces stress to local riparian
2 vegetation and increases access to water and reduces local bank erosion. Species dependent on
3 riparian vegetation benefit through maintenance and expansion of forage, nesting, and rearing
4 habitat. Bank stability is improved with the expansion of extant riparian vegetation. Stream
5 temperatures are lowered due to increase in shade cover affecting steelhead and other aquatic
6 resources sensitive to stream temperature fluctuations.
- 7 • **Steelhead:** Existing low-flow conditions in the Carmel River during average, dry, and very dry
8 years are improved by decreased groundwater pumping which results in improvement of
9 migration potential and stream connectivity, expanding spawning areas, lowering temperatures,
10 increasing dissolved oxygen, and reducing salinity in downstream coastal areas.
- 11 • **California Red-Legged Frog:** Reduced groundwater pumping in average, dry, and very dry
12 years increases the water table, potentially improving successful breeding and expanding
13 rearing locations for CRLF. Potential increases in riparian vegetation described above also
14 favorably affect this species, which utilize riparian areas for foraging and dispersal.
- 15 • **Other Resources:** Other fish species and other aquatic resources dependent on adequate flows
16 and water quality experience similar benefits described above for steelhead. Special-status
17 birds, raptors and other species gain breeding and foraging locations with expansion of riparian
18 vegetation and areas. Special-status wildlife species, such as southwestern pond turtle, also see
19 an improvement of habitat conditions due to increase of flow and raising of water tables,
20 particularly in summer and early fall periods of average, dry, and very dry years.

21 **Regulatory Setting and Water Supply Planning**

22 Relevant state and local regulations and prior legal rulings that apply to water supply and demand
23 are discussed below.

24 **SB 610 and SB 221 Applicability**

25 SB 610 and SB 221 (Water Code Section 10912 and Government Code Section 65867.5, respectively)
26 are companion measures that support planning between water suppliers and local jurisdictions. SB
27 610 expands the existing requirement that lead agencies confer with affected public water agencies
28 when preparing a negative declaration, mitigated negative declaration, or EIR for certain large
29 projects. The water agency is required to provide the lead agency a detailed water supply
30 assessment (WSA) of whether the water agency has sufficient current and future water supplies to
31 service the proposed project and other expected future projects (Water Code Section 10910). The
32 WSA must be considered during the CEQA process. If there is insufficient water, the County must
33 include that determination in its findings for the project (Water Code Section 10911).

34 A WSA (per Water Code Section 10912) is required for:

- 35 1. A proposed residential development of more than 500 units.
- 36 2. A proposed shopping center or business establishment employing more than 1,000 persons or
37 having more than 500,000 square feet of floor space.
- 38 3. A proposed commercial office building employing more than 1,000 persons or having more than
39 250,000 square feet of floor space.

- 1 4. A proposed hotel or motel, or both, having more than 500 rooms.
- 2 5. A proposed industrial, manufacturing, or processing plant, or industrial park planned to have
- 3 more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000
- 4 square feet of floor area.
- 5 6. A mixed-use project that includes one or more of the projects specified in this subdivision.
- 6 7. A project that would demand an amount of water equivalent to, or greater than, the amount of
- 7 water required by a 500 dwelling unit project.

8 To determine if the proposed project would demand more water than a proposed residential
9 development of 500 units, a factor of 0.42 acre-feet per year (AFY) per dwelling unit used by the
10 MPWMD was used (Monterey County 2005). Based on this threshold (500 x 0.42 AFY = 210 AFY),
11 even under the higher demand scenario of Option 1 (New Resort Hotel) for Area M Spyglass Hill, the
12 average year demand for water would be 135 AFY, substantially less than the threshold AFY for a
13 WSA. Under Area M, Option 2, average year demand for water would be 114 AFY. Therefore,
14 preparation of a WSA was not required and was not prepared for the proposed project.

15 **Carmel River: SWRCB Order WR95-10 and SWRCB Order WR2009-** 16 **0060 (CDO)**

17 In 1995, the SWRCB issued Order WR 95-10, which found that Cal-Am did not have sufficient water
18 rights for its existing water diversions from the Carmel River. SWRCB found that Cal-Am had rights
19 to only 3,376 AFY, and ordered Cal-Am to do the following: (1) immediately cease and desist from
20 diverting any water from the Carmel River in excess of 14,106 AFY; (2) obtain appropriative permits
21 for its diversions; (3) obtain water from other sources to make 1:1 reductions in unlawful
22 diversions; and/or (4) contract with another agency having rights to divert and use water from the
23 Carmel River. Cal-Am was also ordered to implement a water conservation plan to further reduce
24 diversions to 11,990 AFY in 1996 and to 11,285 AFY in 1997 and subsequent years. SWRCB
25 subsequently required Cal-Am to maintain a water conservation program with the goal of limiting
26 annual diversions to 11,285 AFY until full compliance with the order was achieved (SWRCB 1995). A
27 discretionary exemption to certain limitations of WR 95-10 related to the applicant's entitlement is
28 discussed in the section on the history of the entitlement below.

29 SWRCB (in Decision D-1632, as amended in Order WR 98-04) has also determined that the Carmel
30 River is a "fully appropriated stream" from the mouth of the river upstream to the Sleepy Hollow
31 Gage (RM 17.2) between May 1 through December 31 and that SWRCB has permit authority in this
32 reach. Certain existing diversions present prior to Decision D-1632 are allowed to apply for a permit
33 to allow diversion between May and December; all other applicants must limit their diversions to
34 between January and April.

35 In October 2009, the SWRCB issued Order WR2009-0060, a cease and desist order (CDO), which
36 prescribes a series of significant cutbacks to Cal-Am's pumping from Carmel River from 2010
37 through December 2016. Specifically, it includes a schedule for Cal-Am to reduce diversions from the
38 Carmel River, bans new water service connections (with certain exceptions, including for
39 connections related to the Applicant's entitlement), bans increased use of water at existing service
40 connections resulting from a change in zoning or use, establishes a requirement to build smaller
41 near-term water supply projects, and requires reporting procedures. If a new water supply cannot
42 be built by the end of 2016, the CPUC, which regulates Cal-Am as a water utility, may require water

1 rationing and/or a moratorium on new water permits for construction/remodels. Customers in Del
2 Monte Forest using an entitlement from the Pebble Beach Wastewater Reclamation Project
3 (including the proposed project) are not subject to the moratorium, but are subject to any rationing
4 program that affects the Cal-Am water system. Lawsuits have been filed challenging the CDO, and
5 proceedings are pending in Santa Clara Superior Court. Ongoing litigation is not anticipated to be
6 resolved until late 2011 (MPWMD 2011).

7 **Seaside Aquifer Adjudication**

8 Most of the Seaside Area groundwater basin is within the incorporated cities of Marina, Seaside, and
9 Sand City. The Seaside Area basin is composed of a number of smaller sub-basins, and the
10 boundaries of the basin are poorly understood, particularly under Monterey Bay. Current water use
11 within the basin (2005–2010) has averaged about 4,000 AFY (see Appendix H).

12 Because of the 1995 Order WR 95-10 that ruled Cal-Am did not have a legal right to approximately
13 70% of the water it had been diverting from the Carmel River (refer to Carmel River discussion
14 above), Cal-Am began drawing more water from groundwater wells within the Seaside groundwater
15 basin. In 2006, the basin was adjudicated and a watermaster was appointed to manage the basin and
16 bring its groundwater budget into balance. The adjudication resulted in a court-ordered physical
17 solution to the basin's groundwater problem. The operating yield for three years beginning in 2007
18 for the basin as a whole was defined as 5,600 AFY (including 4,611 AFY for the coastal subareas)
19 including both Cal-Am and other users. The judgment requires a 10% decrease in operating yield for
20 the coastal subareas every three years beginning in 2010. The decreases are to continue until
21 production reaches the "natural safe yield" of 3,000 AFY established under the judgment. The
22 watermaster adopted the Seaside Monitoring and Maintenance Program in 2006 to implement the
23 decreases (MPWMD 2007). Cal-Am's current (2011) allocation for the Seaside Aquifer is 3,448 AFY
24 (including 3,202 AFY for the Coastal Subareas and 246 AFY for the Laguna Seca Subareas). Cal-Am's
25 ultimate adjudicated allocation is 1,474 AFY and withdrawals will be reduced to that level over time.

26 This analysis presumes that there will be no increase in supply from the Seaside Aquifer to serve
27 water demand generated by the project from this aquifer due to the constraints noted above.

28 **History of Pebble Beach Company's Water Entitlement**

29 Following is a summary of the water entitlement relative to the applicant's properties within the Del
30 Monte Forest.

31 In 1989, MPWMD adopted Ordinance 39, which offered to provide a permanent dedication of
32 potable water to users who guaranteed financing of the CAWD/PBCSD Recycled Water Project,
33 which would reclaim wastewater for irrigation use on golf courses and other uses in the Del Monte
34 Forest. The intent of the Recycled Water Project was to lower use of potable water for irrigation by
35 an average of 800 AFY by provision of recycled water for irrigation.

36 A Fiscal Sponsorship Agreement was signed by MPWMD and the Pebble Beach Company, in which
37 the applicant guaranteed financing for the Recycled Water Project to be operated by CAWD and
38 PBCSD. In return, the applicant would be granted a dedicated water entitlement of 365 AFY of
39 potable water for specific "benefited" properties in the Del Monte Forest. An additional 15 AFY
40 entitlement would be granted to two other property owners on Areas S and W in the Del Monte

1 Forest who also participated in the agreement. The total entitlement granted was for 380 AFY of
2 potable water. The right to the remaining water savings would be held by MPWMD.

3 The Agreement identifies this entitlement as a vested property right and allows the applicant the
4 right to reallocate the water entitlement among the benefited properties, provided that the annual
5 water usage among all benefited properties does not exceed the aggregate water entitlement held by
6 the applicant.

7 In 1994, the Recycled Water Project and the distribution and storage system were constructed and
8 began operations.

9 As noted above, in 1995, the SWRCB found that Cal-Am did not have sufficient water rights for its
10 existing water diversions from the Carmel River (Order WR 95-10) and required Cal-Am to reduce
11 its diversions and take actions to implement a water project to replace its illegal diversions. In 2009,
12 the SWRCB issued a cease and desist order directing Cal-Am to take various actions to further curtail
13 and reduce its illegal diversions of water from the Carmel River (Order WR2009-0060). Order WR
14 2009-0060 allowed Cal-Am to divert water to supply the applicant's water entitlement from
15 MPWMD until December 31, 2016. The Order prohibits Cal-Am from diverting water from the
16 Carmel River after December 31, 2016, to supply the applicant's water entitlement. The Applicant
17 and other parties separately filed petitions with the SWRCB for reconsideration of Board Order WR
18 2009-0060. The Applicant's petition focused on challenging the prohibition of Cal-Am diversions to
19 supply the water entitlement. Upon review of this petition, SWRCB determined that Cal-Am could
20 provide water from the Carmel River to supply the applicant's water entitlement, provided the
21 water provided is within Cal-Am's legal water rights. SWRCB also determined that WR 2009-0060
22 does not contain language extinguishing the applicant's entitlements but affirms that the
23 entitlements must be served in a manner consistent with the water rights held by Cal-Am. When Cal-
24 Am develops a new source of water that makes water available for new connections consistent with
25 Order WR 2009-0060, the entitlements will apply to that new supply (SWRCB 2010).

26 In summary, Cal-Am can provide water from the Carmel River to supply new connection for the
27 applicant's entitlements until December 31, 2016 without limitation. After December 31, 2016, Cal-
28 Am would have to supply the applicant's entitlement from water withdrawn from the Carmel River
29 within its legal rights or from other legal sources, such as the Regional Project. The Seaside Aquifer
30 cannot supply additional water for Cal-Am under current conditions (without replenishment of the
31 aquifer from external sources) because the aquifer is oversubscribed and subject to constraint by
32 the basin adjudication described above.

33 Pursuant to MPWMD Ordinance 109 the Applicant is allowed to transfer up to 175 AFY of their
34 remaining entitlement to other residential users. As of 2011, the Applicant had used 10 AFY of the
35 entitlement for the previously developed Casa Palmero project and has sold approximately 130 AFY
36 to other residential users. Subtracting these amounts from the original 365 AFY, there is
37 approximately 225 AFY remaining entitlement for project or other use. As of 2011, the total amount
38 of the original entitlement of 365 AFY actually used was approximately 40 AFY, leaving 325 AFY
39 unused (MPWMD 2011).

40 **Monterey Bay Regional Water Supply Project**

41 The Monterey Regional Water Supply Project (Regional Project) is an adopted program to replace
42 the water illegally withdrawn from the Carmel River by Cal-Am and water above Cal-Am's

1 adjudicated allocation for the Seaside Aquifer in the short-run and to provide additional water for
2 planned growth in the future.

3 The California Public Utilities Commission (CPUC) originally studied a Coastal Water Project focused
4 solely on replacing the unlawful diversions of Carmel River water. The CPUC's certified Final EIR for
5 the Coastal Water Project also analyzed the Regional Project, as a project alternative, that would
6 produce additional water beyond Cal-Am's current Carmel River replacement needs. In addition to
7 Cal-Am's replacement needs, the Regional Project would provide sufficient additional water to the
8 Marina Coast Water District to meet the future needs of Fort Ord (2,700 AFY), to provide for build-
9 out of the Monterey Peninsula in accordance with existing local general plans (4,500 AFY), and to
10 provide for the North County (5,900 AFY). The Regional Project is envisioned as a phased project,
11 with first priority being 12,500 AFY of replacement water for Cal-Am and 2,700 AFY to meet future
12 Fort Ord demand. Phase I of the Regional Project would therefore provide up to 15,200 AFY in a
13 critically dry weather year. If fully built out with Phase II, the Regional Project would supply up to
14 25,600 AFY (CPUC 2009).

15 As described in the Coastal Water Project Final EIR (CPUC 2009), Phase I of the Regional Project
16 would include the following facilities and would provide up to 15,200 AFY in critically dry years:

- 17 • Sand City desalination plant and distribution system which began operation in 2010 (300 AFY).
- 18 • Regional Urban Water Augmentation Project, which includes delivery of recycled water from the
19 Salinas Valley Reclamation Plant for urban irrigation uses (currently in design) (1,000 AFY).
- 20 • Seaside Basin Aquifer Storage and Recovery (ASR) project expansion (1,300 AFY including n
21 existing 920 AFY plus expansion of 380 AFY).
- 22 • Regional Desalination Facility, which is a new 10.9 mgd plant and associated intake wells
23 proposed to be located in North Marina. (8,800 AFY on average with up to 10,900 AFY).
- 24 • Groundwater use in critically dry years (1,700 AFY) with replacement of water from use of
25 additional desalination water in off-peak years to balance basin.

26 Phase II could include some combination of the following additional facilities, none of which are
27 currently approved (CPUC 2009):

- 28 • Pacific Grove urban runoff diversion project.
- 29 • Salinas River Diversion Facility.
- 30 • Castroville Seawater Intrusion Project expansion.
- 31 • Expansion of the Surface Water Treatment Plant proposed under Phase 1 of the Coastal Water
32 Project.
- 33 • Expansion of the Regional Desalination Facility proposed under Phase 1 of the Coastal Water
34 Project to utilize brackish water wells.
- 35 • Seaside Basin groundwater replenishment activities.
- 36 • Seaside Basin ASR and reservoir expansion.

37 The CPUC certified the Final EIR for the CWP in December 2009 and issued its decision approving
38 the Regional Desalination Project, granting a Certificate of Public Convenience and Necessity
39 (CPCN), for California-American Water Facilities on December 3, 2010.

1 The Regional Project is being implemented through a Water Purchase Agreement
2 (MCWRA/MCWD/Cal-Am 2011): a three-way partnership of the Marina Coast Water District
3 (MCWD), the MCWRA and Cal-Am, whereby the overall purpose of each agency is:

- 4 • MCWD provides water service to the City of Marina and the former Fort Ord. MCWD acts on
5 behalf of persons served to furnish water for beneficial use, to protect the groundwater
6 underlying MCWD, and to conserve the water supply for future as well as present use.
- 7 • MCWRA's boundaries are coexistent with Monterey County's boundaries, and MCWRA is
8 responsible under the Agency Act to control groundwater extractions to prevent the loss of
9 usable groundwater through intrusion of seawater, to replace groundwater through the
10 development and distribution of a substitute surface supply, and to prohibit groundwater
11 exportation from the Salinas Basin.
- 12 • Cal-Am provides water service in various areas within California, including a service area in
13 Monterey County, adjacent to MCWD Service Area and within the boundaries of MCWRA.

14 Phase 1 of the Regional Project was planned for completion of construction by the end of 2015 and
15 operation in 2016, but implementation of the Regional Project has faced numerous challenges to
16 date that may delay or result in change to the Regional Project:

- 17 • California Coastal Commission: The project must be approved by the California Coastal
18 Commission for project elements located within the coastal zone. No permit for the project has
19 been issued to date. The CCC recently (August 2011) postponed consideration of an application
20 for a test well for the project, which is needed to support project design. The delay of this permit
21 could delay design and construction of the project. Approval of the overall project by the CCC is
22 also uncertain as well.
- 23 • Cost: Water derived from the desalination element of the project will be much more expensive
24 than the current supplies from the Carmel River and the Seaside Aquifer. As a result, there is
25 substantial concern on behalf of ratepayers about the future increased cost of water. Cal-Am
26 recently commissioned a study on alternatives to the project, specifically to examine the
27 potential to reduce costs (see discussion below). It is unknown at this time whether cost
28 concerns might result in a change to the project to a different technology or different project
29 configuration; should this happen, completion of the project and provision of replacement water
30 supply could be delayed.
- 31 • Governance: Certain issues have been raised recently concerning project governance. Some
32 stakeholders have advocated for a different structure of control than the current control of
33 MCWD, MCWRA, and Cal-Am. In addition, concerns have been raised about potential conflicts of
34 interest on behalf of the project manager for the project's management consultant, RMC. While
35 governance issues can ultimately be resolved, resolution of these issues may result in delays for
36 project implementation or result in alternatives.

37 Given this uncertainty, at present it is unknown whether the Regional Project would be completed
38 by the end of 2016 and whether the Regional Project will be completed at all. As a result, this EIR
39 considers potential water supply impacts under two alternative scenarios for 2017:

- 40 • 2017 Scenario A: Regional Project completed as proposed by 2016.
- 41 • 2017 Scenario B: Regional Project (or an alternative) not completed by 2016.

1 Alternatives to the Regional Project

2 In light of the challenges to the Regional Project, a number of parties have been considering
3 alternatives. A review of potential alternatives was completed in October 2011 by RBF Consulting on
4 behalf of Cal-Am (RBF, 2011). Alternatives reviewed by RBF include the following:

- 5 • Alternative 1 Regional Project. This is the proposed 10 mgd desalination project included in the
6 Regional Project, along with 1,300 AFY of groundwater recharge to the Seaside Aquifer using
7 water from the Carmel River.
- 8 • Alternative 2 - Reduced Marina Desal Project plus an Extended ASR system plus Groundwater
9 Recharge of Treated Wastewater. This alternative would include a smaller (6.5 mgd)
10 desalination plant in Marina, 2,700 AFY of groundwater recharge to the Seaside Aquifer with
11 treated wastewater from the regional wastewater treatment plant, and 2,700 AFY of
12 groundwater recharge to the Seaside Aquifer using water from the Carmel River.
- 13 • Alternative 3- Lower Carmel Valley Filtration Plant (LCVFP) plus an Extended ASR System. This
14 alternative would include a 35 mgd filtration plant in Carmel Valley using high flow diversion
15 water with 6,700 AFY of groundwater recharge to the Seaside Aquifer.
- 16 • Alternative 4 - LCVFP plus an Extended ASR System plus Groundwater Recharge Using Treated
17 Wastewater. This alternative would include a 24 mgd LCVFP along with 2,700 AFY of
18 groundwater recharge using treated wastewater and 4,200 AFY of groundwater recharge from
19 the Carmel River.
- 20 • Alternative 5 - LCVFP plus a Desal Plant in Marina plus an Extended ASR System. This
21 alternative would include a 32 mgd LCVFP, a 3.5 mgd desalination plant in North Marina, and
22 5,500 AFY of groundwater recharge.
- 23 • Alternative 6 - LCVFP plus Sand City Desal Expansion plus an Extended ASR System. This
24 alternative would include a 35 mgd LCVFP, expansion of the existing Sand City desalination plan
25 from 0.3 mgd to 1.0 mgd, and 6,500 AFY of groundwater recharge.
- 26 • Alternative 7 - LCVFP plus Monterey Desal Plant plus an Extended ASR System. This alternative
27 would include a 32 mgd LCVFP, a 3.0 mgd desalination plant near the Naval Post Graduate
28 School and 5,200 AFY.
- 29 • Alternative 8 - Lower Carmel Valley Iron Removal Plant plus a Monterey Desal Plant plus an
30 Extended ASR System. This alternative would include a 20 mgd iron removal plant, a 3.0 mgd
31 desalination plant near the Naval Post Graduate School and 5,100 AFY of groundwater recharge.
- 32 • Alternative 9 - Salinas River Filtration Plant plus an Extended ASR System. This alternative
33 would include a 35 mgd filtration plant and 6,900 AFY of groundwater recharge.
- 34 • Alternative 10 - Deep Water Desalination at Moss Landing. This alternative would include a 10
35 mgd desalination plant near Moss Landing along with 1,300 AFY of groundwater recharge.
- 36 • Alternative 11 - Marina Desal Plant plus Groundwater Recharge of Treated Wastewater plus
37 Conservation or Table 13 Direct Diversion³. This alternative would include a 5 mgd desalination
38 plant in Marina, 2,700 AFY of groundwater recharge from the Carmel River, more aggressive
39 conservation to reduce demand by 1,500 AFY. A variant of this alternative would be to obtain

³ “Table 13” refers to Table 13 in SWRCB’s Decision D-1632 implementing Order WR 95-10 and identifies the holders of priority rights for diversion of water from the Carmel River.

1 Table 13 direct diversion rights (meaning established rights to Carmel River diversion) in lieu of
2 additional conservation.

3 RBF estimated capital costs for these different alternatives vary between \$362 million for the 10.
4 RBF estimated unit costs for these alternatives vary between \$2,680/AF for the Regional Project,
5 which is the lowest of all alternatives up to \$4,460/AF for Alternative 10. These cost estimates are
6 sensitive to the underlying cost assumptions for each alternative.

7 At present, none of the alternatives are undergoing formal environmental review or approval
8 processes, and thus it is speculative to articulate full-blown alternatives to the Regional Project for
9 evaluation in this EIR.

10 Given this uncertainty, this EIR considers potential water supply under two scenarios for 2017 at a
11 very general level:

- 12 • 2017 Scenario B: Regional Project (or an Alternative) not completed by 2016 (as discussed
13 above).
- 14 • 2017 Scenario C: Alternative to the Regional Project completed as proposed by 2016 (same as
15 2017 Scenario A in terms of provision of water supply but potentially different secondary
16 environmental impacts due to construction/operation of alternative).

17 Local Coastal Plan

18 Existing Local Coastal Plan

19 The existing Del Monte Forest Land Use Plan was adopted and certified in 1984. There have been
20 substantial changes in water supply conditions since that time including the development of the
21 Recycled Water Project, SWRCB Order WR95-10 and the CDO (WR2009-0060), the listing of the
22 California red-legged frog and California Coastal Steelhead under the Federal Endangered Species
23 Act, and the increase in water demands with growth.

24 The existing Del Monte Forest Land Use Plan and Coastal Implementation Plan describe the
25 reservation of water for developments in the Del Monte Forest from the County's allotment of water.
26 Coastal Act policies require, where public works facilities can accommodate only a limited amount of
27 new development, that coastal-dependent land uses, including recreation and visitor-serving land
28 uses, shall not be precluded by non-priority residential development. The County has previously
29 allocated all of its available allotment, so it has no allotments of water that could be utilized for new
30 development. At present, the only available water for development in the Del Monte Forest is that
31 related to the applicant's water entitlement.

32 The existing LCP designates much of the Del Monte Forest, including the land proposed for
33 development by the proposed project, as resource constrained (B-8). Per LUP Policy 113, the
34 Resource Constraint Area (B-8) designation shall only be removed when water and sewer capacity
35 sufficient to serve such development becomes available and that highway capacity and circulation
36 solutions have been agreed upon and adopted. Until such time that resource problems are solved,
37 the existing LCP specifies that there shall be no development other than existing lots of record. In
38 addition the LCP does not allow the drilling of new wells within the Del Monte Forest to serve new
39 development (per CIP Section 20.147.110.A.4).

1 **Proposed Local Coastal Plan Amendment**

2 As discussed in Chapter 2, Project Description, the proposed LCP Amendment would update the LCP
3 to reflect the current water supply conditions. As described therein, a lack of adequate, long-term
4 public water sources and supplies is a significant constraint to development in the Del Monte Forest.
5 The LCP Amendment prescribes that development in the Del Monte Forest can only be approved if it
6 is first clearly demonstrated that the development will be served by an adequate, long-term public
7 water supply, and where such development incorporates all necessary measures to assure no net
8 increase in water demand from Cal-Am sources where extraction is leading to resource degradation.
9 The only exception is the remaining portion of the applicant's water entitlement consistent with all
10 applicable law for such use, including as circumstances surrounding such use change over time (e.g.,
11 in relation to SWRCB order or otherwise). Thus, the LCP amendment recognizes the validity of the
12 water entitlement and recognizes that new development that relies on the remaining entitlement is
13 allowable provided other applicable law does not dictate otherwise.

14 **Impacts Analysis**

15 **Methodology**

16 **Approach**

17 To evaluate potential impacts on water supply and demand resulting from the proposed project, the
18 water demand from the project elements were evaluated against the criteria for determining
19 significance below.

20 With the proposed project, the Pebble Beach Driving Range in Area V would be relocated to Collins
21 Field, which is currently irrigated with recycled water. Recycled water used at the existing Driving
22 Range would be eliminated as the area would be converted to residential use. The project would
23 therefore result in a reduction in the amount of turf irrigation compared to 2011 Existing
24 Conditions. Irrigation for proposed visitor-serving and residential landscaping is presumed to use
25 potable water due to lack of recycled water infrastructure to serve dispersed development areas. As
26 a result, the project would not result in an increase in recycled water demand, and there would be
27 no demand for new recycled water treatment or distribution lines.

28 In the Del Monte Forest, potable water is supplied by Cal-Am from sources in the Carmel Valley
29 alluvial aquifer and the Seaside Aquifer. As discussed below, given the constraints in the Seaside
30 Aquifer and the basin adjudication, which will reduce Cal-Am's withdrawals over time, it is
31 presumed that the project would not be supplied by Cal-Am with water from the Seaside Aquifer. It
32 is presumed that the project will be supplied from the Carmel River through 2016, and either from
33 the Carmel River or from the Regional Project or an alternative to the Regional Project after 2017.

34 CEQA guidelines (Section 15125) specify that the environmental setting extant at the time of an
35 EIR's Notice of Preparation will "normally" constitute the baseline physical condition by which a
36 lead agency determines whether an impact is significant. Water supply conditions as they exist in
37 2011 are considered the CEQA baseline for this analysis. This EIR defines existing water supply
38 conditions to be the actual withdrawals of water from the Carmel River and the Seaside Aquifer as
39 follows: 2011 Existing Conditions are defined in terms of the current level of withdrawals from the
40 Carmel River and the Seaside Aquifer and the current level of water demand served by Cal-Am. Non-

1 Cal-Am water users are presumed to derive their water from the Carmel River, Seaside Aquifer, or
 2 other sources but are not included in the analysis as they are not presumed to be served by Cal-Am
 3 who would supply water to the proposed project. Carmel River withdrawals from 1995 to 2010
 4 were used for this analysis (Table 3.12-6), but were adjusted (as discussed in Appendix H) to
 5 account for the relatively wetter conditions during this period compared to long-term conditions.

6 **Table 3.12-6. Carmel River Withdrawals for 2011 Existing Conditions based on 1995 to 2010**
 7 **Averages by Water Type (in Acre-Feet)**

Year	Water Year Type	Historic Withdrawals
1995	Wet	10,036
1996	Average	11,701
1997	Average	12,847
1998	Wet	10,154
1999	Average	10,580
2000	Average	11,350
2001	Average	10,798
2002	Dry	11,068
2003	Average	11,541
2004	Dry	11,282
2005	Wet	11,036
2006	Wet	10,954
2007	Critically Dry	10,486
2008	Critically Dry	10,835
2009	Average	10,286
2010	Wet	9,786
1995 to 2010	Annual Average	10,921
	Water Year Type	2011 Existing Conditions¹
	<i>Wet</i>	<i>10,393</i>
	<i>Average</i>	<i>11,300</i>
	<i>Dry</i>	<i>11,175</i>
	<i>Critically Dry</i>	<i>10,660</i>

Notes:

¹ 2011 Existing Conditions = Carmel River withdrawals based on sources listed in Appendix H.

8

9 **Criteria for Determining Significance**

10 In accordance with CEQA, the State CEQA Guidelines, Monterey County plans and policies, and
 11 agency and professional standards, a project impact would be considered significant if the project
 12 would:

13 **A. Water Supply and Demand**

- 14 • Result in a water demand that exceeds water supplies available to serve the project from
 15 existing entitlements and resources, and/or require new or expanded supplies.

1 **B. Water Infrastructure Capacity**

- 2 • Result in water demand that exceeds capacity of the water supply or infrastructure system,
3 requiring substantial expansion of water supply and treatment facilities and/or water
4 infrastructure, the construction of which could cause significant environmental effects.

5 **C. Carmel River Biological Resources**

- 6 • Result in water demand that would result in new or substantially more severe impacts on
7 sensitive biological resources of the Carmel River, including associated riparian vegetation.

8 **Impacts and Mitigation Measures**

9 **A. Water Supply and Demand**

10 **WSD-A1. The project's water demand would represent an increase in water use above the**
11 **2011 Existing Conditions, but would be within the Applicant's current entitlement and could**
12 **be legally supplied by Cal-Am through 2016. However, given the current uncertain nature of**
13 **regional water supplies, the additional project water demand could intensify water supply**
14 **shortfalls and rationing starting in 2017, if the Regional Project (or its equivalent) is not built**
15 **by then. (Significant and unavoidable)**

16 **Water Demand**

17 The proposed project would create an estimated demand for water of between 114 and 135 AFY in
18 an average year, depending on the development option selected for Area M Spyglass Hill. A summary
19 of water demands is provided in Table 3.12-7. A more detailed estimate of water demand is
20 provided in Appendix H. This water demand includes irrigation demand for the visitor-serving and
21 residential portions of the project. The applicant is not proposing to use recycled water for new
22 landscaped areas associated with the visitor-serving and residential portions of the project due to
23 the lack of existing recycled water lines to serve these locations. Since the total demand with Area M
24 Option 1 (New Resort Hotel) would be 135 AFY and the total demand with Area M Option 2 (New
25 Residential Lots) would be 114 AFY, the higher demand of 135 AFY is generally used in the
26 remainder of this impact analysis.

1 **Table 3.12-7. Direct Water Demand of Proposed Project**

Development Area	Projected Demand	
The Lodge at Pebble Beach	13.11	
The Inn at Spanish Bay	12.85	
Area M Spyglass Hill		
Option 1 New Resort Hotel	30.59	
Option 2 New Residential Lots	10.00	
Residential Lot Subdivisions	77.00	
Equestrian Center Reconstruction	0.00	
Driving Range Relocation	0.33	
SR 1/SR 68/17-Mile Drive Intersection Reconstruction	0.70	
	Total with Option 1	Total With Option 2
Project Total - Average Year	134.57	113.99
Project Total - Wet Year	127.84	108.29
Project Total - Dry Year	141.30	119.69
Project Total - Very Dry Year	148.03	125.39
Source: Appendix H		
Note: Units are acre-feet per year (AFY).		

2

3 **Water Supply Impact Analysis**

4 As noted above, the applicant’s proposal is to use water pursuant to a water entitlement that was
 5 derived through financing the replacement of potable water used for turf irrigation in the Del Monte
 6 Forest with recycled water. Given the constraints on the Seaside Aquifer and the basin adjudication
 7 which will reduce Cal-Am’s withdrawals over time, it is presumed that the project would not be
 8 supplied by Cal-Am with water from the Seaside Aquifer up to 2016. After 2016, the project could be
 9 supplied by Cal-Am with water from the Carmel River within Cal-Am’s water rights, or through new
 10 water supplies from the Regional Project (or an equivalent alternative).

11 ***Change in Carmel River Withdrawals through 2016 With the Project***

12 The project’s increase in demand would result in increased withdrawals by Cal-Am from the Carmel
 13 River aquifer up to 2016, compared to 2011 Existing Conditions. The project-related increases in
 14 withdrawals can be estimated, as shown in Table 3.12-8. Depending on water year type, project
 15 increased withdrawals are estimated at 128 to 145 AF from the Carmel River.

1 **Table 3.12-8. Project Changes in Withdrawals from the Carmel River**

Low Use (Wet Year)	Acre Feet Per Year (AFY)
<i>2011 Existing Conditions^a</i>	10,393
Project Demand	128
<i>Total Withdrawal</i>	10,521
Change Relative to 2011 Existing Conditions	128
Average Use (Average Rainfall Year)	
<i>2011 Existing Conditions^b</i>	11,205
Project Demand	135
<i>Total Withdrawal</i>	11,340
Change Relative to 2011 Existing Conditions	135
High Use (Dry Year)	
<i>2011 Existing Conditions^c</i>	11,489
Project Demand	142
<i>Total Withdrawal</i>	11,631
Change Relative to 2011 Existing Conditions	142
Very High Use (Very Dry Year)	
<i>2011 Existing Conditions^d</i>	11,773
Project Demand	145
<i>Total Withdrawal</i>	11,918
Change Relative to 2011 Existing Conditions	145

Source:

Appendix H.

Notes:

- ^a Average of Cal-Am Carmel River Withdrawals Water Years 1995, 1998, 2005, 2006 and 2010.
- ^b Average of Cal-Am Carmel River Withdrawals Water Years 1995–2010, adjusted by 2.6%.
- ^c Average of Cal-Am Carmel River Withdrawals Water Years 1995–2010, adjusted by 5.2%.
- ^d Average of Cal-Am Carmel River Withdrawals Water Years 1995–2010, adjusted by 7.8%.

2
3 The results shown in Table 3.12-8 are shown graphically in Figure 3.12-5 and supporting data are
4 provided in Appendix H.

5 **Change in Carmel River Withdrawals in 2017 with the Project**

6 Starting in 2017, Cal-Am is required to reduce its withdrawals from the Carmel River to the level of
7 its existing water rights (3,376 AFY) and over time to reduce its withdrawals from the Seaside
8 Aquifer to its ultimate adjudicated allocation (1,474 AFY). Several scenarios of what will occur in
9 2017 were evaluated:

- 10 ● **2017 Scenario A (Regional Project on Time).** This scenario evaluates water supply and
11 demand conditions in 2017, presuming that the Regional Project is completed as proposed in
12 the Final EIR for the Coastal Water Project (CPUC 2009) to replace water from the Carmel River

1 that is above Cal-Am's existing water rights and water from the Seaside Aquifer in excess of Cal-
2 Am's adjudicated ultimate allocation. Under this scenario, the proposed project would be
3 supplied by water from either the Carmel River or the Regional Project.

- 4 ● **2017 Scenario B (No Regional Project or Alternative).** This scenario evaluates water supply
5 and demand conditions in 2017, presuming that the Regional Project (or an equivalent
6 alternative) is not completed by 2017 to replace water from the Carmel River that is above Cal-
7 Am's existing water rights and water from the Seaside Aquifer in excess of Cal-Am's adjudicated
8 ultimate allocation. Under this scenario, the proposed project would be supplied by water from
9 the Carmel River, but due to regional supply shortfalls would be subject to water rationing as
10 would all existing demand. This scenario would also apply to interim years between the start of
11 2017 and when a Regional Project (or an equivalent alternative) would be completed.
- 12 ● **2017 Scenario C (Alternative to Regional Project).** This scenario evaluates water supply and
13 demand conditions in 2017, presuming that a project equivalent to the Regional Project is
14 completed by the end of 2016 to replace water from the Carmel River that is above Cal-Am's
15 existing water rights and water from the Seaside Aquifer in excess of Cal-Am's adjudicated
16 ultimate allocation. The amount of production is assumed to be the same as that proposed with
17 the Regional Project. Under this scenario, the proposed project would be supplied by water from
18 either the Carmel River or the alternative to the Regional Project. Since the assumed production
19 of the alternative supply project is the same as the Regional Project, this alternative is the same
20 in terms of water supply and demand as 2017 Scenario A but varies in terms of environmental
21 impact as analyzed under Impact WSD-2 below.

22 Carmel River withdrawals including the project demand would be the same whether or not the
23 Regional Project (or an alternative project) is completed due to the fixed limits on Cal-Am's
24 withdrawals from the Carmel River per SWRCB orders. The estimated change in withdrawals with
25 the project in 2017 is shown in Table 3.12-9 and Table 3.12-10.

1 **Table 3.12-9. Project Changes in Cal-Am Withdrawals from the Carmel River, 2017 Scenario A**
 2 **(with the Regional Project) (Acre-Feet)**

Low Use (Wet Year)	
<i>2011 Existing Conditions^a</i>	10,393
Cal-Am Maximum Withdrawals per SCWRB Order WR2009-0060 ^b	3,376
Project Demand (presuming from Carmel River) ^c	128
Reduction in Cal-Am service to Other Existing Users ^d	-128
<i>Withdrawals with Project^e</i>	3,376
Change over 2011 Existing Conditions	-7,017
Average Use (Average Rainfall Year)	
<i>2011 Existing Conditions^a</i>	11,205
Cal-Am Maximum Withdrawals per SCWRB Order WR2009-0060 ^b	3,376
Project Demand (presuming from Carmel River) ^c	135
Reduction in Cal-Am service to Other Existing Users ^f	-135
<i>Withdrawals with Project^e</i>	3,376
Change over 2011 Existing Conditions	-7,829
High Use (Dry Year)	
<i>2011 Existing Conditions^a</i>	11,489
Cal-Am Maximum Withdrawals per SCWRB Order WR2009-0060 ^b	3,376
Project Demand (presuming from Carmel River) ^c	142
Reduction in Cal-Am service to Other Existing Users ^d	-142
<i>Withdrawals with Project</i>	3,376
Change over 2011 Existing Conditions	-8,113
Very High Use (Critically Dry Year)	
<i>2011 Existing Conditions^a</i>	12,098
Cal-Am Maximum Withdrawals per SCWRB Order WR2009-0060 ^b	3,376
Project Demand (presuming from Carmel River) ^c	145
Reduction in Cal-Am service to Other Existing Users ^d	-145
<i>Withdrawals with Project^e</i>	3,376
Change over 2011 Existing Conditions	-8,722

Notes:

- ^a Existing Condition Water Year scenarios from Table 3.12-8.
- ^b Cal-Am withdrawals from the Carmel River limited to Cal-Am water rights amount after 12/31/16.
- ^c Project can be supplied per water entitlement per allowance in SWRCB Order WR 2009-0060, but not in excess of water right amount.
- ^d If project supplied from Carmel River, then Cal-Am will need to supply existing users with an equivalent amount from the Regional Project. If the project is supplied from the Regional Project, then the net effect is the same as Cal-Am withdrawals are limited to their existing water rights (3,376 AFY).
- ^e Assumes no new demand is met from the Carmel River except that of the project due to Cal-Am limits.

Source: Appendix H.

3

1 **Table 3.12-10. Table 3.12-10 Project Changes in Cal-Am Withdrawals from the Carmel River for**
 2 **2017 Scenario B (No Regional Project) (Acre-feet)**

Low Use (Wet Year)	
<i>2011 Existing Conditions^a</i>	<i>10,393</i>
Cal-Am Maximum Withdrawals per SCWRB Order WR2009-0060b	3,376
Project Demand At 65% rationing ^c	45
Reduction in Cal-Am service to Other Existing Users ^d	-45
<i>Withdrawals with Project^e</i>	<i>3,376</i>
Change over 2011 Existing Conditions	-7,017
Average Use (Average Rainfall Year)	
<i>2011 Existing Conditions^a</i>	<i>11,205</i>
Cal-Am Maximum Withdrawals per SCWRB Order WR2009-0060 ^b	3,376
Project Demand At 65% rationing ^c	47
Reduction in Cal-Am service to Other Existing Users ^c	-47
<i>Withdrawals with Project^e</i>	<i>3,423</i>
Change over 2011 Existing Conditions	-7,782
High Use (Dry Year)	
<i>2011 Existing Conditions^a</i>	<i>11,489</i>
Cal-Am Maximum Withdrawals per SCWRB Order WR2009-0060 ^b	3,376
Project Demand At 65% rationing ^c	50
Reduction in Cal-Am service to Other Existing Users ^d	-50
<i>Withdrawals with Project^e</i>	<i>3,426</i>
Change over 2011 Existing Conditions	-8,063
Very High Use (Critically Dry Year)	
<i>2011 Existing Conditions^a</i>	<i>12,098</i>
Cal-Am Maximum Withdrawals per SCWRB Order WR2009-0060 ^b	3,376
Project Demand At 65% rationing ^c	51
Reduction in Cal-Am service to Other Existing Users ^d	-51
<i>Withdrawals with Project^e</i>	<i>3,427</i>
Change over 2011 Existing Conditions	-8,671

Source:

Appendix H

Notes:

^a Existing Condition Water Year scenarios from Table 3.12-8.

^b Cal-Am withdrawals from the Carmel River limited to Cal-Am water rights amount after 12/31/16.

^c Project can be supplied per water entitlement per allowance in SWRCB Order WR2009-0060, but not in excess of water right amount. Presumed project is supplied from Carmel River by Cal-Am, but is subject to rationing like other users. Amount of rationing rounded up to 65% (from 61%) based on calculation of shortfall without the Regional Project (or equivalent by 2017) as shown in Appendix H.

^d Increase of project demand intensifies rationing by equivalent amount.

^e Assumes no new demand is met from the Carmel River except that of the project due to Cal-Am limits.

3

1 **Significance Evaluation**

2 Impacts of the increased water demand from the proposed project were analyzed with respect to:
3 (a) whether sufficient water could be supplied to service the proposed project; and (b) the potential
4 to require development of additional supply to meet project demand.

5 ***Ability to Supply Water for Project***

6 As described above under “Environmental Setting,” there is a remaining unused water entitlement
7 of 325 AFY. Provision of water pursuant to this entitlement by Cal-Am is not constrained by the
8 requirements of SWRCB Order WR 95-10 or Order WR2009-0060 up to December 31, 2016 (see
9 discussion of water supply and distribution in “Environmental Setting” above). The estimated
10 increased supply needed to serve project demands could range between 128 and 145 AFY,
11 depending on water year type. Even if all of this water were derived from the Carmel River, it is less
12 than the remaining entitlement; thus, Cal-Am would be able to supply project demand without
13 incurring any additional risk of enforcement activity from SWRCB pursuant to Order WR 95-10 or
14 Order WR2009-0060 up to December 31, 2016.

15 After December 31, 2016, Cal-Am would be limited to supplying the applicant’s water entitlement
16 from the Carmel River within its legal water rights limit or from future new connection to other legal
17 sources, such as the Regional Project (or an equivalent alternative). Given recognition by SWRCB,
18 MPWMD, and Cal-Am of the validity of the applicant’s water entitlement and its basis in a net
19 reduction of Carmel River withdrawals due to the Recycled Water Project operations, the project can
20 be supplied water from legal sources of water after December 31, 2016.

21 However, given the uncertainty with the Regional Project at this time (as described above), it is
22 possible that there will be no new water supply adequate to fully meet existing demand and project
23 demand by 2017. As a result, there is the possibility of a supply shortfall and water rationing. If the
24 Regional Project (or an equivalent) is not completed by the end of 2016, the project’s water demand
25 would intensify the need for water rationing for existing water uses. The project would be subject to
26 rationing like other existing demand, but the additional project demand would mean the impact of
27 rationing would be more intense.

28 Based on the estimated shortfall in supply without the Regional Project (or its equivalent) (see
29 Appendix H), water rationing could reach 65%. Water rationing could result in economic disruption
30 of commercial and industrial activities on the Monterey Peninsula as well as disruption of
31 residential use. It is also possible that current users of Cal-Am water who have overlying rights to
32 groundwater may increase pumping in certain areas, which may exacerbate environmental
33 conditions (unless other prohibitions like the Seaside aquifer adjudication prevent such activity).
34 The exact response of the community to deep, persistent water rationing is difficult to estimate. This
35 is considered a significant and unavoidable impact related to water supply if the Regional Project (or
36 its equivalent) is not built by the end of 2016.

37 Under constitutional limitations established in the U.S. Supreme Court decisions in the *Nollan* and
38 *Dolan* cases⁴, a project can only be required to mitigate proportionately to their level of impact. No
39 further mitigation is feasible on the part of the Applicant because any additional mitigation would be
40 disproportionate to their water supply impact in light of the Applicant’s prior financing of the

⁴ *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987), and *Dolan v. City of Tigard*, 512 U.S. 374 (1994),

1 Recycled Water Project which has restored more water to the Carmel River than the Applicant
2 proposes to use for the proposed project pursuant to their water entitlement.

3 In summary, the project would be able to obtain water through 2016, would be able to obtain water
4 in 2017 and after if the Regional Project (or its equivalent) is completed by then, and could obtain
5 water in 2017 and after if the Regional Project (or its equivalent) is not completed by then, but
6 would be subject to deep rationing and would intensify the level of rationing for existing users
7 which is considered a significant unavoidable water supply impact.

8 ***Need for New Water Supplies***

9 Before December 31, 2016, the project water demand would be drawn from the Carmel River but
10 would be supplied pursuant to the Applicant's entitlement and Cal-Am is allowed by SCWRB order
11 WR 2009-0060 to supply water through 2016. Thus, up to 2016, the additional project demand
12 would not require the construction of new water supply facilities.

13 After December 31, 2016, the project water demand may be drawn from the Carmel River within
14 Cal-Am's legal rights, but, if so, it would displace an equivalent amount of supply for other existing
15 Cal-Am users. Alternatively, the project could be supplied directly from the Regional Project (or its
16 equivalent). In either case, compared to 2011 Existing Conditions, the project would increase
17 demand for new supply.

18 The Regional Project is being designed to accommodate the existing demand that would be
19 displaced by the restrictions on Cal-Am withdrawals from the Carmel River and the Seaside Aquifer.
20 MPWMD estimates the existing demands based on estimates of water use within the Cal-Am system
21 between 1996 and 2006, and then adjusted those demands upward to account for the relatively wet
22 conditions in this period compared to long-term averages. The use of potable water by the PBCSD
23 Recycled Water Project between 1996 and 2006 is included in MPWMD's estimates and averaged
24 285 AFY. Using the MPWMD's adjustment factors, the potable water demand of the Recycled Water
25 Project would be 292 AFY (average year) up to 307 AFY (critically dry year) (see calculations in
26 Appendix H). Thus, MPWMD included up to 307 AFY in its estimate of existing water demand, which
27 was used to size the Regional Project.

28 Subsequent to 2006, the PBCSD Recycled Water Project was upgraded with the Phase 2
29 improvements which have virtually eliminated all potable water use. Thus, the 307 AFY included in
30 the MPWMD's estimates of existing demand is no longer needed for the Recycled Water Project and
31 is available. Since the Applicant financed the upgrades to the plant that eliminated this water use, it
32 is reasonable to consider this 307 AFY available to serve the Applicant's entitlement. Thus, although
33 the project's water demand will be met either directly from the Regional Project (or its equivalent)
34 or indirectly from the Regional Project (due to displacement of other existing demand from being
35 met via Carmel River water), the project would not require an expansion of the Regional Project (or
36 its equivalent) beyond its currently planned capacity. This is considered a less than significant
37 impact.

38 The project's impact on water infrastructure and associated secondary impacts on the environment
39 of infrastructure are discussed separately below.

1 B. Water Infrastructure Capacity

2 **WSD-B1. Local water infrastructure is included to serve the proposed project and existing**
3 **supply infrastructure outside the project area is adequate to serve the project through 2016.**
4 **The Regional Project (or its equivalent) will need to be built by 2017 to serve existing**
5 **demand and the increase in demand from the project. Regional water supply infrastructure**
6 **and operations will have secondary environmental impacts. (Significant and Unavoidable)**

7 Inside the Del Monte Forest, local distribution water lines are included in the project to deliver
8 water from current distribution lines to the point of demand. The project's new demand could range
9 from 128 to 148 AFY. This amount is less than the amount of potable water previously provided by
10 Cal-Am from the Carmel River to the Del Monte Forest for use in irrigation of golf courses and other
11 large turf areas, which averaged up to 1,000 AFY and over in the past (see Appendix H). With Phase
12 2 of the Recycled Water Project, this demand for potable water use for irrigation of golf courses and
13 large turf areas no longer occurs. The infrastructure already exists to deliver the project's water
14 demand from the Carmel River to the Del Monte Forest, taking into account the local connecting
15 water lines included in the project. Thus, no water infrastructure impacts would occur due to the
16 project related to supplying the project from the Carmel River.

17 After 2016, the project's water demand must either be provided from the Carmel River or from the
18 Regional Project (or an equivalent). If the project is provided water from the Carmel River (by Cal-
19 Am pursuant to its existing water rights), then a proportionate amount of water would need to be
20 supplied to other existing users from the Regional Project (or an equivalent). Regardless of whether
21 the project's demand is serviced from the Carmel River or from the Regional Project (or its
22 equivalent), the Regional Project or an equivalent will need to be built to meet existing demand and
23 proposed project demand. In the CPUC's Final EIR (CPUC 2009), the Regional Project was identified
24 as having significant and unavoidable impacts in the following area: air quality (during construction
25 only for both Phase 1 and Phase 2); geology, soils and seismicity (specifically concerning
26 liquefaction for Phase 2 only); and greenhouse gas emissions (for both Phase 1 and Phase 2).

27 The physical impacts of alternatives to the Regional Project have not been evaluated under CEQA
28 yet, but it is possible they may have similar or different significant, unavoidable impacts than the
29 Regional Project. Of note, many of the alternatives to the Regional Project propose increases in high
30 flow diversions from the Carmel River during winter that are greater than those included in the
31 Regional Project, and thus may result in impacts on steelhead and other Carmel River biological
32 resources, but this has not yet been evaluated and thus are considered speculative under CEQA.
33 Alternatives including desalination elements are likely to have similar greenhouse gas emission
34 impacts as the Regional Project (though perhaps changed in degree) due to the energy intensity of
35 desalination. Alternatives could also result in impact associated with air quality and water quality
36 during construction as well as impacts related to geology, soils, and seismicity. Alternatives
37 involving acquisition of additional Carmel River diversion rights would mean smaller reductions in
38 withdrawals from the river compared to the Regional Project. Due to the early stage of development
39 of these alternatives, it is conservatively assumed for this EIR that alternatives to the Regional
40 Project would also result in one or more significant environmental impacts.

41 The project would indirectly contribute to these secondary physical impacts on the environment
42 because the project would add additional demand for new regional water supply infrastructure. This
43 is considered a significant and unavoidable impact. For the Regional Project, the CPUC has
44 documented the reasons why further mitigation is not available to reduce identified significant and

1 unavoidable impacts. For alternatives to the Regional Project, environmental review has not been
2 completed and thus it is unknown whether or not all significant impacts could be avoided, but it is
3 assumed that such large scale infrastructure would have one or more unavoidable impacts.

4 **C. Carmel River Biological Resources**

5 **WSD-C1. The project's water demand would result in increased withdrawals from the Carmel**
6 **River through 2016 and thus would have a significant and unavoidable impact on Carmel**
7 **River biological resources. After 2017, SWRCB mandated reductions in Cal-Am withdrawals**
8 **from the Carmel River will not be changed by the project demand. (Significant and**
9 **unavoidable)**

10 Compared to 2011 Existing Conditions, the proposed project would increase withdrawals from the
11 Carmel River through 2016, which would affect biological resources dependent on the Carmel River,
12 including riparian vegetation, steelhead, CRLF, and other sensitive biological resources dependent
13 on the river and its aquifer.

14 As described in the "Environmental Setting" for the Carmel River above, existing groundwater
15 pumping (and prior surface diversions) has adversely affected the biological resources found in the
16 Carmel River. Withdrawal of additional water from the Carmel River aquifer to meet project water
17 demand (and increased amounts from cumulative demand) would lower the water table, shorten
18 the amount and period of flow, and contribute to ongoing impacts on Carmel River resources.

19 In wet years, limited increases are less likely to adversely affect biological resources in the Carmel
20 River due to the relative abundance of available water for both withdrawal and to support the river
21 and its resources. Based on the analysis above, the project would result in increased withdrawals of
22 around 128 AFY in a wet year. The wettest year in the last fifteen years was Water Year 1998 (> 47
23 inches of rain on the Monterey Peninsula) (see Appendix H) and Cal-Am Carmel River withdrawals
24 totaled around 10,154 AF. In such a wet year, the project would add about 1% to withdrawals
25 compared to 2011 Existing Conditions. In their study of instream flow needs for steelhead, National
26 Marine Fisheries Service (NMFS), identified that in above normal rainfall years, there could be
27 somewhere between 13,000 and 17,000 AF available for withdrawal on an annual basis without
28 affecting critical flows identified as necessary for steelhead in the Carmel River (NMFS 2002). Thus
29 in wet years, the limited withdrawals associated with the project are not expected to result in
30 adverse effects to Carmel River biological resources on an annual basis compared to 2011 Existing
31 Conditions.

32 However, even during wetter years, lower flows in the Carmel River can still occur in summer and
33 early fall. Under 2011 Existing Conditions (including existing withdrawals), the Carmel River can
34 still go dry in its lower reaches (as it did in early September 1998 during the wettest year in the last
35 25 years), and surface flow to Carmel Lagoon can cease. NMFS has identified that new diversions
36 from the Carmel River should be avoided between June and October of wet years (as well as other
37 years) to avoid further adverse effects on steelhead (NMFS 2002). By increasing diversions
38 compared to 2011 Existing Conditions through 2016, the project could contribute to the river drying
39 earlier in the spring which would affect river resources and could contribute to lower lagoon levels
40 and reduced water quality in Carmel Lagoon.

41 Given that existing average year withdrawals from the Carmel River are already in excess of 10,000
42 AF (and dry year withdrawals can be higher) and have been identified as having adverse effects on
43 river resources, project increases in withdrawals in average, dry, and very dry years would

1 adversely affect Carmel River biological resources compared to 2011 Existing Conditions. Due to the
2 constraints in SWRCB Order WR 2009-0060, this change would only occur through the end of 2016.
3 Effects on biological resources are as follows:

- 4 ● **Riparian vegetation:** Increased groundwater pumping could lead to local riparian vegetation
5 mortality through stress, lack of access to water and local bank erosion. Species dependent on
6 riparian vegetation would be indirectly affected due to the loss of forage, nesting, and rearing
7 habitat. Bank stability could be lessened with the loss of extant riparian vegetation. Stream
8 temperatures could rise due to a reduction of shade cover affecting steelhead and other aquatic
9 resources sensitive to stream temperature fluctuations.
- 10 ● **Steelhead:** Existing low-flow conditions in the Carmel River during average, dry, and very dry
11 years would be exacerbated by increased groundwater pumping. Successful migration,
12 spawning, and rearing are dependent on appropriate flow conditions and adequate water
13 quality. The depletion of the aquifer in the summer by pumping can cause the first fall flows to
14 infiltrate very quickly. This process may delay adult upstream migration or reduce duration of
15 suitable upstream migration periods. Shallow areas within the river channel may present
16 migration barriers to adult steelhead under low flow conditions; pumping has the potential to
17 reduce river flows below critical thresholds for migration at these low points in the stream.
18 Lower flows in average, dry, and very dry years could lower the available spawning areas by
19 drying suitable locations. Juvenile steelhead are routinely stranded and isolated during summer
20 drying of the river, leading to mortality. With increased pumping, drying would occur earlier
21 and more often in rearing areas. In addition, reduction in flow would reduce water quality in
22 terms of further depressed dissolved oxygen levels and increased temperatures affecting
23 juveniles and adults. Elevated temperatures, low dissolved oxygen levels, and lack of flow
24 constrain migration of smolts to the ocean in summer and fall; increased pumping would further
25 limit periods of feasible migration in average, dry, and very dry years. Steelhead rearing habitat
26 and suitable smolt holding areas in Carmel lagoon are also limited by shallower than natural
27 water depths and salinity stratification in summer and fall due to existing withdrawals and this
28 could be exacerbated by increased withdrawals.
- 29 ● **California Red-Legged Frog:** CRLF require streams or ponds that hold water for lengthy
30 periods of time (3.5–7 months) for successful breeding and maturation of larvae. They utilize
31 the Carmel River and adjacent creeks and ponds that are supported by groundwater connected
32 to the Carmel River aquifer. Increased groundwater pumping in average, dry, and very dry years
33 will lower the water table even further, potentially reducing successful breeding and rearing
34 locations for CRLF. Loss of riparian vegetation described above would also affect this species,
35 which utilize riparian areas for foraging and dispersal.
- 36 ● **Other Resources:** Fish and other aquatic resources dependent on adequate flows and water
37 quality would be subject to similar effects described above for steelhead. Special-status birds,
38 raptors and other species could lose breeding and foraging locations in the event of loss of
39 riparian vegetation and areas. Special-status wildlife species, such as southwestern pond turtle,
40 could also see a loss of habitat due to reduction of flow and lowering of water tables, particularly
41 in summer and early fall periods of average, dry, and very dry years.

42 This impact is a significant and unavoidable impact through 2016. As discussed above, no further
43 mitigation is feasible on the part of the Applicant because any additional mitigation would be
44 disproportionate to their water supply impact in light of the Applicant's prior financing of the
45 Recycled Water Project. As shown in Table 3.12-5, the project demand (and their entitlement) is

1 much less than the amount of water already saved from the Applicant's financing of the Recycled
2 Water Project, which has restored more water to the Carmel River than the Applicant proposes to
3 use. Thus, when comparing PBC's usage of water before the Recycled Water Project with the
4 project's proposed water use, there is still a net benefit to the Carmel River that should be
5 acknowledged.

6 After 2016, SWRCB Order WR95-10 and Order WR2009-0060 will result in a substantial reduction
7 in Cal-Am withdrawals from the Carmel River. Because the SWRCB orders cap the amount that Cal-
8 Am can withdraw from the Carmel River, the potential provision of water from the river to the
9 project from either the Carmel River or from the Regional Project (or an equivalent) would not
10 result in any change in the amount of Cal-Am withdrawals from the Carmel River (as shown in
11 Tables 3.12-9 and Table 3.12-10). Thus, the project would not have a significant impact on biological
12 resources in the Carmel River after 2016.

13 Cumulative Impacts

14 A. Water Supply and Demand

15 **WSD-A1(C). Cumulative water demand on the Monterey Peninsula exceeds current water**
16 **supplies requiring new regional water supplies to be developed. The project's water demand**
17 **would represent an increase in water use above the 2011 Existing Conditions. Through 2016,**
18 **the project can be supplied from the Carmel River regardless of other cumulative demands.**
19 **In 2017 and after, given the current uncertain nature of the Regional Project, the additional**
20 **project water demand could intensify cumulative water supply shortfalls and rationing**
21 **starting in 2017, if the Regional Project or its equivalent is not built by then. (Significant and**
22 **unavoidable)**

23 Cumulative Water Demand

24 Cumulative demand was analyzed in two ways: (1) Cumulative impacts were evaluated due to the
25 use of the remaining unused portion of the Applicant's water entitlement combined with project
26 water demand to examine potential near-term impacts on withdrawals from the Carmel River; and
27 2) Cumulative impacts were evaluated due to cumulative demands on the Monterey Peninsula for
28 2011, 2017, and 2030. As described in Section 3.0, cumulative development within the Del Monte
29 Forest consists of residential development of perhaps up to 105 new single-family dwelling units⁵.
30 As shown in Table 3.12-11, these units could result in a demand of up to 82 AFY. It is expected that
31 Del Monte Forest new residential owners may purchase a portion of the Applicant's entitlement; if
32 not they would be new demand that would have to be supplied by Phase 2 of the Regional Project
33 (or an equivalent alternative). MPWMD Ordinance No. 109 allowed up to 175 AF to be sold by the
34 Applicant to other Del Monte Forest benefitted properties. As of September 2011, of the 175 AF, only
35 30 AF was being used, leaving 145 AF that could be used in future. It was assumed that all of the
36 remaining 145 AF of residential entitlement would be used in the near future and that the 82 AF of
37 cumulative Del Monte Forest growth would either be accommodated through use of the residential

⁵ As described in Table 3-2 in the introduction to Chapter 3, there are 96 undeveloped (vacant) existing residential lots, 8 new lots allowed in Area X based on County-issued certificates of compliance, and 1 new lot allowed in Area Y based on the presumption that presence of environmentally sensitive habitat area (ESHA) may prevent further subdivision – thus the potential for up to 105 new dwelling units.

1 entitlement or would be deferred until new regional supplies were available.⁶ These demands are
2 summarized in Table 3.12-11.

3 On the Monterey Peninsula, cumulative water demands were examined in the Final EIR for the
4 Coastal Water Project (California Public Utilities Commission 2009), which also analyzed the
5 Regional Project. Using data from the Final EIR and several other data sources, cumulative water
6 demand was analyzed for 2011, 2017, and 2030 in comparison to available or projected water
7 supplies. The results of this analysis are discussed later in this section.

⁶ If residential owners do not purchase a portion of the Applicant's water entitlement, they would not be able to obtain a Cal-Am connection until such a time as Phase 2 of the Regional Project (or an equivalent) were built that included allocations for new growth, which could be at a distant future period.

1 **Table 3.12-11. Other Future Entitlement Demand**

	Units	Use factor (AFY/unit)	Demand AFY)	Factor AFY/unit)	Notes
Del Monte Forest Buildout (other than the Project)					
<i>Existing Vacant Lots</i>					
Future SFD Development	96	0.8	76.8	0.8	DMF Average
<i>Area X and Y</i>					
Future SFD Development	9	0.8	7.2	0.8	DMF Average
Total			84		Assumed that such properties would either purchase PBC entitlement or would have to be served by future expansions of the Regional Project.
PBC Entitlement Allocations					
Total entitlement			365		
Amount in use as of 2011			40		10 AF - PBC, 30 AF - others (MPWMD 2011)
Remaining unused entitlement			325		
Entitlement used for project			145		Based on critically dry year estimate
Remaining entitlement outside of project for future other residential use			145		MPWMD Ordinance 109 allows up to 175 AF to be sold to DMF benefitted properties. As of September 2011, PBC had sold 117 AF, leaving 58 AF more that could be sold. Of the 175 AF, only 30 AF is being used as of 2011 leaving 145 AF that could be used in future.
Unused entitlement			34		Remaining entitlement not currently being used minus amount to be used for project minus amount unused DMF benefitted properties. (Note numbers do not precisely add due to rounding).
Sources					
DMF residential development calculations - ICF.					
Entitlement information: MPWMD, 2011, Monthly Entitlement Report, October 17, 2011 (for September 2011).					

1 **Water Supply Impact Analysis**

2 As noted above, the applicant's proposal is to use water pursuant to a water entitlement that was
3 derived through financing the replacement of potable water used for turf irrigation in the Del Monte
4 Forest with recycled water. Given the constraints in the Seaside Aquifer and the basin adjudication
5 which will reduce Cal-Am's withdrawals over time, it is presumed that the project and any future
6 other entitlement demand would be supplied by water from the Carmel River through 2016. After
7 2016, the project and future other entitlement demand could be supplied by Cal-Am with water
8 from the Carmel River within Cal-Am's water rights, or through new water supplies from the
9 Regional Project (or an equivalent).

10 ***Cumulative Change in Carmel River Withdrawals Through 2016***

11 The cumulative effect of project demand plus future other entitlement demand on Carmel River
12 withdrawals through 2016 is shown in Table 3.12-12. Compared to 2011 Existing Conditions,
13 project demand plus future other entitlement demand would increase withdrawals up to 2016 by
14 266 to 301 AFY.

1 **Table 3.12-12. Cumulative Changes in Withdrawals from the Carmel River (through 2016) (Acre-**
 2 **Feet)**

Low Use (Wet Year)	
<i>2011 Existing Conditions^a</i>	10,393
Project Demand	128
Other Water Entitlement Demand	138
<i>Withdrawal</i>	10,659
Change relative to 2011 Existing Conditions	266
Average Use (Average Rainfall Year)	
<i>2011 Existing Conditions^b</i>	11,205
Project Demand	135
Other Water Entitlement Demand	145
<i>Withdrawal</i>	11,485
Change relative to 2011 Existing Conditions	280
High Use (Dry Year)	
<i>2011 Existing Conditions^c</i>	11,489
Project Demand	142
Other Water Entitlement Demand	153
<i>Withdrawal</i>	11,783
Change relative to 2011 Existing Conditions	294
Very High Use (Critically Dry Year)	
<i>2011 Existing Conditions^d</i>	11,773
Project Demand	145
Other Water Entitlement Demand	156
<i>Withdrawal</i>	12,074
Change relative to 2011 Existing Conditions	301

Source:

Appendix H

Notes:

Totals may not add precisely due to rounding.

^a Wet Year = Water Years 1995, 1998, 2005, 2006, and 2010.

^b Average = Average of 1995 to 2010 conditions, adjusted by MPWMD factor of 2.6% to reflect relative wetter conditions than long-term averages (see Appendix H).

^c Dry = Average of 1995 to 2010 conditions, adjusted by MPWMD factor of 5.2%

^d Critically Dry = Average of 1995 to 2010 conditions, adjusted by MPWMD factor of 7.8%.

3
 4 ***Cumulative Change in Carmel River Withdrawals in 2017 With the Project and Future Other Entitlement***
 5 ***Demand***

6 Starting in 2017, Cal-Am is required to reduce its withdrawals from the Carmel River to the level of
 7 its existing water rights (3,376 AFY). As described above, several scenarios of what will occur in
 8 2017 were evaluated:

- 1 • **2017 Scenario A (Regional Project on Time).** This scenario evaluates water supply and
2 demand conditions in 2017, presuming that the Regional Project is completed as proposed in
3 the Final EIR for the Coastal Water Project (CPUC 2009).
- 4 • **2017 Scenario B (No Regional Project or Alternative).** This scenario evaluates water supply
5 and demand conditions in 2017, presuming that the Regional Project (or an equivalent
6 alternative) is not completed by 2017.
- 7 • **2017 Scenario C (Alternative to Regional Project).** This scenario evaluates water supply and
8 demand conditions in 2017, presuming that an equivalent to the Regional Project is completed
9 by the end of 2016. Since the assumed production of the alternative supply project is the same
10 as the Regional Project, this alternative is the same in terms of water supply and demand as
11 2017 Scenario A but varies in terms of environmental impact as analyzed under Impact WSD-2
12 below.
- 13 Carmel River withdrawals including the project demand and future other entitlement demand
14 would be the same whether or not the Regional Project (or an alternative project) is completed. The
15 net change in withdrawals is as shown in Table 3.12-13 and Table 3.12-14. However, as discussed
16 below, the addition of cumulative demand (including the project) will intensify potential water
17 rationing if the Regional Project (or its equivalent) is not completed.

1 **Table 3.12-13. Cumulative Changes in Withdrawals from the Carmel River for 2017 Scenario A**
 2 **(with Regional Project)**

Low Use (Wet Year)	
<i>2011 Existing Conditions^a</i>	<i>10393</i>
Cal-Am Maximum Withdrawals per SCWRB Order WR 2009-0060 ^b	3376
Project Demand ^c	128
Other Future Entitlement Demand ^c	138
Reduction in Cal-Am service to Other Existing Users ^d	-266
<i>Withdrawals with Project and other Entitlement Demand</i>	<i>3376</i>
Change over 2011 Existing Conditions	-7017
Average Use (Average Rainfall Year)	
<i>2011 Existing Conditions^a</i>	<i>11205</i>
Cal-Am Maximum Withdrawals per SCWRB Order WR 2009-0060 ^a	3376
Project Demand ^c	135
Other Future Entitlement Demand ^c	145
Reduction in Cal-Am service to Other Existing Users ^d	-280
<i>Withdrawals with Project and other Entitlement Demand</i>	<i>3376</i>
Change over 2011 Existing Conditions	-7829
High Use (Dry Year)	
<i>2011 Existing Conditions^a</i>	<i>11814</i>
Cal-Am Maximum Withdrawals per SCWRB Order WR 2009-0060 ^b	3376
Project Demand ^c	142
Other Future Entitlement Demand ^c	153
Reduction in Cal-Am service to Other Existing Users ^d	-294
<i>Withdrawals with Project and other Entitlement Demand</i>	<i>3376</i>
Change over 2011 Existing Conditions	-8113
Very High Use (Critically Dry Year)	
<i>2011 Existing Conditions^a</i>	<i>11773</i>
Cal-Am Maximum Withdrawals per SCWRB Order WR 2009-0060 ^b	3376
Project Demand ^c	145
Other Future Entitlement Demand ^c	156
Reduction in Cal-Am service to Other Existing Users ^d	-301
<i>Withdrawals with Project and other Entitlement Demand</i>	<i>3376</i>
Change over 2011 Existing Conditions	-8397

3

1 **Table 3.12-14. Cumulative Changes in Withdrawals from the Carmel River for 2017 Scenario B (No**
 2 **Regional Project)**

Low Use (Wet Year)	
<i>2011 Existing Conditions^a</i>	10393
Cal-Am Maximum Withdrawals per SCWRB Order 2009-0060 ^b	3376
Project Demand At 65% rationing ^c	45
Other Future Entitlement Demand at 65% rationing ^c	48
Reduction in Cal-Am service to Other Existing Users ^d	-93
<i>Withdrawals with Project and other Entitlement Demand</i>	3376
Change over 2011 Existing Conditions	-7017
Average Use (Average Rainfall Year)	
<i>2011 Existing Conditions^a</i>	11205
Cal-Am Maximum Withdrawals per SCWRB Order 2009-0060 ^b	3376
Project Demand At 65% rationing ^c	47
Other Future Entitlement Demand at 65% rationing ^c	51
Reduction in Cal-Am service to Other Existing Users ^d	-98
<i>Withdrawals with Project and other Entitlement Demand</i>	3376
Change over 2011 Existing Conditions	-7829
High Use (Dry Year)	
<i>2011 Existing Conditions^a</i>	11489
Cal-Am Maximum Withdrawals per SCWRB Order 2009-0060 ^b	3376
Project Demand At 65% rationing ^c	50
Other Future Entitlement Demand at 65% rationing ^c	53
Reduction in Cal-Am service to Other Existing Users ^d	-103
<i>Withdrawals with Project and other Entitlement Demand</i>	3376
Change over 2011 Existing Conditions	-8113
Very High Use (Critically Dry Year)	
<i>2011 Existing Conditions^a</i>	11773
Cal-Am Maximum Withdrawals per SCWRB Order 2009-0060 ^b	3376
Project Demand At 65% rationing ^c	51
Other Future Entitlement Demand at 65% rationing ^c	55
Reduction in Cal-Am service to Other Existing Users ^d	-106
<i>Withdrawals with Project and other Entitlement Demand</i>	3376
Change over 2011 Existing Conditions	-8397

Source:
 Appendix H

Notes:

- ^a Existing Condition Water Year scenarios from Table 3.12-7.
- ^b Cal-Am withdrawals from the Carmel River limited to Cal-Am water rights amount after 12/31/16.
- ^c Project can be supplied per water entitlement per allowance in SWRCB order WR2009-0060, but not in excess of water right amount. Presumed project is supplied from Carmel River by Cal-Am, but is subject to rationing like other users. Amount of rationing rounded up to 65% based on calculation of shortfall (61%) without Regional Project (or equivalent by 2017) as shown in Appendix H.3.
- ^d Increase of project demand intensifies rationing by equivalent amount.

1 ***Change in Water Supply Balance on the Monterey Peninsula Compared to 2011, 2017, and 2030***
2 ***Conditions***

3 Cumulative conditions were also evaluated for the Monterey Peninsula as a whole considering
4 existing and future demands, including the project demands, and future other entitlement demands
5 noted above. The results of this analysis are shown in Table 3.12-15. As shown therein, there is
6 adequate supply at present to serve cumulative demand (taking into account current restrictions on
7 new connections) in 2017 and 2030 presuming, respectively, that Phase 1 of the Regional Project (or
8 its equivalent) is built by 2016 and Phase 2 of the Regional Project is built in time to anticipate new
9 demands beyond the demands met by Phase 1. If the Regional Project (or its equivalent) is not built,
10 then there will be substantial shortfalls and likely water rationing.

11 **Significance Evaluation**

12 Impacts of the increased cumulative water demand was analyzed with respect to: (a) whether
13 sufficient water could be supplied to service cumulative demand; and (b) the potential to require
14 development of additional supply to meet project demand.

15 ***Ability to Supply Water for Cumulative Development***

16 As shown in Table 3.12-12, the increased project demand and future other entitlement demand
17 would result in withdrawals more than 2011 Existing Conditions but less than the total remaining
18 entitlement amount. As a result, Cal-Am can legally supply water for both the project and future
19 other entitlement demand up to 2016.

20 After December 31, 2016, Cal-Am would be limited to supplying the applicant's water entitlement
21 from the Carmel River within its legal water rights limit or from other legal sources, such as the
22 Regional Project (or an equivalent alternative). Given recognition by SWRCB, MPWMD, and Cal-Am
23 of the validity of the applicant's water entitlement and its basis in a net reduction of Carmel River
24 withdrawals due to the Recycled Water Project operations, the project and future other water
25 entitlement use can be supplied water from legal sources of water after December 31, 2016.

26 However, given the uncertainty with the Regional Project at this time (as described above), it is
27 possible that there will be no new water supply adequate to fully meet existing demand, project
28 demand, and future other entitlement demand by 2017. As a result, there is the possibility of a
29 supply shortfall and water rationing. If the Regional Project (or an equivalent) is not completed by
30 the end of 2016, the project's water demand and future other entitlement demand would intensify
31 the need for water rationing for existing water uses. The project and future other entitlement
32 demand would be subject to rationing like other existing demand, but the additional project and
33 future other entitlement demand would mean the impact of rationing would be more intense.

1 **Table 3.12-15. Water Supply and Demand on the Monterey Peninsula, 2011, 2017, and 2030**

	2011	2017 with no RWSP	2017 with RWSP Phase 1	2030 with RWSP Phase 2	Sources and Notes
Water Demand					
Existing demand from Carmel River served by Cal-Am ^a	11,015	11,015	11,015	11,015	CPUC 2009. Average year demand.
Existing demand from Seaside Aquifer served by Cal-Am ^a	3,695	3,695	3,695	3,695	CPUC 2009. Average year demand.
Future Monterey Peninsula Demand		455 ^b	455 ^b	4,546	CPUC 2009 for 2030 estimate.
Marina Coast Water District for former Fort Ord area (outside Cal-Am service Area)				2,700	CPUC 2009.
North County (outside Cal-Am service area)				5,900	CPUC 2009.
Proposed Project Demand	135	135	135	135	Average year demand.
Future Other PBC Entitlement Demand	145	145	145	145	Average year demand.
<i>Total Demand</i>	<i>14,990</i>	<i>15,444</i>	<i>15,444</i>	<i>28,136</i>	
Water Supply					
Carmel River (Cal-Am water rights)	3,376	3,376	3,376	3,376	CPUC 2009.
Carmel River (Cal-Am interim limit over water rights)	7,909	0	0	0	CPUC 2009. Eliminated at end of 2016 per SWRCB order.
Seaside Aquifer (Cal-Am withdrawals)	3,448 ^c	1,474 ^c	1,474 ^c	1,474 ^c	Seaside Groundwater Basin Watermaster, 2010.
Seaside Aquifer Storage and Recovery (ASR)	920	920	920	920	CPUC 2009.
<i>Subtotal Existing Sources</i>	<i>15,653</i>	<i>5,770</i>	<i>5,770</i>	<i>5,770</i>	
RWSP: Conservation		0 ^d	0 ^d	0 ^d	CPUC 2009.
RWSP: Sand City Desalination	300	300	300	300	CPUC 2009. Desal facility in operation in May 2010.
RWSP: Regional Urban Water Augmentation Project (RUWAP)		0	1,000	1,000	CPUC 2009.
RWSP: Seaside ASR Expansion		0	380	380	CPUC 2009. MPWMD estimates it may be able to obtain up to 1,000 AFY, but this analysis assumes only the 380 AFY in CPUC 2009.
RWSP: Desalination		0	10,900	10,900	CPUC 2009. Critically dry year supply; in average years would be 8,800 AFY.
RWSP: Groundwater use in critically dry years		0	1,700	1,700	CPUC 2009. Groundwater use in peak periods offset by desalination production in off peak periods

	2011	2017 with no RWSP	2017 with RWSP Phase 1	2030 with RWSP Phase 2	Sources and Notes
<i>Total Additional Supply (with Phase 1)</i>	300	300	14,280	14,280	
Total Supply (with Phase 1)	15,953	6,070	20,050	20,050	
Supply/ Demand Balance	963	-9,374	4,606	-8,086	
RWSP: Phase 2	0	0	0	10,400	CPUC 2009. Additional amount beyond Phase 1
<i>Total Additional Supply (with Phase 2)</i>	15,953	6,070	20,050	20,050	
Total Supply (with Phase 2)	15,953	6,070	20,050	30,450	
Supply/ Demand Balance	963^e	-9,374	4,606^e	2,314^e	

Sources:

- ^a CPUC, 2009. Final EIR, Coastal Water Project, Chapters 2 and 5.
- ^b Project Demand and Future Other Entitlement Demand from Appendix H.2
- ^c Seaside Basin Watermaster. 2010. Reported Quarterly and Annual Water Production from the Seaside Groundwater Basin.

Notes:

RWSP = Regional Water Supply Project or the Regional Project

- ^a Does not include existing non-Cal-Am demand or supply. Other existing users not supplied by Cal-Am are presumed to derive water from the Carmel River and the Seaside Aquifer per their existing rights.
- ^b Due to current moratorium on most new connections, only limited new hookups are allowed (including pursuant to the entitlement from the PBCSD Recycled Water Project and the Sand City Desalination project and certain areas in the Laguna Seca Subarea). The exact amount of new demand in these areas up to 2017 has not been estimated; 10% of 2030 new demand was assumed for the 2017 scenarios, excluding entitlements from the Recycled Water Project which were accounted for separately below.
- ^c 2011 amount shown is for 2011 (~3,202 AFY for the coastal subareas and 246 AFY for the Laguna Seca Subarea). Allocation reduced to adjudicated rights (1,474 AFY per CPUC 2009) over time. Analysis assumes reduction to 1,474 AFY will occur by 2017 but may occur later in time.
- ^d No number assumed in CPUC 2009. Also excluded 300 AFY mentioned in CPUC 2009 for unaccounted water recovery as unproven water savings.
- ^e Although a nominal surplus is shown for 2011, >2016 (with RWSP Phase 1) and 2030 (with RWSP Phase 2), the water demand shown is normal-year demand and does not account for dry or critically dry -year demands. Thus, this should not be considered a true surplus in toto, but rather mostly a reserve for use during critical years. RWSP Phase 1, includes 15,200 AFY (including 920 AFY of existing ASR) to meet the immediate needs of the Monterey Peninsula, and replace a previously approved supply for part of the former Fort Ord within the MCWD service area. Similarly, the nominal surplus for 2011 and 2030 (with RWSP Phase 2) should not be seen as excess supply but rather reserve for dry or critically-dry years.

1 Based on the estimated shortfall in supply without the Regional Project (or its equivalent) (see
2 Appendix H), water rationing in 2017 and after could reach 65%. Impacts associated with water
3 rationing were discussed above. This is considered a significant impact related to water supply
4 because the project demand would intensify the level of water rationing in this scenario. Under
5 constitutional limitations established in the U.S. Supreme Court decisions in the *Nollan* and *Dolan*
6 cases⁷, a project can only be required to mitigate proportionately to their level of impact. No further
7 mitigation is feasible on the part of the Applicant because any additional mitigation would be
8 disproportionate to their water supply impact in light of the Applicant's prior financing of the
9 Recycled Water Project which has restored more water to the Carmel River than the Applicant
10 proposes to use for the proposed project pursuant to their water entitlement.

11 As shown in Table 3.12-15, by 2030, cumulative demand would far exceed water supplies developed
12 with Phase 1 of the Regional Project (or its equivalent) but cumulative demand could be met if Phase
13 2 of the Regional Project (or its equivalent) were completed. As described in the EIR for the 2010
14 Monterey County General Plan, existing City, County, MPWMD, and SWRCB policies and restrictions
15 would constrain new development in absence of a long-term water supply and thus cumulative
16 demands beyond that serviced by Phase 1 of the Regional Project would not worsen the water
17 supply conditions.

18 In summary, the project contribution to cumulative impacts is as follows: 1) the project's water
19 demand would not worsen the cumulative water supply conditions through 2016 and existing
20 demand, project demand, and future other entitlement demand could be met with existing supplies,
21 2) cumulative demands due to existing demand, project demand and future other entitlement
22 demand would be able to obtain water in 2017 and after if the Regional Project (or its equivalent) is
23 completed by then; 3) project demand and other entitlement demand could be serviced by Cal-Am in
24 2017 and after even if the Regional Project (or its equivalent) is not built, but would be subject to
25 deep rationing and would intensify the cumulative level of rationing which is considered a
26 significant unavoidable water supply impact; 4) in 2030, in absence of Phase 1 and 2 of the Regional
27 Project (or its equivalent), cumulative demand will far exceed regional water supplies and the
28 project demand would contribute to that shortfall and likely rationing but if both phases of the
29 Regional Project (or its equivalent) are completed, then cumulative water demands can be met.

30 ***Need for New Water Supplies***

31 Before December 31, 2016, the project and future other entitlement water demands would be
32 drawn from the Carmel River but would result in a level of withdrawal less than the remaining
33 unused water entitlement and would not require the construction of new water supply facilities.

34 After December 31, 2016, the project and future other entitlement water demands may be drawn
35 from the Carmel River within Cal-Am's legal rights, but if so, it would displace an equivalent amount
36 of supply for other existing Cal-Am users. Alternatively, the project could be supplied directly from
37 the Regional Project (or its equivalent). In either case, compared to 2011 Existing Conditions, the
38 project and future other entitlement demand would increase demand for new supply.

39 As described above, MPWMD included up to 307 AFY in its estimate of existing water demand for
40 the potable water demand of the PBCSD Recycled Water Project which is no longer needed when it
41 estimated existing demand for the Regional Project. The project and future other entitlement water

⁷ *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987), and *Dolan v. City of Tigard*, 512 U.S. 374 (1994),

1 demand would range from 266 to 301 AFY, which is less than the 307 AFY freed up by Phase 2 of the
2 PBCSD Recycled Water Project and thus would not result in a need to expand the Regional Project
3 beyond current planning. This is considered a less than considerable contribution to cumulative
4 water supply impacts and thus a less than significant impact.

5 Cumulative impacts on water infrastructure, associated secondary impacts on the environment of
6 infrastructure, and the project's contribution to cumulative impacts are discussed separately below.

7 **B. Water Infrastructure Capacity**

8 **WSD-B1(C). Water infrastructure is adequate to serve the project and future other**
9 **entitlement demand through 2016. Phase 1 of Regional Project (or its equivalent) will need**
10 **to be built by 2017 to serve existing demand, project demand and future other entitlement**
11 **demand. Phase 2 of the Regional Project (or its equivalent) will be needed to be built to meet**
12 **new cumulative demand. Regional water supply infrastructure and operations will have**
13 **significant and unavoidable secondary environmental impacts and the project contributes to**
14 **the need for such infrastructure. (Significant and unavoidable)**

15 Inside the Del Monte Forest, distribution water lines are included in the project to deliver water
16 from current distribution lines to the point of demand. Other cumulative development inside the Del
17 Monte Forest is limited to residential development. The project's new demand and future other
18 entitlement demand could range from 266 to 301 AFY. This amount is less than the amount of
19 potable water previously provided to the Del Monte Forest for use in irrigation of golf courses and
20 other large turf areas, which averaged up to 1,000 AFY and over in the past (see Appendix H). With
21 Phase 2 of the Recycled Water Project, this demand for potable water use for irrigation of golf
22 courses and large turf areas no longer occurs. Thus, the infrastructure already exists to deliver the
23 project's water demand and other entitlement demand from the Carmel River to the Del Monte
24 Forest, taking into account the local connecting water lines included in the project. Thus, no water
25 infrastructure impacts would occur due to the project or future other entitlement demand related to
26 supplying them with water from the Carmel River through 2016.

27 After 2016, project and future other entitlement water demand must either be provided from the
28 Carmel River or from the Regional Project (or an equivalent). If the project and future other
29 entitlement demand is provided from the Carmel River (by Cal-Am pursuant to its existing water
30 rights), then a proportionate amount of water would need to be supplied to other existing users
31 from the Regional Project (or an equivalent). As discussed above for the project analysis, regional
32 water infrastructure would likely have one or more significant unavoidable impacts on the
33 environment. The project would indirectly contribute to these secondary physical impacts on the
34 environment because the project would add additional demand (along with cumulative demand) for
35 new regional water supply infrastructure.

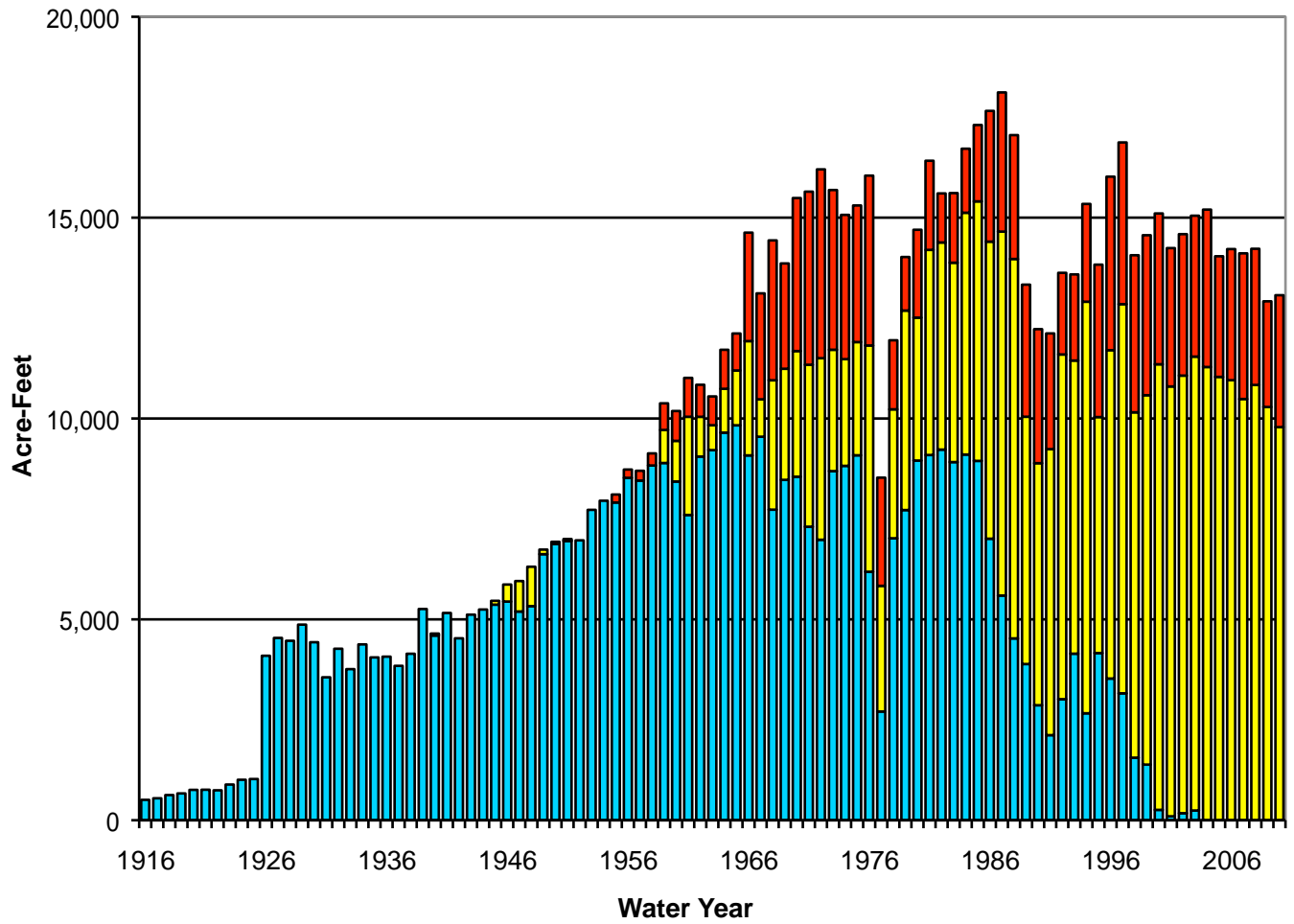
36 This is considered a significant and unavoidable impact. For the Regional Project, the CPUC has
37 documented the reasons why further mitigation is not available to reduce identified significant and
38 unavoidable impacts. For alternatives to the Regional Project, environmental review has not been
39 completed and thus it is unknown whether or not all significant impacts could be avoided, but it is
40 assumed that such large scale infrastructure would have one or more unavoidable impacts.

1 **C. Carmel River Biological Resources**

2 **WSD-C1(C). Project and future other entitlement water demand would represent an increase**
3 **in water use above the 2011 Existing Conditions and would have a significant unavoidable**
4 **impact on Carmel River biological resources through 2016. After 2017, SWRCB mandated**
5 **reductions in Cal-Am withdrawals from the Carmel River will not be changed by cumulative**
6 **demand. (Less than significant)**

7 As discussed above, project and future other entitlement water demand would increase Cal-Am
8 withdrawals above the 2011 Existing Conditions and thus would contribute to existing cumulative
9 impacts on Carmel River biological resources through 2016. The character of impacts on the river
10 are as discussed above under project impacts but would be greater due to additional other
11 entitlement demand.

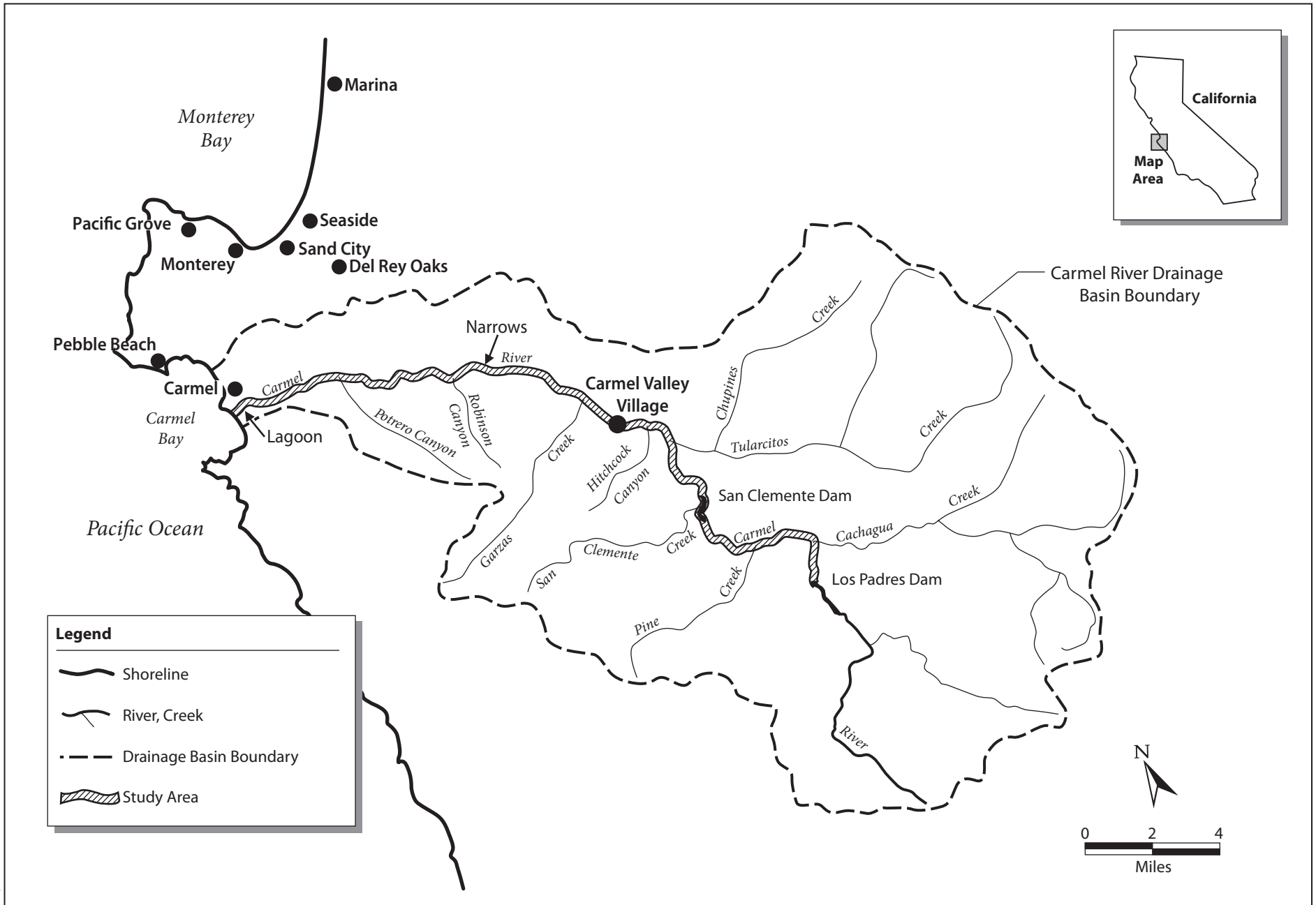
12 As noted above, after December 31, 2016, Cal-Am withdrawals from the Carmel River will be limited
13 to its existing legal rights, which are far less than current levels of withdrawals and withdrawals
14 overall will be far less than 2011 Existing Conditions. Cumulative demand from the project, future
15 other entitlement demand, or other sources will not change the allowable levels of Cal-Am
16 withdrawals from the river and thus withdrawals would be the same with or without the project.
17 Because withdrawals would be unchanged for 2017 and after, the project would not contribute to
18 any adverse effect on Carmel River biological resources in 2017 and after.
19



- Seaside Coastal Basin
- Carmel Valley Aquifer
- Carmel River

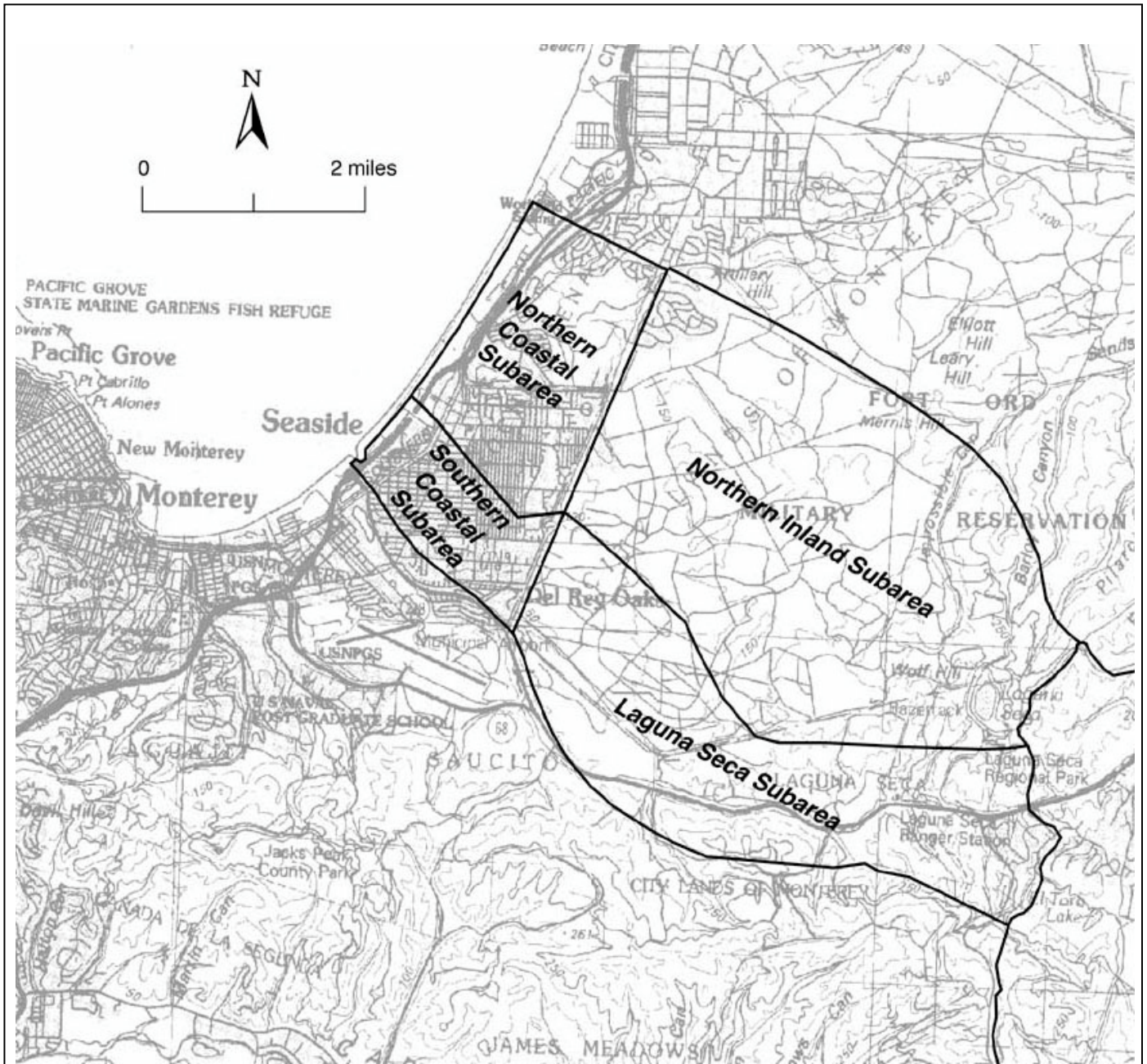
Note: "Cal-Am" refers to the California-American Water Company and its predecessor companies.

Figure 3.12-1
Cal-Am Water Production by Source: 1916-2010



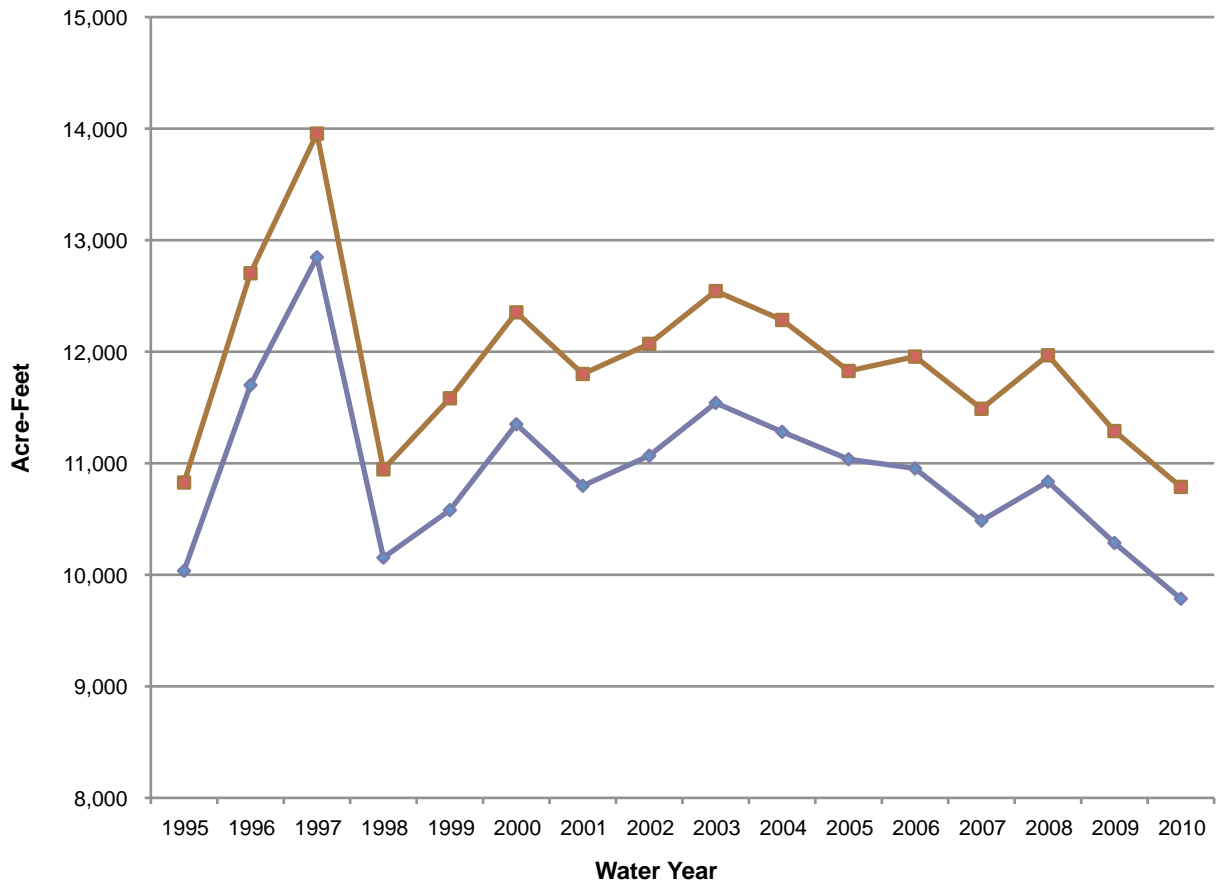
Graphics ... 00106.11 (9-11)

**Figure 3.12-2
Carmel River Watershed**



Source: Modified from Yates, Feeney, and Rosenberg 2002, Figure 1.

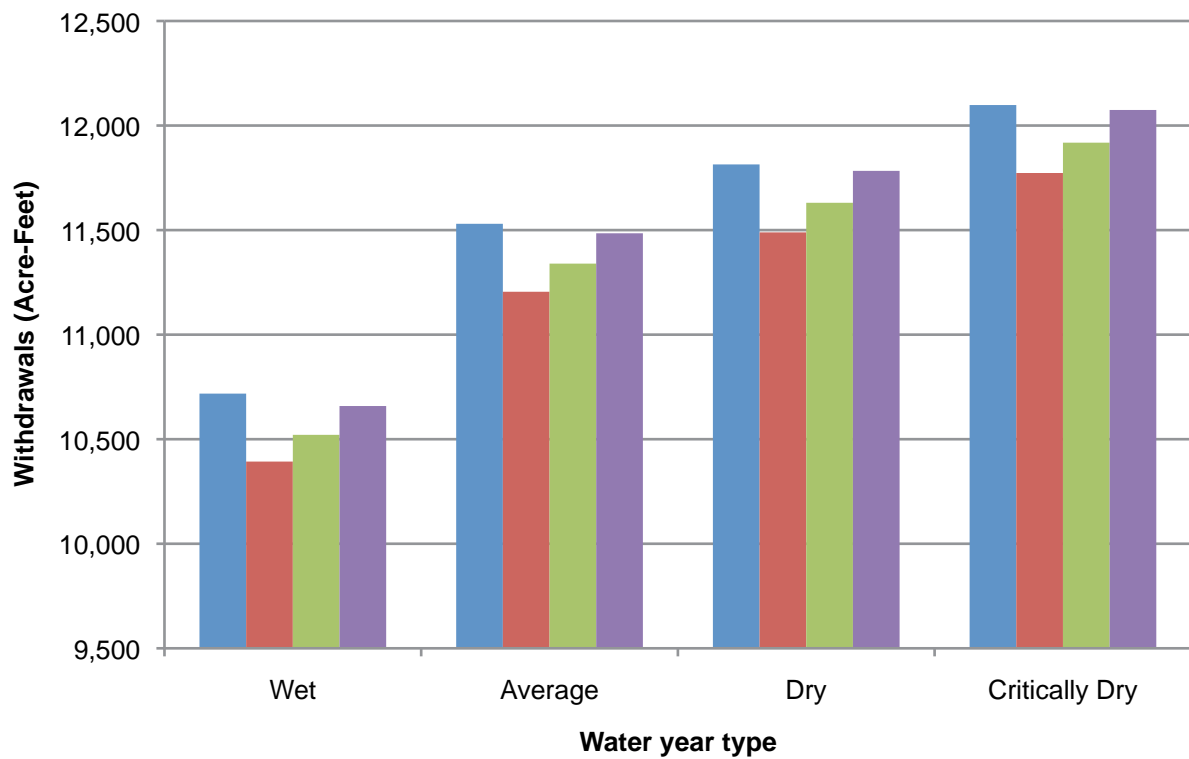
Figure 3.12-3
Seaside Groundwater Basin



■ Carmel River without the Recycled Water Project
◆ Carmel River Actual Withdrawals

Graphics ... 00106.11 (8-11)

**Figure 3.12-4
Carmel River Withdrawals with and without the
Recycled Water Project, 1995 - 2010 (acre-feet)**



- 2011 Baseline*
- 2011 Existing Conditions
- Withdrawals with Project
- Withdrawals with Project and Other Entitlement Demand

* The 2011 Baseline equals the 2011 Existing Conditions plus unused Pebble Beach Company entitlement.

**Figure 3.12-5
Cal-Am Carmel River Withdrawals through 2016 with Project**

Chapter 4
Other CEQA-Required Sections

Other CEQA-Required Sections

This chapter includes the following discussions required by CEQA:

- Significant and Unavoidable Environmental Impacts.
- Significant Irreversible Environmental Changes.
- Growth-Inducing Impacts.

Significant and Unavoidable Environmental Impacts

Section 15126.2 (b) of the State CEQA Guidelines requires that an EIR describe any significant impacts, including those that can be mitigated but not reduced to a level of less than significant. Furthermore, where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should also be described.

The individual resource sections of Chapter 3 identify those significant impacts that cannot be reduced below a level of significance. The significant and unavoidable impacts are listed in Table 4-1, as are the mitigation measures that would be required but would not reduce this impact to a less-than-significant level. See the resource sections in Chapter 3 of this Draft EIR for a more detailed discussion of each of these significant and unavoidable impacts.

Table 4-1. Summary of Significant and Unavoidable Environmental Impacts

Significant and Unavoidable Environmental Impacts

Air Quality

C. Construction Emissions

Impacts AQ-C1 and AQ-C1(C): The project would result in a short-term increase in PM10 emissions due to grading and construction.

Mitigation Measures:

AQ-C1. Implement measures to control fugitive dust emissions.

AQ-C2. Implement measures to control construction-related exhaust emissions.

Transportation

A. Traffic During Project Construction

Impacts TRA-A1 and TRA-A1(C): Construction traffic would result in short-term increases in traffic volumes that would affect level of service and intersection operations.

Mitigation Measures:

TRA-A1. Schedule construction work and truck trips to comply with the Del Monte Forest Architectural Board Guidelines.

TRA-A2. Develop and implement a traffic control plan.

TRA-A3. Obtain approval for construction truck traffic routes from Monterey County and include these routes in all contracts.

TRA-A4. Implement SR 1/SR 68/17-Mile Drive Intersection Reconstruction early in the overall construction schedule.

C. Impacts on Roadway Intersections and Segments

Impacts TRA-C1 and TRA-C1(C): The project would add substantial traffic to intersections in Del Monte Forest and the immediate vicinity to decrease from acceptable levels of service to unacceptable levels of service or to worsen existing unacceptable levels of service.

Mitigation Measures:

TRA-C1. Pay fair-share contribution to install a traffic signal at the intersection of SR 68/Skyline Forest Drive and widen SR 68 from two to four lanes through the intersection.

TRA-C2. Pay fair-share contribution to construct the full SR 68 Widening Project.

TRA-C3. Pay fair-share contribution to construct new turn lanes and establish new traffic signal timings at the SR 1/Ocean Avenue intersection.

TRA-C5(C): Pay fair-share contribution to restripe the westbound approach at the Sunset Drive/Congress Avenue intersection to provide a left-turn pocket.

TRA-C6(C): Pay fair-share contribution to optimize signal timings and phasing at the Forest Avenue/David Avenue intersection.

TRA-C7(C): Pay fair-share contribution to construct the full SR 68 Widening Project (as required by TRA-C2) and to add third lane and to construct a third eastbound lane on SR 68 from about the Scenic Drive overcrossing through the SR 1 intersection

TRA-C8(C): Pay fair-share contribution to construct a refuge lane on SR 68 for traffic turning left out of the Aguajito Road intersection.

TRA-C9(C): Pay fair-share contribution to optimize signal timings at the SR 1/Carpenter Street intersection.

Significant and Unavoidable Environmental Impacts

Impacts TRA-C2 and TRA-C2(C):The project would add traffic to regional highway sections that would operate at unacceptable levels of service.

Mitigation Measure:

TRA-C4. Pay fair-share traffic impact fee for various improvements to SR 1, SR 68, and SR 156 based on the conditions described in the Transportation Agency for Monterey County's Regional Development Impact Fee Program.

Impact sTRA-C3 and TRA-C3(C): The project would add traffic to a highway ramp projected to operate at an unacceptable level of service.

Mitigation Measures:

TRA-C5. Pay fair-share contribution to replace the SR 1 northbound merge at SR 68 (west) with an auxiliary lane between SR 68 (west) and Munras Avenue.

TRA-C10(C): Pay fair-share contribution to replace the SR 1 northbound merge at SR 68 (west) with an auxiliary lane between SR 68 (west) and Munras Avenue.

Water Supply and Demand

A. Water Supply and Demand

Impact WSD-A1 and WSD-A1(C). The project's water demand would represent an increase in water use above the 2011 Existing Conditions, but would be within the applicant's current entitlement and could be legally supplied by Cal-AM through 2016. However, given the current uncertain nature of regional water supplies, the additional project water demand could intensify water supply shortfalls and rationing starting in 2017, if the regional water supply project or its equivalent is not built by then, which is a significant and unavoidable water supply impact.

Mitigation Measure:

Mitigation is not feasible because any additional mitigation would be disproportionate to the impact of the proposed project given applicant's prior funding of the Recycled Water Project. The applicant's use of water for this project is pursuant to a valid, legal water entitlement affirmed by MPWMD, Cal-Am, and SWRCB.

B. Water Infrastructure Capacity

Impact WSD-B1 and WSD B1(C): Local water infrastructure is included to serve the proposed project, and existing supply infrastructure outside the project area is adequate to serve the project through 2016. The regional water supply project (or its equivalent) will need to be built by 2017 to serve existing demand and the increase in demand from the project; regional water supply infrastructure and operations will have secondary significant and unavoidable environmental impacts.

Mitigation Measure:

Mitigation is not feasible because any additional mitigation would be disproportionate to the impact of the proposed project given applicant's prior funding of the infrastructure for the Recycled Water Project. The applicant's use of water for this project is pursuant to a valid, legal water entitlement affirmed by MPWMD, Cal-Am, and SWRCB.

C. Carmel River Biological Resources

Impact WSD-C1 and WSD-C1(C): The project's water demand would result in increased withdrawals from the Carmel River through 2016 and thus would have a significant and unavoidable impact on Carmel River biological resources. After 2017, SWRCB mandated reductions in Cal-Am withdrawals from the Carmel River will not be changed by the project demand.

Significant and Unavoidable Environmental Impacts

Mitigation Measure:

Mitigation is not feasible because any additional mitigation would be disproportionate to the impact of proposed project given applicant's prior financing of the infrastructure for the Recycled Water Project. The applicant's use of water for this project is pursuant to a valid, legal water entitlement affirmed by MPWMD, Cal-Am, and SWRCB.

Notes:

(C) = Cumulative impact.

Following is a brief discussion of the significant and unavoidable impacts and the reason that feasible mitigation or alternatives are not proposed.

Air Quality

The proposed project's temporary construction impact on PM10 emissions is discussed in Section 3.2, Air Quality. This impact could be reduced to a less-than-significant level by imposing a strict limitation on the amount of daily ground disturbance. However, this reduction would only extend the construction period itself and result in a greater duration of disruption to neighboring areas and traffic. There is a trade-off between having a shorter but more intense construction schedule and a less intense but longer construction schedule. The County's judgment is that overall community disruption and environmental impacts would be greater with an extended construction schedule, and thus that there is no overall environmental advantage to elongating the construction schedule.

Transportation

Although mitigation is required to reduce construction period traffic impacts through implementation of a traffic plan including truck scheduling, it is impossible to restrict all construction traffic from occurring during peak hours. As discussed in Section 3.8, Transportation and Circulation, certain regional roadways currently operate at unacceptable levels of service during peak hours. It is not feasible to fix all affected roadways prior to construction because there is not currently adequate funding to implement all planned improvements. The applicant would be required to contribute fair-share mitigation funds for regional roadways in the form of the TAMC regional impact fee, but this contribution would not result in the improvements being completed before construction.

For identified operational significant impacts on intersections and roadways, the applicant would be required to contribute fair-share mitigation fees toward the construction of the identified intersection and roadway improvements. As described in Section 3.11, Transportation and Circulation, the proposed project contributes only a small part of the traffic that would cause local and regional traffic deficiencies. As such, the applicant cannot be required to fund the entire improvements identified as mitigation as this would be disproportionate to the level of project impact. Thus, for a period of time between when the proposed project is built until the identified traffic mitigations are fully built, there will be significant and unavoidable impacts.

Also, as described in Section 3.11, Transportation and Circulation, the County may decide to focus all of the required mitigation fees on one or more traffic mitigation measures instead of all of them in order to increase the probability that one or more of the measures could be implemented earlier. Because some of the identified mitigation measures are not included in a transportation improvement program of the County, the City of Monterey, or Caltrans and the applicant is responsible for only a relatively minor part of the funding, it is possible that some of the measure may not ultimately be implemented due to a lack of funding.

Finally, the TAMC Regional Impact Fee program addresses many, but not all regional highway deficiencies. As a result, there are no regional projects identified to address some of the regional highway deficiencies to which the proposed project would contribute traffic. For these reasons, there would be significant and unavoidable impacts during the interim between project construction and mitigation completion, where identified mitigation cannot obtain sufficient funding from other

sources other than the applicant, and where regional transportation improvement programs are not planning highway improvements to address certain deficiencies.

Water Supply

As discussed in Section 3.12, Water Supply and Demand, the proposed project would increase water demand above existing conditions but less than the applicant's remaining entitlement. The proposed project can be supplied by Cal-Am from the Carmel River pursuant to the applicant's water entitlement through 2016 without significant impact.

Starting in 2017, the proposed project can still be supplied by Cal-Am from either the Carmel River, from the regional water supply project (Regional Project), or from an alternative to the regional water supply project. If the Regional Project (or an equivalent) is completed by the end of 2016, the impact of the proposed project's water demand for 2017 and after would be less than significant.

If the Regional Project (or an equivalent) is not completed by the end of 2016, the proposed project's water demand would intensify the need for water rationing for existing water uses. The proposed project would be subject to rationing like other existing demand, but the additional project demand would mean the impact of rationing would be more intense. Water rationing could result in economic disruption of commercial and industrial activities on the Monterey Peninsula as well as disruption of residential use. It is also possible that current users of Cal-Am water who have overlying rights to groundwater may increase pumping in certain areas which may exacerbate environmental conditions (unless other prohibitions like the Seaside aquifer adjudication prevent such activity). The exact response of the community to deep, persistent water rationing is hard to estimate. This is considered a significant and unavoidable impact related to water supply if the Regional Project (or its equivalent) is not built by the end of 2016.

Under constitutional limitations established in the U.S. Supreme Court decisions in the *Nollan* and *Dolan* cases¹, a project can be required to mitigate only proportionately to its level of impact. No further mitigation is feasible on the part of the applicant because any additional mitigation would be disproportionate to their water supply impact in light of the applicant's prior funding of the Recycled Water Project, which has restored more water to the Carmel River than the applicant proposes to use for the proposed project pursuant to their water entitlement.

Separate from the water supply impact described above, the proposed project's water demand after 2016 must be provided either from the Carmel River or from the Regional Project (or an equivalent). If the proposed project is provided from the Carmel River (by Cal-Am pursuant to its existing water rights), a proportionate amount of water would need to be supplied to other existing users from the Regional Project (or an equivalent). Regardless of whether the proposed project's demand is serviced from the Carmel River or from the Regional Project (or its equivalent), the Regional Project or an equivalent will need to be built to meet existing demand and proposed project demand. In the CPUC's Final EIR (CPUC 2009), the Regional Project was identified as having significant and unavoidable impacts in the following areas: air quality (during construction only for both Phase 1 and Phase 2); geology, soils, and seismicity (specifically concerning liquefaction for Phase 2 only); and GHG emissions (for both Phase 1 and Phase 2). The physical impacts of alternatives to the Regional Project have not yet been evaluated under CEQA, but it is possible that they might have unavoidable impacts that are similar to or different from those of the regional water supply project.

¹ *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987), and *Dolan v. City of Tigard*, 512 U.S. 374 (1994),

The proposed project would indirectly contribute to these secondary physical impacts on the environment because the proposed project would add additional water demand for new regional water supply infrastructure.

Through 2016, the project would increase withdrawals from the Carmel River above 2011 existing conditions which would also significantly affect biological resources that are dependent on the river in average, dry, and critically dry years. This is a significant and unavoidable impact. No further mitigation is feasible on the part of the applicant because any additional mitigation would be disproportionate to their water supply impact in light of the applicant's prior funding of the Recycled Water Project, which has restored more water to the Carmel River than the applicant proposes to use for the proposed project pursuant to their water entitlement.

Significant Irreversible Environmental Changes

Section 15126.2(c) of the State CEQA Guidelines requires that an EIR must consider any significant irreversible environmental changes that would be caused by the proposed project should it be implemented. Section 15126.2(c) reads as follows:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

A project would result in significant irreversible environmental changes if:

- The primary and secondary impacts would generally commit future generations to similar uses.
- The project would involve a large commitment of nonrenewable resources.
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project.
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

The environmental effects of the proposed project are analyzed in detail in the resource sections of Chapter 3 of this Draft EIR.

The proposed project would require the use of nonrenewable resources such as metal and aggregate resources for physical construction components. Furthermore, fossil fuels would be consumed during construction and operation activities. Fossil fuels in the form of diesel oil and gasoline would be used for construction equipment and vehicles. During operations, diesel oil and gasoline would be used by passenger vehicles. Electrical energy (in part derived from fossil fuel generation) and natural gas would also be consumed during construction and operation (e.g., heating, cooling, refrigeration, lighting, etc.). All new buildings would need to comply with the state's Title 24 regulations that promote energy efficiency. However, the consumptive use of these energy resources would be irretrievable and their loss irreversible. Construction use of fossil fuels is limited to the construction period and is not a wasteful use of energy. Operational direct and indirect use of fossil

fuels would be in compliance with existing regulations, including Title 24, and would not be a wasteful use of energy.

Impacts associated with operation of the proposed project would occur as described in Chapter 3. Development of the proposed project would result in irreversible changes to biological resources, specifically the loss of Monterey pine forest and certain special-status species. Development of the proposed project would constitute a long-term intensification of developed uses, and it is unlikely that the land use would return to its original condition. The total amount of area converted from undisturbed natural land covers to urban land covers is approximately 41 acres.

The proposed project would not involve the routine on-site transport or storage of substantial amounts of hazardous materials, with the exception of common hazardous agents such as fuel, paints, oils, solvents, and cleansers. The amount and use of these chemical agents would be limited and are not anticipated to result in irreversible damage related to the release of hazardous materials. Adherence to Monterey County hazardous materials regulations would ensure that potential impacts related to the accidental release of hazardous materials would be less than significant.

As previously discussed, the proposed project would result in significant irreversible changes due to the use of raw materials, and fossil fuels during construction and operation, and the permanent loss of undeveloped natural lands. While many of these impacts can be avoided, lessened, or mitigated, some of these impacts are irreversible consequences of development, which are described in greater detail in the resource sections of Chapter 3 of this Draft EIR.

Growth-Inducing Impacts

Section 15126.2(d) of the State CEQA Guidelines requires that an EIR discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Furthermore, Section 15126.2(d) states:

Included in this are projects which would remove obstacles to population growth. Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

This analysis evaluates whether the proposed project would directly or indirectly induce economic, population, or housing growth in the surrounding environment.

Analysis of Direct Growth-Inducing Impacts

A project would directly induce growth if it would involve development of new housing or remove barriers to population growth, for example, by changing a jurisdiction's general plan/zoning to allow new residential development to occur or by removing an infrastructure constraint. The proposed project would allow for development of 90 to 100 new residential units and 95 to 195 new visitor-serving units, and would preserve 635 acres for preservation of Monterey pine forest and other

native habitat.² The proposed project would result in an estimated increase in daily population of 518 or 343 people under Option 1 or Option 2, respectively. Potential impacts related to the increase in population were taken into the direct and cumulative impact analysis in the resource sections of Chapter 3 of this Draft EIR.

The capacity of existing infrastructure in the project area would be expanded to accommodate the proposed project. Extension of water, sewer, gas, and telecommunications would occur; however, existing utility connections are available throughout Del Monte Forest. While the proposed project would include use of existing water entitlements, it would not include the expansion of water supply for uses beyond the proposed project's demand (see Section 3.12, Water Supply and Demand). Roadways would be extended and improved to alleviate existing traffic LOS deficiencies, and project mitigation (see Section 3.11, Transportation and Circulation) would address project impacts on traffic conditions, but would not create new capacity beyond that necessary to accommodate planned growth.

The proposed project itself would facilitate growth in terms of visitor-serving units and residential units in Del Monte Forest, which would increase economic activity in and beyond Del Monte Forest. Increased economic activity could stimulate growth in terms of services for employees and others. However, the proposed project does not create conditions that would induce unplanned growth in Del Monte Forest or elsewhere. Thus, while the proposed project results in growth directly and would result in an increase in economic activity that would induce growth indirectly, it is not expected to result in unplanned growth that is not already anticipated in governing adopted land use planning documents.

² All citations refer to greatest number of units/sf depending on the option chosen at Area M Spyglass Hill (Option 1 or Option 2). Area M Spyglass Hill Option 1 includes 90 residential lots and 195 new visitor-serving units (100 of which would be the new resort hotel in Area M Spyglass Hill), and Option 2 (New Residential Lots) includes 100 residential lots (10 of which would be in Area M Spyglass Hill) and 95 visitor-serving units. The final number of residential and visitor-serving units would be based on the option chosen.

Chapter 5
Alternatives

Introduction

According to Section 15126.6 of the CEQA Guidelines, an EIR shall describe and evaluate a reasonable range of alternatives to the proposed project that would feasibly attain most of the project's basic objectives, but that would avoid or substantially lessen any identified significant environmental impacts of the project. An EIR is not required to present the alternatives analysis in the same level of detail as the assessment of the proposed project, and it is not required to consider every conceivable alternative to a project. Rather, an EIR must consider a reasonable range of potentially feasible alternatives that will foster informed decision making.

To develop a reasonable range of alternatives to the project for analysis, the County considered the following, which are discussed in this Introduction.

- Project Objectives.
- Significant Impacts of the Proposed Project.
- Alternatives Suggested during the Scoping Process.

The Alternatives Analysis section includes the alternatives evaluated in the Draft EIR and identifies the environmentally superior alternative; it also includes alternatives considered but dismissed from further analysis in the Draft EIR.

At the end of this chapter, the Previously Proposed Projects section includes a discussion of previous proposals for development and preservation of lands in Del Monte Forest. This section is included because it explains other predecessor projects that were evaluated and considered and ultimately led to the current proposed project, which has lower environmental impacts than the previously proposed projects.

Project Objectives

The general objectives of Monterey County (the CEQA lead agency) are to protect the natural, cultural, and visual resources of Del Monte Forest; preserve and enhance public access and recreation opportunities; enhance visitor-serving uses; and balance development and preservation.

The applicant's general objectives of the proposed project are to:

- Expand and improve existing priority visitor-serving uses.
- Develop a reduced number of primarily large residential lots from that allowed by the current LUP and concentrate such lots in or adjacent to existing developed areas.
- Formally preserve large undeveloped tracts of forested open space previously planned for residential development.
- Provide management prescriptions to the preserve areas to enhance habitat values.

- 1 • Provide a reduced-intensity buildout plan compared to prior proposals for Del Monte Forest
2 that can obtain Coastal Commission staff concurrence and that reduces the potential for
3 litigation over the interpretation and effect of the existing LCP.

4 The specific goals to expand and improve the visitor-serving uses include:

- 5 • Adding guest rooms to The Lodge at Pebble Beach and The Inn at Spanish Bay, and building a
6 new hotel at Spyglass Quarry.
- 7 • Modernizing and expanding existing meeting facilities.
- 8 • Relocating the Pebble Beach Driving Range to a larger area that can accommodate support
9 facilities, including a golf training facility.
- 10 • Renovating the Equestrian Center.
- 11 • Improving parking and circulation for visitors, employees, and residents.

12 These objectives were considered during the formulation of potential alternatives for consideration
13 in this Draft EIR.

14 **Significant Impacts of the Proposed Project**

15 The State CEQA Guidelines Section 15126.6 (f) states that “alternatives shall be limited to ones that
16 would avoid or substantially lessen any of the significant effects of the project.” As such, alternatives
17 that do not avoid or substantially lessen significant impacts of the proposed project do not need to
18 be analyzed in an EIR.

19 The analysis in this Draft EIR identifies the environmental impacts by resource topic in Chapter 3,
20 Environmental Setting, Impacts, and Mitigation Measures. The description below focuses on the
21 significant impacts, most of which can be reduced to a less-than-significant level by implementing
22 mitigation measures. Those that remain significant and unavoidable are listed at the end. A
23 summary of all the impacts is included in Table ES-2. In general, the project’s most significant
24 temporary impacts are related to construction noise, air quality, and traffic. The project’s most
25 significant permanent impacts are related to biological resources, traffic and water supply. Impacts
26 on biological resources are primarily related to the residential element of the proposed project.

27 **Significant Impacts by Resource Area**

28 **Aesthetics.** The proposed project would change certain portions of existing views within Del Monte
29 Forest. It would degrade the views where new development is visible from 17-Mile Drive (including
30 views of residential development in Area F-2 and the Corporation Yard), and it would degrade the
31 visual character and quality and introduce light and glare at some development sites. These impacts
32 would be less than significant with implementation of the mitigation measures described in Section
33 3.1, Aesthetics, of Chapter 3, Environmental Setting, Impacts, and Mitigation Measures.

34 **Air Quality.** The proposed project would result in increased emissions of priority pollutants and
35 dust during construction and operation, as well as exposure of new sensitive receptors (residents in
36 Area U) to odor from operation of the Equestrian Center. All but one of the impacts would be less
37 than significant with implementation of the mitigation measures described in Section 3.2, Air
38 Quality, of Chapter 3. Impact AQ-C1, which identifies a short-term increase in PM10 emissions due
39 to grading, and construction would not be reduced to a less-than-significant level. Project elements
40 that would result in substantial excavation at the development site include: Pebble Beach Driving

1 Range Relocation from Area V to Collins Field, Area M Spyglass Hill New Resort Hotel (Option 1) or
2 Area M Spyglass Hill New Residential Lots (Option 2), and Residential Lot Subdivision at the
3 Corporation Yard.

4 **Biological Resources.** The proposed project would result in loss of environmentally sensitive
5 habitat areas (e.g., Monterey pine forest and small areas of seasonal wetlands), special-status plants
6 (e.g., Yadon's piperia and other species) and special-status wildlife habitat (e.g., for the California
7 red-legged frog and other species). Monterey pine forest is affected by most project elements, but
8 the majority of the effects are due to residential development. Impacts on plants, wildlife, and
9 seasonal wetlands and other waters are also primarily due to residential development. The impacts
10 would be less than significant with implementation of the mitigation measures described in Section
11 3.3, Biological Resources; however, the project would still result in a net reduction in the acreage of
12 Monterey pine forest and of Yadon's piperia habitat and other biological resources, even with
13 mitigation.

14 **Climate Change.** The proposed project would generate GHG emissions and contribute to cumulative
15 greenhouse gas impacts. The impacts would be less than significant with implementation of the
16 mitigation measures described in Section 3.4, Climate Change.

17 **Cultural Resources.** The proposed project would not result in degradation of known significant
18 cultural or paleontological resources, but it could disrupt undiscovered cultural and paleontological
19 resources. The impacts would be less than significant with implementation of the mitigation
20 measures described in Section 3.5, Cultural Resources.

21 **Geology, Seismicity, and Soils.** The proposed project could result in exposure of structures and
22 people to seismic hazards, unstable soils, and hazardous materials and could increase erosion and
23 sedimentation. The impacts would be less than significant with implementation of the mitigation
24 measures described in Section 3.6, Geology, Seismicity, and Soils.

25 **Hydrology and Water Quality.** The proposed project would result in alteration of drainage
26 patterns, increased impervious surfaces and stormwater runoff, and water quality degradation from
27 construction and sedimentation and contaminants in stormwater. The impacts would be less than
28 significant with implementation of the mitigation measures described in Section 3.7, Hydrology and
29 Water Quality.

30 **Land Use and Recreation.** The proposed project could result in incompatible land uses where
31 residential use in Area U is proposed adjacent to the existing equestrian center. The proposed
32 project could result in some inconsistencies with the land use designations and zoning contained
33 within the existing LCP; however, these inconsistencies would be resolved by the LCP Amendment,
34 once certified by the Coastal Commission. The impacts would be less than significant with
35 implementation of the mitigation measures described in Section 3.8, Land Use and Recreation, and
36 conditions of approval.

37 **Noise and Vibration.** The proposed project would result in increased noise and vibration during
38 construction. Additionally, the ventilation equipment for the underground parking structures would
39 generate operational noise. Traffic noise increases would not be significant. Noise impacts overall
40 would be less than significant with implementation of the mitigation measures described in Section
41 3.3, Noise and Vibration.

42 **Public Services and Utilities.** The proposed project would expose people and structures to risk of
43 wildland fire where proposed residential development is adjacent to undeveloped open space, most

1 notably the Corporation Yard. The impacts would be less than significant with implementation of the
2 mitigation measures described in Section 3.10, Public Services and Utilities.

3 **Transportation and Circulation.** The proposed project would result in construction-related traffic
4 that would temporarily increase traffic volumes that would affect LOS and intersection operations.
5 The project would add substantial traffic to intersections within and adjacent to Del Monte Forest
6 and adjacent highway ramps, causing the levels of service to worsen, in certain locations from
7 acceptable to unacceptable. The proposed project would contribute to cumulative traffic on several
8 highways outside Del Monte Forest that already operate at unacceptable LOS. Implementation of
9 mitigation measures described in Section 3.11, Transportation and Circulation, would reduce
10 identified significant impacts, but impacts related to construction traffic and impacts related to
11 certain roadways outside Del Monte Forest where mitigation is payment of fair-share impact fees
12 would remain significant even after mitigation.

13 **Water Supply and Demand.** As described in Section 3.12, Water Supply and Demand, the proposed
14 project would generate demand for water. The project demand would result in greater withdrawals
15 from the Carmel River than 2011 existing conditions but less than the Applicant's remaining
16 entitlement and thus the project can be supplied water through 2016. After 2016, although the
17 project can be legally supplied from the Carmel River or the regional water supply project (Regional
18 Project) servicing the project demand could intensify water shortages in the event the Regional
19 Project (or an equivalent) is not completed by the end of 2016, and could worsen potential water
20 rationing for other water users in 2017 and after. In addition, the project's water demand would
21 directly or indirectly contribute to the need for new regional water supply infrastructure. Finally,
22 the project would increase withdrawals from the Carmel River through 2016 above 2011 existing
23 conditions which would have significant unavoidable impacts on biological resources dependent on
24 the Carmel River in average, dry, and critically dry years. Therefore, this is a potentially significant
25 and unavoidable impact.

26 Significant Unavoidable Impacts

27 The project would result in the following significant and unavoidable impacts on air quality,
28 transportation, and water supply. As described below, other than the No Project Alternative, no
29 feasible project alternatives would reduce these impacts to a less-than-significant level.

30 Air Quality

- 31 • AQ-C1: The proposed project would result in a short-term increase in PM10 emissions due to
32 grading and construction.

33 Traffic

- 34 • TRA-A1: Construction traffic would result in short-term increases in traffic volumes that would
35 affect level of service and intersection operations.
- 36 • TRA-C1: The proposed project would add substantial traffic to certain intersections along SR 68
37 or SR 1 to decrease from acceptable levels of service to unacceptable levels or to worsen existing
38 unacceptable levels of service. This is a project impact and a cumulative impact.
- 39 • TRA-C2: The proposed project would add traffic to regional highway sections that are projected
40 to operate at unacceptable levels of service.

- 1 • TRA-C3. The proposed project would add traffic to a SR 68 highway ramp projected to operate
2 at an unacceptable level of service.

3 **Water Supply**

- 4 • WSD-A1: The project's water demand would represent an increase in water use above the 2011
5 existing conditions, but would be within the Applicant's current entitlement and could be legally
6 supplied by Cal-Am through 2016. However, given the current uncertain nature of regional
7 water supplies, the additional project water demand could intensify water supply shortfalls and
8 rationing starting in 2017 if the Regional Project or its equivalent is not built by then.
- 9 • WSD-B1: Local water infrastructure is included to serve the proposed project, and existing
10 supply infrastructure outside the project area is adequate to serve the project through 2016.
11 The Regional Project (or its equivalent) will need to be built by 2017 to serve existing demand
12 and the increase in demand from the proposed project. This is a project impact and cumulative
13 impact. The Regional Project infrastructure and operations would have secondary significant
14 and unavoidable environmental impacts.
- 15 • WSD-C1: The project's water demand would result in increased withdrawals from the Carmel
16 River through 2016 and thus would have a significant and unavoidable impact on Carmel River
17 biological resources. After 2017, SWRCB mandated reductions in Cal-Am withdrawals from the
18 Carmel River will not be changed by the project demand.

19 **Alternatives Suggested during the Scoping Process**

20 The NOP for the proposed project was issued on April 7, 2011(Appendix A), and a public scoping
21 meeting was held on April 27, 2011. Verbal and written comments were received in response to the
22 NOP and at the scoping meeting. The scoping comments included the following suggestions for
23 analyzing project alternatives:

- 24 • Underground parking garage for employees at The Inn at Spanish Bay rather than a surface
25 parking lot in Area B. *This alternative is analyzed below.*
- 26 • Roundabout at the SR 68/SR 1 intersection off-ramp. *This alternative is analyzed below.*
- 27 • New road to alleviate traffic on upper Sunridge Road near the SR 1 gate. *This alternative does not*
28 *meet any project objectives nor is an alternative to any project element. As such it was not*
29 *analyzed in detail.*

30 **Alternatives Analysis**

31 The alternatives considered for evaluation are identified in Table 5-1. They include alternatives that
32 were suggested during public scoping and that reduce significant impacts. Because it was
33 determined there were no feasible alternatives to reduce all significant and unavoidable impacts to a
34 less than significant level, the alternatives selected for analysis focus on reducing impacts to
35 biological resources and on reducing unavoidable impacts to air quality, traffic and water supply.
36 The County also considered alternatives that require meeting the County's affordable housing
37 requirements through construction of inclusionary units inside Del Monte Forest.

1 The alternatives listed in Table 5-1 were initially evaluated for their feasibility and their ability to
 2 achieve most of the project objectives while avoiding, reducing, or minimizing significant impacts
 3 identified for the proposed project. The list of alternatives is separated into those that are analyzed
 4 in the Draft EIR and those that were considered but dismissed from further analysis in the Draft EIR.

5 As discussed in Chapter 2, Project Description, the project being analyzed in this EIR includes the
 6 proposed development and preservation within Monterey County’s unincorporated Del Monte
 7 Forest.¹

8 **Table 5-1. Summary of Alternatives Considered for Evaluation**

Alternative	Meets Most Project Objectives?	Feasible?	Further Reduces Significant Impacts^a?	Reduces One or More Impacts¹ to Less than Significant?	Creates Additional Significant Impacts?
Analyzed in Draft EIR					
1A. Clustered Development Option A	Yes	Yes	Yes	No	No
1B. Clustered Development Option B	Yes	Yes	Yes	No	No
1C. Clustered Development Option C	Yes	Yes	Yes	Yes	No
2A. Reduced Development Option A	Yes	Yes	Yes	No	No
2B. Reduced Development Option B	Yes	Yes	Yes	No	No
2C. Reduced Development Option C	Yes	Yes	Yes	Yes	No
3. Driving Range Redesign	Yes	Yes	Yes	Yes	No
4. Spanish Bay Underground Employee Parking	Yes	Yes	Yes	No	Yes
5. Roundabout at the SR 68/SR 1/17-Mile Drive Interchange	Yes	Yes	No	No	No
Alternatives Considered but Dismissed from Further Analysis					
Alternative A—New Access Road near SR 1 Gate	No	No	No	No	Yes
Alternative B—Residential Development at Sawmill Gulch	Yes	No	No	No	Yes
Alternative C—No Residential Development	No	Yes	Yes	Yes	No
Alternative D – No Visitor-Serving Development	No	Yes	Yes	Yes	No
Alternative E – Reduced Visitor-Serving Development	No	Yes	Yes	No	No

^a Reduces at least one (but not all) projects impacts to less than significant.

9

¹ As described in Chapter 2, Project Description, the LCP Amendment is not part of the “project” being analyzed under CEQA in this document. The LCP Amendment is exempt from normal CEQA analysis because it will be analyzed through the certified regulatory process under the California Coastal Commission which is considered the functional equivalent to CEQA. However, the proposed project represents the “Concept Plan” described in the LCP Amendment and this EIR describes the environmental impacts of the Concept Plan for use as information in the County and CCC review and approval of the LCP Amendment.

1 **Alternatives Analyzed in the Draft Environmental Impact Report**

2 The alternatives analyzed in the Draft EIR include Alternatives 1 to 5 and the No Project Alternative.
3 All of these alternatives were determined to be feasible and to meet most of the project objectives,
4 except the No Project Alternative, which must be analyzed per CEQA.

5 The characteristics of Alternatives 1 to 5 are described in this section and summarized in Table 5-2.
6 The ability of these alternatives to substantially lower the significant impacts identified for the
7 proposed project is discussed below and summarized in Table 5-3.

8 All subject areas are analyzed for each alternative determined to be potentially feasible, though at a
9 much more general level than the analysis in Sections 3.1–3.12 of Chapter 3.

10 **No Project Alternative**

11 CEQA requires analysis of a No Project Alternative.

12 **Alternative Characteristics**

13 Under the No Project Alternative, there would be no renovation, expansion, or creation of new
14 visitor-serving development, no new residential subdivisions, and no new trails. The
15 SR 1/SR 68/17-Mile Drive intersection reconfiguration and the four internal intersection
16 improvements would not be built by the applicant. The new preservation areas would not be
17 secured with new conservation easements.

18 Other than the proposed project, no pending applications or permit approvals exist for development
19 within the properties contained in the current proposal. Without the proposed project and its
20 proposed subdivisions, it is still possible that single-family residential development could occur on
21 certain existing legal lots within the project area. The first single-family dwelling per legal lot can be
22 approved under a Coastal Administrative Permit in areas designated Low-Density Residential (LDR)
23 and Medium-Density Residential (MDR) by the LUP; however, as noted below, coastal development
24 permits are required under certain conditions. Construction of one single-family residence or a
25 second dwelling unit in a residential zone can be exempt from CEQA review (CEQA Guidelines
26 15303), although the exemption is not absolute. Residential use is not an allowable or conditionally
27 allowable use in areas designated for open space recreation or open space forest uses.

28 Based on certificates of compliance at Monterey County, 41 approved legal lots currently exist
29 within the project area: Area B/C (1), F-1 (1), F-2 (1), F-3 (1), G/Corp Yard (1), H (2), I-1 (1), I-2 (1),
30 J (2), K/L (1), Areas M, N, O, U, and V (28 lots total), and PQR (1). The 13 lots in areas other than
31 Area MNOUV are within areas that contain areas designated by the existing LUP for Low-Density
32 Residential (LDR) and Medium-Density Residential (MDR) use (some contain areas designated for
33 open space recreational or open space forest as well). In Area MNOUV, at least 7 (and possibly as
34 many as 11) of the 13 legal lots are within areas designated for either Low-Density Residential
35 (LDR) or Medium-Density Residential (MDR) uses; the remainder are within areas designated for
36 open space recreational or open-space forest use. Of the 28 lots in MNOUV, 19 are at Collins Field,
37 two are for the Collins Residences, 1 is in Area O, and the other 6 are in Area M in areas with dunes,
38 forest, and golf course use at present. It cannot be known for certain that such residential
39 development will or will not actually occur; however this residential development is considered
40 possible and thus disclosed as a potential result of the No Project Alternative.

1 In accordance with the Coastal Zoning Ordinance, all development that would cause a significant
2 environmental impact, on slopes 30% or greater, with ridgeline development, or within 100 feet of
3 ESHA requires a coastal development permit. Because 20 of the existing lots are located in areas
4 containing Monterey pine forest, dunes and/or other biological resources, coastal development
5 permit review is likely for at least 20 single-family dwelling units on legal lots, and possibly more.

6 Other development may occur on other existing vacant lots in Del Monte Forest, noted in Chapter 4,
7 Cumulative Impacts, but this development is external to the proposed project.

8 **Impact Analysis**

9 **Aesthetics**

10 Minor changes in visual aesthetics would occur due to new residential development; however,
11 permit review would be expected to require compatibility of new dwelling units with local aesthetic
12 setting and character. Aesthetic impacts would be most acute for any new units that would be
13 located on or adjacent to the Signal Hill dunes, but would be expected to be consistent with other
14 adjacent residential units already located within dune areas. The impact would be less than that of
15 the proposed project overall due to the substantially lower level of build-out.

16 **Air Quality**

17 A minor increase in emissions of priority pollutants and PM10 would occur during residential
18 construction and due to new single-family dwelling units, but this alternative would not involve
19 large-scale excavation and would avoid the proposed project's significant and unavoidable impact
20 due to construction PM10 emissions because residential development would likely occur spread out
21 over time as opposed to at the same time. Air quality impacts would be less than that of the
22 proposed project due to less construction and less traffic generation during operations.

23 **Biological Resources**

24 Despite limited residential development, undeveloped properties would for the most part remain
25 undeveloped. Based on the assumptions used in the analysis of the proposed project (15,000 sf
26 disturbance per lot), the construction of units on the 20 lots that are in areas considered ESHA could
27 result in direct removal of perhaps up to 7 to 8 acres of Monterey pine forest and dunes as well as
28 indirect effects on the adjacent forest and dune areas.

29 While it is possible that special-status plant species, like Yadon's piperia or dune plants, could be
30 removed for residential development, it is expected that coastal development permit review would
31 require avoidance, wherever feasible. Similarly, impacts related to wetlands, other sensitive habitat
32 areas, and special-status wildlife species would be expected to be avoided in general per LUP
33 policies. With permit conditions, impacts on biological resources overall are likely to be reduced to a
34 less-than-significant level.

35 Under the No Project Alternative, there would be no dedication of easements for preservation areas.
36 Current resource management of existing applicant-owned open space areas is presumed to
37 continue.

38 Biological resource impacts would be less than that of the proposed project due to a reduced direct
39 removal of sensitive habitat (up to 8 acres versus more than 40 acres) and less indirect effects.

Table 5-2. Summary of Characteristics for Alternatives Evaluated in the Draft EIR

Alternative ¹	VSC Units	Residential Units			Alternative Description	
		Total Residential Units in DMF	Market Rate Residential Units in DMF	Inclusionary Housing	Notes	Lot Modifications
Proposed Project	195	90	90	In Lieu Fee	Refer to Ch 2, Project Description for description of residential lot subdivisions and other project elements.	
Alternative 1: Clustered Development						
1A: Clustered Development Option A	195	108	90	18 units In Corporate Yard (MDR)	Preserve Areas J and K by concentrating residential development in Areas F-2 and I-2 and change to MDR, Change Corp Yard LDR (10 units) to MDR.	Add 6 lots to F-2 and 7 lots to I-2. F-2: Split lots 3, 4, 11, 12, 13, 14 I-2: Split lots 7, 8, 9, 13, 14, 15, 16
1B: Clustered Development Option B	195	108	90	18 units In Corporate Yard (MDR)	Preserve Area K and L by concentrating in F-2 and I-2. Change F-2 and I-2 to MDR. Change Corp Yard LDR (10 units) to MDR.	Add 9 lots each to F-2 and I-2. F-2: Split lots 3, 4, 6, 7, 10-14 I-2: Split lots 7-11, 13-16
1C: Clustered Development Option C	195	108	90	18 units In Corporate Yard (MDR)	Avoids YP entirely by focusing growth away from YP at each site as feasible and minor relocation of lots. Eliminate 6 lots in Area K and relocate to Area L. Change Corp Yard LDR (10 units) to MDR.	F-2: Modify lots 1, 2, 5, 6, 8, 9, 10, 11, 15 to avoid YP; eliminate Lot 16, and Split Lot 4 I-2: Delete lots 1, 3, 4, 5, 6, 12; Split lots 2, 7, 8, 9, 13, 14 J: Delete lots 1 and 5; split lots 2, 3, modify Lot 5 to avoid YP K: Modify Lot 1 and 5 to avoid YP; delete Lots, 2-4, 6-8. L: Split Lots 1 - 5, 8 U: Modify Lot 7 to avoid YP V: Delete Lot 11, modify Lot 10 to avoid YP; reconfigure to add new lot 11 but avoid all YP. Modify special events center to avoid YP.
Alternative 2: Reduced Development						
2A: Reduced Development Option A	195	93	77	16 units In Corporate Yard (MDR)	Preserve Area J and K by eliminating units. Change Corp Yard LDR (10 units) to MDR.	Area J and K - Delete all 13 lots
2B: Reduced Development Option B	195	87	72	15 units In Corporate Yard (MDR)	Preserve Area K and L by eliminating units. Change Corp Yard LDR (10 units) to MDR.	Area K and L - Delete all 18 lots
2C: Reduced Development Option C	195	77	64	13 units In Corporate Yard (MDR)	Avoids YP entirely by deleting certain lots in Areas F-2, I-2, J, K, U and V. Change Corp Yard LDR (10 units) to MDR.	F-2: Delete lots 1, 2, 5, 6, 8, 9, 15, 16 I-2: Delete lots 1, 3, 4, 5, 6, 12 J: Delete lots 1, 4, 5 K: Delete all 8 lots U: Modify Lot 7 to avoid YP V: Delete Lot 11, modify Lot 10 to avoid YP. Modify special events center to avoid YP.
Alternative 3: Driving Range Redesign	195	90	90	In Lieu Fee	Redesign driving range (being relocated from Area V to Collins Field) to avoid Pacific Grove clover in northwest corner.	
Alternative 4: Spanish Bay Underground Employee Parking	195	90	90	In Lieu Fee	Relocate 290-space surface parking lot from Area B to underground at the Inn at Spanish Bay to reduce impacts to Monterey pine forest.	
Alternative 5: Roundabout at the SR 68/SR 1/17-Mile Drive Interchange	195	90	90	In Lieu Fee	Intersection modified to include two roundabouts instead of a traffic signal. A smaller single-lane roundabout would be located at the intersection of the SR 1 southbound on-ramp and 17-Mile Drive, and a larger roundabout would be located at the intersection of the SR 1 southbound off-ramp and SR 68 intersection.	

Notes: **DMF** = Del Monte Forest; **LDR** = Low Density Residential; **MDR** = Medium Density Residential; **VSC** = Visitor-Serving Commercial

¹ The proposed project presented in the first row and all alternatives proposed assume Option 1 New Resort Hotel would be implemented in the Area M Spyglass Hill area, which includes construction of a new resort hotel instead of 10 residential lots.

Table 5-3. Comparison of Environmental Impacts of Project Alternatives Analyzed in Draft EIR

Issue Area		Alternative								
		1. Clustered Development Options			2. Reduced Development Options			3. Driving Range Redesign	4. Spanish Bay Underground Employee Parking	Alternative 5: Roundabout at the SR 68/SR 1/17-Mile Drive Interchange
		1A: Option A	1B: Option B	1C: Option C	2A: Option A	2B: Option B	2C: Option C			
Proposed Project										
Aesthetics	<ul style="list-style-type: none"> Adverse change in views; visual degradation; increased light and glare. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>more</u> for views and light in Areas F-2, I-2 and Corporate Yard and <u>less</u> in Areas J and K. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>more</u> for views and light in Areas F-2, I-2 and Corporate Yard and <u>less</u> in areas K and L. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>more</u> for views and light in Areas F-2, I-2 and Corporate Yard. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>more</u> for views and light in Corporate Yard and <u>less</u> in Areas J and K. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>more</u> for views and light in Corporate Yard and <u>less</u> in Areas K and L. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>more</u> for views and light in Corporate Yard. 	<ul style="list-style-type: none"> Same impacts. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>less</u> for new light/tree removal in Area B. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>less</u> because fewer trees removed and less retaining wall structure.
Air Quality	<ul style="list-style-type: none"> Construction-related PM10. Construction-related diesel; odors from equestrian. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>less</u> near Areas J and K and slightly <u>more</u> near F-2, I-2 and Corporate Yard for emissions from construction. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>less</u> near Areas K and L and slightly <u>more</u> near F-2, I-2 and Corporate Yard for emissions from construction. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>more</u> near Corporate Yard or emissions from construction. 	<ul style="list-style-type: none"> Similar impacts. <u>Less</u> near Areas J and K and slightly <u>more</u> near Corporate Yard for emissions from construction. 	<ul style="list-style-type: none"> Similar impacts. <u>Less</u> near Areas K and L and slightly <u>more</u> near Corporate Yard for emissions from construction. 	<ul style="list-style-type: none"> Similar impacts. <u>Less</u> in Areas F-2, I-2, J, K and slightly <u>more</u> near Corporate Yard for emissions from construction. 	<ul style="list-style-type: none"> Same impacts. 	<ul style="list-style-type: none"> Similar impacts. <u>More</u> at SBI for construction-related emissions. 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>less</u> because less grading but offset by slightly larger disturbance area.
Biological Resources	<ul style="list-style-type: none"> Adverse effects and loss of sensitive habitat and special status plants and wildlife. 	<ul style="list-style-type: none"> <u>Less</u> impact to MPF, YP, streams and wetlands and CRLF habitat. 	<ul style="list-style-type: none"> <u>Less</u> impact to MPF, YP, streams and wetlands and CRLF habitat. 	<ul style="list-style-type: none"> <u>Less</u> impact to MPF, YP, streams and wetlands and CRLF habitat. Yadon's piperia 	<ul style="list-style-type: none"> <u>Less</u> impact to MPF, YP, streams and wetlands and CRLF habitat. 	<ul style="list-style-type: none"> <u>Less</u> impact to MPF, YP, streams and wetlands and CRLF habitat. 	<ul style="list-style-type: none"> <u>Less</u> impact MPF, YP, streams and wetlands and CRLF habitat. Yadon's piperia 	<ul style="list-style-type: none"> Similar impacts overall Less impacts to Pacific Grove clover 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> to Monterey pine forest. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> because fewer Monterey pine trees removed but need to evaluate small unsurveyed areas.
Climate Change	<ul style="list-style-type: none"> Contribute to climate change impacts. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> contribution. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> contribution. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> contribution. 	<ul style="list-style-type: none"> Same impacts. 	<ul style="list-style-type: none"> Slightly <u>more</u> impact during construction 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> contribution because less grading and less idling due to shorter traffic queues.
Cultural Resources	<ul style="list-style-type: none"> Potential disturbance to unknown resources from excavation and grading 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> excavation from residential development 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> excavation from residential development 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> excavation from residential development 	<ul style="list-style-type: none"> Same impacts. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> contribution during construction. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> excavation but need to evaluate small unsurveyed areas.
Geology and Soils	<ul style="list-style-type: none"> Potential structural damage from seismic hazards and unstable soils/slopes; increased erosion and sedimentation; exposure to hazardous materials at Corp Yard 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> due to 18 more units in Corp Yard. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> due to 18 more units in Corp Yard. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>more</u> due to 18 more units in Corp Yard. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> exposure to soil hazards due to less residential. Slightly <u>more</u> due to more units in Corps Yard. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> exposure to soil hazards due to less residential. Slightly <u>more</u> due to more units in Corps Yard. 	<ul style="list-style-type: none"> Similar impact. Slightly <u>less</u> exposure to soil hazards due to less residential. Slightly <u>more</u> due to more units in Corps Yard. 	<ul style="list-style-type: none"> Same impacts. 	<ul style="list-style-type: none"> <u>More</u> impact due to increase in potential for structural failure with additional underground structure and because in area of shallow groundwater and weak surrounding deposits 	<ul style="list-style-type: none"> Similar impacts. Slightly <u>less</u> because less grading but offset by slightly larger disturbance area.

		Alternative								
Issue Area	Proposed Project	1. Clustered Development Options			2. Reduced Development Options			3. Driving Range Redesign	4. Spanish Bay Underground Employee Parking	Alternative 5: Roundabout at the SR 68/SR 1/17-Mile Drive Interchange
		1A: Option A	1B: Option B	1C: Option C	2A: Option A	2B: Option B	2C: Option C			
Hydrology and Water Quality	☉Alteration of drainage patterns; increased impervious surface; degraded water quality	☉Similar impact. Slightly <u>more</u> local impact due to 18 more units in Corp Yard	☉Similar impact. Slightly <u>more</u> local impact due to 18 more units in Corp Yard	☉Similar impact. Slightly <u>more</u> local impact due to 18 more units in Corp Yard	☉Similar impact. Slightly <u>less</u> due no residential development in Areas J and K. Slightly <u>more</u> due to more units in Corp Yard	☉Similar impact. Slightly <u>less</u> due no residential development in Areas K and L. Slightly <u>more</u> due to more units in Corp Yard	☉Similar impact. Slightly <u>less</u> due to removing lots in several areas. Slightly <u>more</u> due to more units in Corp Yard	☉Similar impact.	☉Similar impact. Slightly <u>more</u> due more underground construction at SBI	☉Similar impacts. Slightly <u>less</u> because less grading but offset by slightly larger disturbance area.
Land use and Recreation	☉Potential incompatibility of new residential by equestrian center ○Consistency determination	☉Similar impact.	☉Similar impact.	☉Similar impact.	☉Similar impact.	☉Similar impact.	☉Similar impact.	☉Same impacts.	☉Similar impact.	☉Same impacts. Additional bicycle paths beneficial.
Noise and Vibration	☉Construction related noise and vibration; operation noise at PBL parking structure	☉Similar impact. Slightly <u>less</u> construction noise to residents near Area J and slightly <u>more</u> to residents near Area I-2.	☉Similar impact. Slightly <u>more</u> construction noise to residents near Area I-2.	☉Similar impact.	☉Similar impact. Slightly <u>less</u> construction noise to residents near Area J.	☉Similar impact.	☉Similar impact.	☉Same impacts.	☉Similar impact. <u>More</u> construction related noise and vibration and operation noise from parking ventilation fans at SBI	☉Similar impact.
Public Services and Utilities	☉Exposure of people/structures to risk of wildland fire.	☉Similar impact.	☉Similar impact.	☉Similar impact.	☉Similar impact.	☉Similar impact.	☉Similar impact.	☉Same impacts.	☉Similar impact.	☉Same impacts.
Transportation	●Construction related traffic increases at intersections; operation related traffic to regional highways ☉Increased traffic at intersections within DMF and highway ramps; potential design hazards from new roadways; increased risk to bicyclists	●☉Similar impact. Slightly <u>more</u> local traffic due to 18 more residences at Corporate Yard but same regional traffic.	●☉Similar impact. Slightly <u>more</u> local traffic due to 18 more residences at Corporate Yard but same regional traffic.	●☉Similar impact. Slightly <u>more</u> local traffic due to 18 more residences at Corporate Yard but same regional traffic.	●☉Similar impact. Slightly <u>more</u> local traffic due to more residents in Del Monte Forest. Less regional traffic due to less residential units.	●☉Similar impact. Slightly <u>less</u> local and regional traffic	●☉Similar impact. Slightly <u>less</u> local and regional traffic	☉Same impacts.	●☉Similar impact. <u>More</u> traffic within SBI	●☉Similar impact. <u>Less</u> impacts from shorter queues and less backup but requires Caltrans design exception. Additional study required to determine additional improvements required.

Issue Area		Alternative								
		1. Clustered Development Options			2. Reduced Development Options			3. Driving Range Redesign	4. Spanish Bay Underground Employee Parking	Alternative 5: Roundabout at the SR 68/SR 1/17-Mile Drive Interchange
		1A: Option A	1B: Option B	1C: Option C	2A: Option A	2B: Option B	2C: Option C			
Water Supply and Demand	<p>● Demand for potable water and infrastructure extension would be accommodated through 2016. If Regional Project not built, project would intensify potential rationing. Project contributes to need for Regional Project, which has secondary impacts</p>	● Similar impact.	● Similar impact.	● Similar impact.	● Less water demand since less residential development.	● Less water demand since less residential development.	● Less water demand since less residential development.	● Same impacts.	● Similar impact.	● Similar impact. Slightly more water demand for additional landscaping with roundabout.

Note: These are the impacts overall, considering all the impacts combined and the wors

- = Significant unavoidable impact.
- ⊙ = Significant impact that can be reduced to less than significant.
- = Less-than-significant impact.
- = No impact or not applicable to the development site.

1 Climate Change

2 GHG emissions would occur during residential construction and due to new single-family dwelling
3 units. However, as with the proposed project, related impacts could be reduced through
4 construction BMPs and design features to reduce building energy use. The impact would be less than
5 that of the proposed project due to a lower level of construction and operational emissions.

6 Cultural Resources

7 It is possible that undiscovered cultural and paleontological resources could occur during
8 residential construction. The impact could be less than that of the proposed project because of a
9 much smaller construction footprint.

10 Geology, Seismicity, and Soils

11 New residential structures could be built in areas with risk associated with geology, seismicity, or
12 soils; however, as with the proposed project, it is likely that related impacts would be reduced
13 through design and construction BMPs and adherence to applicable regulatory codes, policies, and
14 statutes. The impact would be less than that of the proposed project due to a smaller area of
15 construction.

16 Hydrology and Water Quality

17 There could be limited changes in surface flow quantity or quality immediately surrounding single-
18 family residential unit development, although the amount of new impervious spaces would be
19 limited and dispersed throughout Del Monte Forest. The impact would be less than that of the
20 proposed project due to a much smaller area of construction, less impervious spaces, and less urban
21 runoff and landscape management.

22 Land Use and Recreation

23 Land uses would remain as they currently are, with the exception of single-family dwelling units on
24 legal lots. Because such single-family dwelling units are found throughout Del Monte Forest, the
25 potential for incompatibilities with adjacent properties are unlikely.

26 Noise and Vibration

27 Temporary construction noise would occur during residential construction. Traffic noise levels
28 would slightly increase with the increased number of residences, although the level of increase is
29 not likely to be noticeable. The impact would be less than that of the proposed project due to a
30 smaller level of construction and lesser generation of traffic noise.

31 Public Services and Utilities

32 There would be minor increases in demand for public services and utilities with new single-family
33 residential development but such demands could be readily accommodated similar to those of the
34 project. The impact would be less than that of the proposed project due to smaller demands of new
35 development.

1 **Transportation and Circulation**

2 No increases in traffic related to proposed visitor-serving development would occur. Increases
3 associated with residential traffic would occur. Construction traffic associated with single-family
4 dwellings would be limited and dispersed throughout Del Monte Forest. Traffic to the Equestrian
5 Center would continue at its current level. Internal roadway improvements would not occur, unless
6 proposed independently of the project.

7 Without the project, the SR 1/SR 68 interim improvements proposed by the applicant would not be
8 funded by the applicant. The full SR 68 corridor widening between SR 1 and the Community Hospital
9 of the Monterey Peninsula is included in the regional development impact fee program, but it is not
10 certain when sufficient funds would be accumulated and the project constructed. In the baseline
11 without-project and cumulative without-project conditions, the SR 1 southbound off-ramp has
12 failing operations (LOS E or F) at both morning and evening peak hours (Section 3.11,
13 Transportation). Note that with the project, these conditions would be improved to LOS C (morning
14 peak) and LOS D (evening peak) under 2015 conditions.

15 Overall, the traffic impact would be less than that of the proposed project in most locations due to a
16 far lower generation of new traffic, but conditions at the SR 1/SR 68 would be worse in the short
17 term due to a probable delay in funding improvements at this interchange.

18 **Water Supply and Demand**

19 There would be increases in demand for water with new single-family residential development. This
20 demand could be accommodated through use of a portion of the Applicant's water entitlement.
21 However, in the event the Regional Project is not completed by the end of 2016, any increase in
22 demand would exacerbate water rationing and economic dislocation for other water users in 2017
23 and after. Therefore, this is a potentially significant and unavoidable impact. The impact would be
24 less than that of the proposed project due to the lower demand of new development.

25 **Alternative 1—Clustered Development Options**

26 **Alternative Characteristics**

27 Multiple options exist to cluster residential development to reduce the level of impact on biological
28 resources. The following three options were developed to reduce the level of impact on Monterey
29 pine forest and Yadon's piperia. All three options have the same visitor-serving component as the
30 proposed project (with Area M Spyglass Hill New Resort Hotel [Option 1]) and the same
31 transportation improvements and preservation areas. Unlike the proposed project (whereby the
32 applicant would contribute an in-lieu fee for affordable housing), these three options include an
33 additional 18 inclusionary housing units in the Corporation Yard to comply with the County's
34 affordable housing program, which increases the total residential development within Del Monte
35 Forest to 108 residential units (90 market-rate and 18 inclusionary).

36 Table 5-2 includes a summary of the alternative characteristics for each option, including the total
37 number of residential units (market rate and inclusionary), a description of how the residential
38 units would be clustered, and the biological resource impacts being avoided or reduced.

39 All three Alternative 1 options would meet most of the project objectives, but the lots in certain
40 subdivisions would be smaller in size and thus would not meet the specific project objective for
41 large lots as well as the proposed project.

1 Alternative 1A: Clustered Development Option A

2 This alternative would include 90 market-rate residential lots but would relocate all proposed
3 residential lots from Areas J (5 lots) and Area K (8 lots), shown in Figures 2-21 and 2-22, to Area F-2
4 (16 lots) and Area I-2 (16 lots), shown in Figures 2-19 and 2-20. Areas J and K contain Monterey
5 pine forest, Yadon's piperia, streams and wetlands, and CRLF breeding habitat. Area K has the
6 largest population of Yadon's piperia of all the proposed development sites (the majority of Yadon's
7 piperia in Del Monte Forest is located within the proposed preservation sites). Areas F-2 and I-2
8 were selected as densification locations because they are completely surrounded by development
9 and, as such, their natural resources are isolated and fragmented from larger undeveloped areas in
10 Del Monte Forest.

11 There are a number of ways that the 13 lots from Areas J and K can be consolidated into Areas F-2
12 and I-2; this alternative presumes 6 lots are added to Area F-2 and 7 lots are added to Area I-2. This
13 alternative presumes that lots not containing Yadon's piperia would be split to accommodate the
14 new lots in each area, so as to avoid any increase in direct loss of Yadon's piperia. The gross density
15 of Area F-2 would decrease from 1.22 acres per unit to 0.89 acre per unit, which would be classified
16 as Medium-Density Residential (MDR), which allows between 2 and 4 units per acre. The gross
17 density of Area I-2 would decrease from 1.17 acres per unit to 0.81 acre per unit, which would also
18 be Medium-Density Residential (MDR).

19 This alternative would include 18 inclusionary units in attached housing at the Corporation Yard.
20 The density of the proposed housing area would change from 0.47 acre per unit to 0.17 acre per
21 unit. Per the county's coastal zoning ordinance, this density would be High-Density-Residential
22 (HDR), which allows 8 units per acre or a higher density approved as part of a clustered residential
23 subdivision. The proposed 10 market-rate single-family units at the Corporation Yard would change
24 to attached housing in combination with the 18 inclusionary units, for a total of 28 units at the
25 Corporation Yard.

26 Alternative 1B: Clustered Development Option B

27 This alternative would include 90 market-rate residential lots but would relocate all proposed
28 residential lots from Area K (8 lots) and Area L (10 lots), as shown in Figures 2-22 and 2-23, to
29 Areas F-2 and I-2. As noted, above, Area K contains Monterey pine forest, streams, wetlands, CRLF
30 habitat, and the largest population of Yadon's piperia of all the proposed development sites. The
31 proposed development area at Area L contains Monterey pine forest adjacent to Del Monte Forest
32 Foundation Indian Village preservation area. Although Area L also contains dune habitat, these areas
33 are already preserved in an existing conservation easement. The project could have indirect effects
34 on the dune area, as described in Section 3.3, Biological Resources, which would be avoided by not
35 developing adjacent areas. Area L also contains several streams, CRLF habitat, and a small
36 population of Yadon's piperia, but the proposed project includes these resources within the
37 proposed preservation areas.

38 Areas F-2 and I-2 can accommodate the 18 lots from Areas K and L in a number of ways; this
39 alternative presumes 9 lots each are added to F-2 and I-2. This alternative presumes that lots not
40 containing Yadon's piperia would be split to accommodate the new lots in each area in order to
41 avoid any increase in direct loss of Yadon's piperia. The gross density of Area F-2 would decrease
42 from 1.22 acres per unit to 0.65 acre per unit, which would be classified as Medium-Density
43 Residential (MDR)/2, which allows up to 2 units per acre. The gross density of Area I-2 would

1 decrease from 1.17 acres per unit to 0.75 acre per unit, which would also be Medium-Density
2 Residential (MDR)/2.

3 This alternative would include 18 inclusionary units in attached housing at the Corporation Yard as
4 described under Alternative 1A.

5 **Alternative 1C: Clustered Development Option C**

6 This alternative would include 90 market-rate residential lots but would restrict and reconfigure
7 building envelopes to avoid all direct impacts to Yadon's piperia. While there are a myriad of ways
8 that lots can be reconfigured and or clustered to avoid Yadon's piperia, this alternative includes the
9 following:

- 10 • Area F-2 (16 lots): Modify allowable building envelopes on Lots 1, 2, 5, 6, 8, 9, 10, 11, and 15 and
11 eliminate Lot 16, and split Lot 4 to accommodate the relocated lot on-site.
- 12 • Area I-2 (16 lots): Delete Lots 1, 3, 4, 5, 6, and 12 and split Lots 2, 7, 8, 9, 13, and 14 to
13 accommodate relocated lots on-site.
- 14 • Area J (5 lots): Delete Lots 1 and 5 and split Lots 2 and 3 to accommodate relocated Lots on-site
15 and modify Lot 4 allowable building envelope.
- 16 • Area K (8 lots): Modify allowable building envelopes on Lots 1 and 5 and delete Lots 2-4 and 6-
17 8 and relocate the lots to Area L.
- 18 • Area L (10 lots): Split Lots 1-5 and Lot 8 to accommodate the relocated lots from Area K.
- 19 • Area U (7 lots): Modify allowable building envelope on Lot 7.
- 20 • Area V (14 lots): Delete Lot 11 and reconfigure other lots to accommodate relocated lot on-site,
21 and modify Lot 10 allowable building envelope.
- 22 • Special Events Staging Area: Reduce the development footprint to avoid Yadon's piperia.

23 These areas and lots are shown in Figures 2-19 to 2-25. This alternative would include 18
24 inclusionary units in attached housing at the Corporation Yard, as described under Alternative 1A.

25 **Impact Analysis**

26 The analysis below applies to all three Alternative 1 options. Any differences between the options
27 are described within the evaluation. Although some impacts would result in an increase or decrease
28 in the severity of an impact compared to the proposed project, the difference is relatively minor and
29 does not change the significance determination for any of the impacts—except for biological
30 resources. Alternative 1C would reduce impacts to Yadon's piperia from less than significant with
31 mitigation to less than significant without mitigation.

32 **Aesthetics**

33 The impacts under this alternative would be similar to those identified for the proposed project.

34 Impacts AES-A1 (adversely affect public viewing in or near visually prominent areas identified in the
35 LUP and along 17-Mile Drive), AES-B1 (degrade visual character and quality of some development
36 sites), and AES-C1 (introduce new light and glare) would be slightly greater under Alternative 1
37 because residential development would be increased in Areas F-2, I-2 and the Corporation Yard.
38 Residential development would be removed from Areas J and K (13 lots) under Option 1A and Areas

1 K and L (18 lots) under Option 1B and relocated to Areas F-2 and I-2. Under Option 1C, the number
2 of residential lots within Areas J, K, L, F-2 and I-2 would be the same but shifted and split differently.
3 All three options include adding 18 units of inclusionary housing to the Corporation Yard site.

4 Like the proposed project, the impacts of Alternative 1 would be reduced to a less-than-significant
5 level with implementation of Mitigation Measures AES-A1 (incorporate design features and
6 landscaping requirements in design plans and specifications for all development sites that involve
7 construction of new structures or modification of existing structures) and AES-C1 (incorporate light
8 and glare reduction measures in design plans and specifications).

9 **Air Quality**

10 The impacts under this alternative would be similar to those identified for the proposed project.

11 The construction-related Impacts AQ-C1 (increase in PM10 emissions from grading and
12 construction) and AQ-D1 (increase in emission of diesel toxic air contaminants from construction
13 trucks and equipment) would generally be the same under Alternative 1. However, localized
14 emissions would shift from Areas J, K, and L to Areas F-2 and I-2 and would slightly increase at the
15 Corporation Yard. Residential development would be relocated from Areas J and K (13 lots) under
16 Option 1A and from Areas K and L (18 lots) under Option 1B to Areas F-2 and I-2 under both
17 options. Under Option 1C, the number of residential lots within Areas J, K, L, F-2 and I-2 would be
18 the same, but shifted and split differently so the overall increase in these areas would remain the
19 same. All three options include adding 18 units of inclusionary housing to the Corporation Yard site.

20 Compared to the proposed project, construction-related emissions would be roughly the same and
21 would be reduced with implementation of Mitigation Measures AQ-C1 (measures to control fugitive
22 dust emissions), AQ-C2 (measures to control construction-related exhaust emissions), and AQ-D1
23 (use after-market emissions control technology on construction equipment). Also like the proposed
24 project, implementation of Mitigation Measures AQ-C1 and AQ-C2 would not be sufficient to reduce
25 construction PM10 emissions to a less-than-significant level because the large excavation areas are
26 related to the visitor-serving development and the relocation of the driving range.

27 **Biological Resources**

28 The impacts under this alternative would be less than those identified for the proposed project.

29 Impacts on Monterey pine forest, Yadon's piperia, streams and wetlands, and CRLF habitat found in
30 Areas J, K, and L would be reduced because the residential development would be relocated to other
31 areas proposed for residential development (to Areas I-2 and F-2 for Alternatives 1A and 1B and
32 repositioned to lower impacts on Yadon's piperia for Alternative 1C). The impacts were quantified
33 for Monterey pine forest and Yadon's piperia. Under the proposed project, 85.98 acres of Monterey
34 pine forest and 8.7 acres of Yadon's piperia would be affected. Under Alternatives 1A, 1B, and 1C, the
35 impacts on Monterey pine forest and Yadon's piperia would be less for both direct and indirect
36 impacts. The total reduction in impacts is:

- 37 ● Alternative 1A—8.53 acres less Monterey pine forest and 2.73 acres less Yadon's piperia.
- 38 ● Alternative 1B—13.64 acres less Monterey pine forest and 2.45 acres less Yadon's piperia.
- 39 ● Alternative 1C —3.49 acres less Monterey pine forest and 3.3 acres less Yadon's piperia (with no
40 direct impacts on Yadon's piperia).

1 In general, impacts on other biological resources supported by Monterey pine forest would have
2 similar relative characteristics to those indicated above for the Monterey pine forest. However,
3 these alternatives would not lower impacts on Hooker's manzanita because this species is not found
4 at Areas J, K, and L and avoiding part of all of these areas would not lower the project's impact.
5 Avoiding Areas J and K would also lower indirect impacts on CRLF habitat, although all proposed
6 project indirect impacts can be readily mitigated to a less-than-significant level. Avoiding Area L
7 would lower indirect impacts on coastal dunes, although all of the proposed project's indirect
8 impacts can be readily mitigated to a less-than-significant level.

9 The additional units at the Corporate Yard would increase the level of indirect effect on the HHNHA
10 due to increased residential use of trails. However, mitigation similar to that recommended for the
11 proposed project could address the effects of increased trail use on sensitive plant and wildlife
12 species.

13 **Climate Change**

14 The impacts under this alternative would be similar to those identified for the proposed project.

15 Like the proposed project, GHG emitted during construction and from operation could contribute to
16 climate change impacts. This alternative would have the same amount of development as the
17 proposed project, plus the 18 additional inclusionary residential units at the Corporation Yard.²
18 Compared to the proposed project, Alternative 1 emissions would be similar to the proposed project
19 and could be reduced with implementation of Mitigation Measures CC-A1 (BMPs for GHG emissions
20 during project construction) and CC-A2 (GHG reduction measures and other design elements to
21 ensure project-related GHG emissions are reduced by 26% relative to business as usual).

22 **Cultural Resources**

23 The impacts under this alternative would be similar to those identified for the proposed project.

24 This alternative would have similar effects as the proposed project if undiscovered resources were
25 encountered during construction. Under this alternative, residential development would be shifted
26 and the density would be increased, reducing the overall disturbed land area, so the potential for
27 discovery could be slightly less. The following same mitigation measures would be required to
28 reduce this impact to a less-than-significant level: Mitigation Measures CR-B1 (worker awareness
29 training for archaeological and paleontological resources prior to construction), CR-B2 (stop work if
30 buried cultural deposits or human remains are encountered during construction activities), and CR-
31 D1 (stop work order if vertebrate fossil materials are encountered during construction).

32 **Geology, Seismicity, and Soils**

33 The impacts under this alternative would be similar to but slightly more than those identified for the
34 proposed project.

35 This alternative includes more residential development (18 inclusionary units) at the Corporation
36 Yard, thus slightly increasing impacts relative to unstable soils and hazardous materials at this site;

² The use of an in-lieu fee would result in the same amount of emissions as would including the 18 inclusionary units at the Corporation Yard because 18 units would be built somewhere within Monterey County. Thus, there would be no nominal change in GHG emissions, although traffic emissions might differ depending on proximity to transit and services.

1 however, the mitigation identified for the proposed project to address soils and hazardous materials
2 would still reduce this impact to a less-than-significant level. This alternative also includes removing
3 residential development from Area K where there are unstable slopes. Overall, the impacts and
4 required mitigation measures would be similar to those identified for the proposed project.

5 **Hydrology and Water Quality**

6 The impacts under this alternative would be similar to those identified for the proposed project.

7 Under this alternative, residential development would be removed from Areas J and K (Option 1A),
8 from Areas K and L (Option 1B), and from various areas to avoid Yadon's piperia (Option 1C).
9 However, it would be relocated to other sites planned for market-rate residential development, so
10 the amount of impervious surface and associated impacts on drainage and water quality would be
11 similar. There would be an increase in impervious surface at the Corporation Yard to accommodate
12 the 18 inclusionary units, resulting in a slight increase in impacts associated with increased
13 impervious surface within Del Monte Forest, but the proposed project's use of an in-lieu fee would
14 still result in new impervious surfaces in Monterey County, and thus the amount of impact would be
15 the same but the location would be different. Site-specific drainage reports would need to be revised
16 for these sites. Overall, the impacts and required mitigation measures would be roughly the same as
17 those for the proposed project.

18 **Land Use and Recreation**

19 The impacts under this alternative would be similar to those identified for the proposed project.

20 Residential land uses would be shifted from Areas J, K and L to Areas I-2 and F-2 (planned for
21 residential development) but the resultant densities would be within the range of normal
22 development in Del Monte Forest. Densities at the Corporation Yard would be higher than most
23 development in Del Monte Forest, but the Corporation Yard is functionally separate from other
24 development and well screened by forest areas. This alternative would comply with the County's
25 Inclusionary Housing Ordinance by providing 18 inclusionary residential units in the Corporation
26 Yard instead of an in-lieu fee. Overall, the land use impacts and required mitigation would be
27 roughly similar to the proposed project in that development can be found consistent with the LUP
28 and would not introduce incompatible land use within Del Monte Forest.

29 **Noise and Vibration**

30 The impacts under this alternative would be similar to those identified for the proposed project.

31 Under this alternative, construction of residential development would be relocated from Areas J and
32 K (Option 1A), from Areas K and L (Option 1B), and from various areas to avoid Yadon's piperia
33 (Option 1C) to Areas I-2 and F-2, thus shifting the location of construction-related noise. This
34 alternative would also add construction of additional units at the Corporation Yard. Based on the
35 location of sensitive receptors (Table 3.9-11 in Section 3.9, Noise and Vibration), this shift would
36 result in slightly less construction noise to residents near Area J and slightly more to residents near
37 Area I-2 and the Corporation Yard.

38 Traffic generation (and thus traffic noise) in and adjacent to Del Monte Forest would be higher than
39 the proposed project due to the 18 inclusionary housing units at the Corporation Yard; regionally,
40 traffic generation (and thus traffic noise) would be the same as that of the proposed project because
41 the in-lieu fee would result in 18 units within Monterey County.

1 Overall noise impacts and required mitigation measures would be roughly similar to those of the
2 proposed project.

3 **Public Services and Utilities**

4 The impacts under this alternative would be roughly similar to those identified for the proposed
5 project.

6 The impact of exposing people and structures to the risk of wildland fires would be slightly more
7 than the proposed project because 18 additional inclusionary housing units would be located in the
8 Residential Lot Subdivision at the Corporation Yard, which is adjacent to the HHNHA and SFB Morse
9 Botanical Preserve to the north and Preservation Areas G and H to the south. The impact severity
10 and required mitigation for this alternative would be the same as that of the proposed project.

11 **Transportation and Circulation**

12 The impacts under this alternative would be similar to those identified for the proposed project.

13 Local construction traffic impacts would be similar but slightly higher than the proposed project due
14 to the 18 additional inclusionary housing units.

15 Localized operational traffic would shift with the relocation of residential lots from Areas J, K, and L
16 to Areas I-2 and F-2, and there would be a minor increase in local traffic from the 18 additional
17 housing units at the Corporation Yard (but no increase in regional traffic).

18 Overall, impacts and required mitigation would be roughly similar to those of the proposed project.
19 Impacts can be reduced with the project mitigation identified for the proposed project, but similar to
20 the proposed project, even with mitigation, certain impacts will remain significant and unavoidable.

21 **Water Supply and Demand**

22 The impacts under this alternative would be similar to those identified for the proposed project.

23 This alternative would result in slightly more demand in Del Monte Forest for potable water with
24 the additional 18 inclusionary units at the Corporation Yard, but the same amount of regional
25 demand because the project would result in 18 inclusionary units somewhere else in Monterey
26 County. The overall impact of this alternative would be the same as the proposed project including
27 the significant unavoidable impacts related to project water demand in the event of no new regional
28 water supply and related to indirect impacts associated with new regional water supply
29 development.

30 **Alternative 2—Reduced Development Options**

31 **Alternative Characteristics**

32 Multiple options exist to reduce the development level to reduce the level of impact on biological
33 resources, traffic and water supply. The spatial layout of the following three options were developed
34 to reduce the level of impact on Monterey pine forest and Yadon's piperia through reduction of the
35 number of market-rate lots. Similar to Alternative 1, all three options have the same visitor-serving
36 component as the proposed project under Project Element Option 1 (Area M Spyglass Hill New
37 Resort Hotel) and the same transportation improvements and preservation areas. Unlike the
38 proposed project, these three Alternative 2 options include an additional 13 to 16 inclusionary

1 housing units in the Corporation Yard to comply with the County's affordable housing program,
2 instead of the applicant contributing an in-lieu fee. Because these alternatives would have fewer
3 market-rate residential lots, the requirements for inclusionary housing units are also less than those
4 of the proposed project. Therefore, under this alternative, there would be 77 to 93 residential units
5 (64 to 77 market-rate and 13 to 16 inclusionary).

6 Table 5-2 includes a summary of the alternative characteristics for each option, including the total
7 number of residential units (market rate and inclusionary), a description of how the residential
8 units would be clustered, and the biological resource impacts being avoided or reduced. Because all
9 three options would have a lower level of development overall, they would generate less traffic,
10 require less construction and would have lower water demands.

11 All three Alternative 2 options would meet most of the project objectives, including increasing the
12 number of residential lots, but they would not provide for as many lots as the proposed project
13 would provide. All three Alternative 2 options would eliminate lots instead of changing their
14 configuration and thus would meet the specific large lot objective where lots are retained, except at
15 the Corporate Yard. All three Alternative 2 options would not meet the specific project objective for
16 large lots at the Corporation Yard.

17 **Alternative 2A: Reduced Development Option A**

18 This alternative would eliminate residential development in Areas J and K (shown in Figures 2-21
19 and 2-22) to reduce biological resource impacts as well as traffic and water supply impacts.
20 Biological resources in these areas were discussed above. This alternative would result in 77
21 market-rate units in Del Monte Forest (compared to 90 with the proposed project). This alternative
22 would include 16 inclusionary units in attached housing at the Corporation Yard.

23 **Alternative 2B: Reduced Development Option B**

24 This alternative would eliminate development in Areas K and L (Figures 2-22 and 2-23) to reduce
25 biological resource impacts as well as traffic and water supply impacts. Biological resources in these
26 areas are discussed above. This alternative would result in 72 market-rate units in Del Monte Forest
27 (compared to 90 with the proposed project). This alternative would include 15 inclusionary units in
28 attached housing at the Corporation Yard.

29 **Alternative 2C: Reduced Development Option C**

30 This alternative would reduce development to avoid all direct impacts on Yadon's piperia and
31 reduce traffic and water impacts. This alternative includes the following:

- 32 ● Area F-2: Delete 8 lots (Lots 1, 2, 5, 6, 8, 9, 15, and 16).
- 33 ● Area I-2: Delete 6 lots (Lots 1, 3, 4, 5, 6, and 12).
- 34 ● Area J: Delete 3 lots (Lots 1, 4, and 5).
- 35 ● Area K: Delete all 8 lots.
- 36 ● Area U: Modify Lot 7 to avoid Yadon's piperia.
- 37 ● Area V: Delete 1 lot (Lot 11) and modify Lot 10 to avoid Yadon's piperia.
- 38 ● Special Events Staging Area: Reduce the development footprint to avoid Yadon's piperia.

1 These areas and lots are shown in Figures 2-19 to 2-25. This alternative would result in 64 market-
2 rate units in Del Monte Forest (compared to 90 with the proposed project). This alternative would
3 include 13 inclusionary units in attached housing at the Corporation Yard.

4 **Impact Analysis**

5 The analysis below applies to all three Alternative 2 options. Any differences between the options
6 are described within the evaluation. Although some impacts would result in an increase or decrease
7 in the severity of an impact compared to the proposed project, none of the alternatives would result
8 in a change in the significance determination for any of the impacts—except for biological resources.
9 Alternative 2C would reduce impacts on Yadon’s piperia from less than significant with mitigation to
10 less than significant without mitigation.

11 **Aesthetics**

12 The impacts under this alternative would be similar to the proposed project.

13 Under Alternative 2, Impacts AES-A1, AES-B1 and AES-C1 would be slightly more at the Corporation
14 Yard than the proposed project because of the increase in residential development³, although
15 impacts in Areas J, K, L, F-2, I-2, U, and/or V would be less due to a lower level of residential
16 development.

17 Like the proposed project, Alternative 2 impacts could be reduced to a less-than-significant level
18 with implementation of Mitigation Measures AES-A1 and AES-C1.

19 **Air Quality**

20 The impacts under this alternative would be roughly similar but slightly less than those identified
21 for the proposed project.

22 The construction-related Impacts AQ-C1 (increase in PM10 emissions from grading and
23 construction) and AQ-D1 (increase in emission of diesel TACs from construction trucks and
24 equipment) would be slightly less under Alternative 2 because, despite an increase in construction
25 at the Corporation Yard, localized emissions would be eliminated at Areas J, K, and/or L
26 (Alternatives 2A and 2B), or lowered at Areas J, K, L, F-2, I-2, U and V (Alternative 2C), and the
27 overall amount of construction would be lower than the proposed project (77 to 93 units with
28 Alternative 2 compared to 108 units with the proposed project, 18 of which would be inclusionary
29 units somewhere in Monterey County). Construction-related emissions would be reduced with
30 implementation of Mitigation Measures AQ-C1 (measures to control fugitive dust emissions), AQ-C2
31 (measures to control construction-related exhaust emissions), and AQ-D1 (use after-market
32 emissions control technology on construction equipment). Also like the proposed project,
33 implementation of Mitigation Measures AQ-C1 and AQ-C2 is not enough to reduce Impact AQ-C1 to a
34 less-than-significant level. The impact would remain significant and unavoidable.

³ The amount of inclusionary housing required depends on the amount of market-rate housing being developed (Monterey County Inclusionary Housing Ordinance requires 20%). The proposed project and Alternatives 1, 3, 4, and 5 include 90 market-rate units, thus requiring 18 inclusionary units. Alternatives 2A, 2B, and 2C include 77, 72, and 64 market-rate units, thus requiring 16, 15, and 13 inclusionary units (respectively).

1 Operational traffic-related emissions would be slightly less than the proposed project due to 15 to
2 31 fewer units overall in Monterey County and would have a less-than-significant impact on air
3 quality, similar to the proposed project.

4 **Biological Resources**

5 Under Alternative 2, impacts on biological resources would be less for Monterey pine forest, Yadon's
6 piperia, streams and wetlands, and CRLF habitat found in Areas J, K, and/or L because the
7 residential development would be relocated to other areas proposed for residential development
8 (Alternatives 2A and 2B), or would be avoided in Area K and lowered in other areas (Alternative
9 2C). The impacts were quantified for Monterey pine forest and Yadon's piperia. Under the proposed
10 project, 86 acres of Monterey pine forest and 9 acres of Yadon's piperia would be affected directly or
11 indirectly. Under Alternatives 2A, 2B, and 2C, the impacts on Monterey pine forest and Yadon's
12 piperia would be less for both direct and indirect impacts. The total reductions in direct and indirect
13 impacts under Alternatives 2A, 2B, and 2C are:

- 14 • Alternative 2A—8 acres less Monterey pine forest and 4 acres less Yadon's piperia.
- 15 • Alternative 2B—14 acres less Monterey pine forest and 4 acres less Yadon's piperia.
- 16 • Alternative 2C—24 acres less Monterey pine forest and 7 acres less Yadon's piperia (with no
17 direct impacts).

18 In general, impacts on other biological resources supported by Monterey pine forest would have
19 similar relative characteristics to those indicated above for Monterey pine forest. However, these
20 alternatives would not lower impacts on Hooker's manzanita because this species is not found at
21 Areas J, K, and L; and avoiding part or all of these areas would not lower the project's impact.
22 Avoiding Areas J and K would also lower indirect impacts on CRLF habitat although all proposed
23 project indirect impacts can be readily mitigated to a less-than-significant level. Avoiding Area L
24 would lower indirect impacts on coastal dunes and Hickman's potentilla, although all proposed
25 project indirect impacts can be readily mitigated to a less-than-significant level.

26 The additional units at the Corporate Yard would increase the level of indirect effect on the HHNHA
27 due to increased residential use of trails. However, mitigation similar to that recommended for the
28 proposed project could address the effects of increased trail use on sensitive plant and wildlife
29 species.

30 **Climate Change**

31 The impacts under this alternative would be similar to but less than those identified for the
32 proposed project due to a reduction in residential unit development by 15 to 31 units.

33 Like the proposed project, GHG emissions during construction and from operation could contribute
34 to climate change impacts. Under this alternative, there would be less residential development
35 compared to the proposed project. The increase in emissions above existing conditions due to
36 Alternative 2 could be reduced to a less-than-significant level with implementation of Mitigation
37 Measures CC-A1 and CC-A2 (same as the proposed project).

38 **Cultural Resources**

39 The impacts under this alternative would be similar to but slightly less than those identified for the
40 proposed project due to a smaller level of residential construction.

1 This alternative would have impacts similar to those of the proposed project if undiscovered
2 resources were encountered during construction. Under this alternative, residential development
3 would require less overall disturbed land area, so that the potential for discovery would be less. The
4 required mitigation measures would be the same as those for the proposed project.

5 **Geology, Seismicity, and Soils**

6 The impacts under this alternative would be similar to those identified for the proposed project.

7 This alternative includes more residential development (13 to 16 inclusionary units) at the
8 Corporation Yard, thus slightly increasing impacts related to unstable soils and hazardous materials
9 at this site; however, the mitigation identified for the proposed project to address soils and
10 hazardous materials would still reduce this impact to a less-than-significant level. This alternative
11 also includes removing residential development from Area K where there are unstable slopes.
12 Overall, the impacts and required mitigation measures would be similar to those identified for the
13 proposed project.

14 **Hydrology and Water Quality**

15 The impacts under this alternative would be similar to but slightly less than those identified for the
16 proposed project, but with a smaller residential element.

17 There would be a reduction in the amount of impervious surface and associated impacts to drainage
18 and water quality due to a lesser amount of residential development overall. There would be an
19 increase in impervious surface at the Corporation Yard to accommodate the 13 to 16 inclusionary
20 units, resulting in a slight increase in impacts associated with increased impervious surface at this
21 location. Site-specific drainage reports would need to be revised for the modified development plan
22 included in this alternative. The impacts on the overall stormwater drainage system offsite would be
23 the same as the proposed project. Overall, the impacts and required mitigation measures would be
24 the same as those for the proposed project.

25 **Land Use and Recreation**

26 The impacts under this alternative would be similar to those identified for the proposed project.

27 Residential land uses would be removed from Areas J, K, and/or L (Alternatives 2A and B) or
28 avoided at Area K and reduced at Area F-2, I-2, J, U and V. Densities at the Corporation Yard would
29 be higher than most development in Del Monte Forest, but the Corporation Yard is functionally
30 separate from other development and well screened by forest areas. This alternative would comply
31 with the County's Inclusionary Housing Ordinance by providing inclusionary residential units in the
32 Corporation Yard, instead of an in-lieu fee. Overall, the land use impacts and required mitigation
33 would be roughly similar to the proposed project in that development can be found consistent with
34 the LUP and would not introduce incompatible land use within Del Monte Forest.

35 **Noise and Vibration**

36 The impacts under this alternative would be similar to those identified for the proposed project.

37 Under this alternative, construction of residential development would be eliminated or lowered in
38 various areas of the Forest, while construction would increase at the Corporation Yard. Overall,
39 construction impacts and required mitigation measures would be the same as those for the
40 proposed project.

1 **Public Services and Utilities**

2 The impacts under this alternative would be similar to those identified for the proposed project.

3 The impact of exposing people and structures to the risk of wildland fires would be slightly more
4 than the proposed project because 13 to 16 additional inclusionary housing units would be located
5 in the Residential Lot Subdivision at the Corporation Yard, which is adjacent to the HHNHA and SFB
6 Morse Botanical Reserve to the north, and Preservation Areas G and H to the south. The impact
7 determination and required mitigation for this alternative would be the same as those for the
8 proposed project.

9 **Transportation and Circulation**

10 The impacts under this alternative would be similar to those identified for the proposed project.

11 Localized traffic would be reduced with the removal of residential lots from Areas J, K, and L (and
12 small portions of other areas planned for residential development); and there would be minor
13 increases in traffic from the 13-16 additional housing units at the Corporation Yard. Traffic
14 generation would be slightly lower than the proposed project regionally, due to 13 to 31 less
15 residential units overall. Traffic generation in Del Monte Forest would be slightly higher by 3 units
16 (Alternative 2A) or slightly lower by 3 to 13 units (Alternatives 2B and 2C). Traffic impacts in and
17 around Del Monte Forest would be similar to the proposed project and slightly less regionally.
18 Impacts can be reduced with the project mitigation identified for the proposed project, but similar to
19 the proposed project, even with mitigation, there will be certain impacts that will remain significant
20 and unavoidable.

21 **Water Supply and Demand**

22 The impacts under this alternative would be similar to but slightly less than those identified for the
23 proposed project.

24 This alternative would result in slightly less regional demand for potable water with 13 to 31 fewer
25 residential units than the proposed project. The overall impact of this alternative would be the
26 similar to but less than the proposed project but would still result in a significant unavoidable
27 impacts related to project water demand in the event of no new regional water supply and related to
28 indirect impacts associated with new regional water supply development.

29 **Alternative 3—Driving Range Redesign**

30 **Alternative Characteristics**

31 This alternative would redesign the relocated Pebble Beach Driving Range, to avoid the 0.2-acre
32 habitat area with Pacific Grove clover in the far northwest corner of Collins Field near the proposed
33 tee box (Figure 2-13). The tee box would be relocated elsewhere on site within the proposed
34 development footprint. Entry into the area containing Pacific Grove clover would be discouraged by
35 a low fence installed around the perimeter with signage indicating that the area is closed for the
36 protection of a sensitive natural resource. The area would be monitored annually to document the
37 condition of the population and determine which factors are affecting the population. The
38 population would be maintained in perpetuity through the use of adaptive management to
39 compensate for factors adversely affecting the population and promoting factors that benefit the
40 population.

1 Table 5-2 includes a summary of the alternative characteristics, including the total number of
2 residential units (market rate and inclusionary). Alternative 3 would meet all the project objectives.

3 **Impact Analysis**

4 The impacts and mitigation measures under this alternative would be the same as those identified
5 for the proposed project for all the issue areas, except as related to Pacific Grove clover. Alternative
6 3 would reduce impacts on Pacific Grove clover from less than significant with mitigation to less
7 than significant without mitigation.

8 **Biological Resources**

9 Under Alternative 3, impacts on biological resources would be similar to those identified for the
10 proposed project, except there would be no direct impact on Pacific Grove clover because impacts
11 would be avoided entirely.

12 **Alternative 4—Spanish Bay Underground Employee Parking**

13 **Alternative Characteristics**

14 This alternative would include a 285-space underground parking lot at The Inn at Spanish Bay, to
15 replace the proposed 285-space surface employee parking lot in Area B, to avoid impacts on
16 Monterey pine forest in Area B.

17 The underground parking lot would be located nominally under the tennis courts in approximately
18 the same location as the 443-space underground parking garage that was proposed as part of the
19 prior project and studied in the 2005 EIR. Underground parking would be available 24 hours daily.
20 The entry road would be realigned via a new driveway south of the underground parking structure.
21 Separate access to the residential portion of the site would be located east of the parking garage.
22 Paths would allow resident access to the tennis courts. Additional parking and circulation needs for
23 The Inn at Spanish Bay, including arrival and parking areas serving the existing Inn as well as
24 proposed new guestrooms and meeting rooms, would be reconfigured to provide visitor access and
25 service.

26 Table 5-2 includes a summary of the alternative characteristics, including the total number of
27 residential units (market rate and inclusionary). Alternative 4 would meet all the project objectives.

28 **Impact Analysis**

29 Overall, impacts would be similar to but slightly greater for a number of resource areas than those
30 identified for the proposed project because of additional impacts occurring from an additional
31 underground structure, but operational impacts related to aesthetics and biological resources would
32 be lower. Although some impacts would be greater or less than those identified for the proposed
33 project, the difference is relatively minor and does not change the significance determination for any
34 of the impacts.

35 **Aesthetics**

36 The impacts and required mitigation measures under this alternative would be similar to those
37 identified for the proposed project. The New Employee Parking in Area B was determined to have a
38 less-than-significant impact on scenic vistas, corridors and views because the remaining roadside

1 vegetation would buffer views of the parking area from 17-Mile Drive. Relocating the parking area to
2 the underground site within The Inn at Spanish Bay developed area, would reduce Impact AES-C1
3 (introduce new sources of light and glare) at this particular development site in Area B relative to
4 the proposed project, but the overall impact and required mitigation would be the same. The new
5 underground structure would not be visible from surface levels and thus would have no aesthetic
6 impacts except at entry and exit points.

7 **Air Quality**

8 The impacts and required mitigation measures under this alternative would be similar to but
9 somewhat greater than the proposed project because there would be substantially more excavation
10 and grading activities associated with constructing an underground 285-space parking structure
11 instead of a surface 285-space parking lot. There would be additional construction-related impacts
12 (AQ-C1, increase in PM10 emissions from grading and construction and AQ-D1, increase in emission
13 of diesel toxic air contaminants from construction trucks and equipment). As with the proposed
14 project, implementation of Mitigation Measures AQ-C-1 and AQ-C2 would reduce construction PM10
15 impacts but would not reduce Impact AQ-C1 to a less-than-significant level. Construction of the
16 underground parking lot would have greater TAC emissions during construction than the proposed
17 project's surface lot in Area B that would require mitigation similar to the proposed project, given
18 that there are residents approximately 100 feet from the location of the underground lot.
19 Implementation of the mitigation identified for the proposed project would be sufficient to mitigate
20 impacts associated with construction-related TAC emissions to less than significant.

21 **Biological Resources**

22 Under this alternative, the impacts on biological resources would be similar to those identified for
23 the proposed project, but 2.81 fewer acres of Monterey pine forest would be affected by relocating
24 the new employee parking lot from Area B to underground at The Inn at Spanish Bay.

25 **Climate Change**

26 The impacts under this alternative would be similar to but slightly more than those identified for the
27 proposed project.

28 Like the proposed project, GHG emitted during construction and from operation could contribute to
29 climate change impacts. This alternative would have the same amount of permanent development as
30 the proposed project would have, but the 285-space parking facility would be an underground
31 structure within The Inn at Spanish Bay developed area instead of a surface parking lot in Area B.
32 This would result in more construction-related GHG emissions than the proposed project would
33 have because there would be more excavation and grading required for the underground structure.
34 The increase in emissions from Alternative 4 could be reduced with implementation of Mitigation
35 Measures CC-A1 and CC-A2, similar to the proposed project.

36 **Cultural Resources**

37 The impacts of this alternative would be similar to but slightly more than those identified for the
38 proposed project.

39 This alternative would have effect similar to those of the proposed project if undiscovered resources
40 were encountered during construction. The likelihood of finding undiscovered resources is greater
41 because substantially more excavation would be required for the underground parking facility.

1 Mitigation Measures CR-B1, CR-B2, and CR-D1 would be required to reduce this impact to a less-
2 than-significant level.

3 **Geology, Seismicity and Soils**

4 The impacts under this alternative would be more than those identified for the proposed project.

5 Under this alternative, the proposed permanent development and related impacts would be the
6 same as the proposed project, but there would be greater impacts from constructing a 285-space
7 parking facility underground within The Inn at Spanish Bay, instead of constructing a surface lot in
8 Area B. This modification would increase the potential for structural failure because it would be
9 located in an area of shallow groundwater and weak surrounding deposits. In addition to the
10 mitigation identified for the proposed project, this alternative would require implementation of
11 specific measures identified in a site-specific geotechnical report and drainage plan prepared for an
12 underground parking structure at this location.

13 **Hydrology and Water Quality**

14 The impacts under this alternative would be similar to but slightly more than those identified for the
15 proposed project.

16 Under this alternative, the proposed permanent development and related impacts would be the
17 same as the proposed project. Additionally, there would be greater impacts from constructing a 285-
18 space parking facility underground within The Inn at Spanish Bay, instead of constructing a surface
19 lot in Area B due to the increased excavation and need for dewatering during construction. A site-
20 specific drainage plan would need to be prepared for the underground garage. It is anticipated that
21 stormwater run-off would be collected and discharged into the existing storm drain system serving
22 the site, and the addition to the existing detention basin volume would be less than significant.
23 There would be no substantial changes in drainage patterns at the site. Dewatering would be needed
24 because it is in an area of shallow groundwater, and this could result in the compromise of water
25 quality and therefore is considered a significant impact, but could be mitigated through proper
26 treatment facilities. This alternative would require similar mitigation as that of the proposed project
27 but pumping would be necessary both during construction and during operations to drain the
28 underground site.

29 **Land Use and Recreation**

30 The impacts under this alternative would be similar to those identified for the proposed project.

31 Under this alternative, a 285-space underground parking facility would be constructed within the
32 developed area of The Inn at Spanish Bay, instead of a 285-space surface parking lot in Area B,
33 across the street from the main entrance. This modification does not change the degree of impacts
34 identified for the proposed project. Overall, the land use impacts and required mitigation would be
35 similar to those of the proposed project.

36 **Noise and Vibration**

37 The impacts under this alternative would be similar to and greater than those identified for the
38 proposed project.

39 Under this alternative, there would be additional construction and operation impacts associated
40 with constructing a 285-space underground parking facility at The Inn at Spanish Bay, instead of a

1 285-space surface parking lot. There would be increased noise and vibration impacts to surrounding
2 visitor-serving uses during construction, and ventilation noise from operation due to the need for
3 ventilation fan or fans for the underground parking lot. The mitigation would be similar to that
4 prescribed for other project elements of the proposed project (NOI-A1, employ noise-reducing
5 treatments on parking structure fan systems; NOI-B1 to NOI-B8, noise-reducing measures during
6 construction; and NOI-C1, limiting operations that result in vibration to specified times).

7 **Public Services and Utilities**

8 The impacts under this alternative would be similar to those identified for the proposed project.

9 Under this alternative, the 285-space employee parking facility would be located underground
10 within The Inn at Spanish Bay developed area, instead of across the street on a surface lot. This
11 would not change the impacts and required mitigation for public services and utilities relative to the
12 proposed project.

13 **Transportation and Circulation**

14 The impacts under this alternative would be similar to those identified for the proposed project,
15 except during construction, which would be greater.

16 This alternative would result in more construction-related traffic because substantially more
17 construction equipment and truck trips would be required to construct an underground parking
18 garage within the developed portion of The Inn at Spanish Bay than a surface parking lot across the
19 street from the main entrance.

20 This alternative would result in additional traffic within the developed portion of The Inn at Spanish
21 Bay from the 285-space employee parking facility but circulation designs could accommodate the
22 traffic flow. Operational traffic levels would be the same as the proposed project.

23 All impacts and mitigation would be similar to those for the proposed project. This alternative
24 would require an additional traffic analysis to determine if site-specific impacts require additional
25 design mitigation to provide for safe and effective internal circulation at The Inn at Spanish Bay.

26 **Water Supply and Demand**

27 The impacts under this alternative would be similar to those identified for the proposed project.

28 This alternative would result in slightly more demand for potable water to meet the County's health,
29 fire and safety requirements for the 285-space underground parking facility. The overall impact of
30 this alternative would be the same as the proposed project including the significant unavoidable
31 impacts related to project water demand in the event of no new regional water supply and related to
32 indirect impacts associated with new regional water supply development.

33 **Alternative 5—Roundabout at the SR 1/SR 68/17-Mile Drive Interchange**

34 This alternative was developed by the City of Monterey and has been included in this analysis upon
35 their request because it would result in better traffic conditions at this interchange than either the
36 proposed Phase 1B improvement or the RTP's Highway 68 Widening Project.

37 However, as described in Section 3.11, Transportation and Circulation, the Phase 1B improvement
38 included in the proposed project would substantially improve traffic conditions compared to a no

1 project condition. As a result, the roundabout is an alternative to this project element, but is not
2 necessary to address an identified significant impact of the project.

3 **Alternative Characteristics**

4 As described in Chapter 2 and shown in Figure 2-29, the interchange modifications included with
5 the proposed project⁴ include the following.

- 6 • Adding a right-turn lane in the eastbound direction.
- 7 • Widening the SR 1 southbound off-ramp to accommodate a right-turn lane, through lane and
8 left-turn lane.
- 9 • Reconfiguring the intersection to form a five-legged intersection to separate the Pebble Beach
10 entrance from the SR 1 on-ramp.
- 11 • Constructing a retaining wall along the SR 1 southbound onramp; providing a separate on-ramp
12 from Pebble Beach entrance that is separate from the main on-ramp to SR 68.
- 13 • Modifying the signals at the SR 1/SR 68 intersection.

14 Under Alternative 5, all the project elements would be the same as those of the proposed project
15 except the SR 1/SR 68/17-Mile Drive Intersection Reconfiguration. Under Alternative 5, the
16 intersection would be modified to include two roundabouts instead of a traffic signal. A smaller
17 single-lane roundabout would be located at the intersection of the SR 1 southbound on-ramp and
18 17-Mile Drive, and a larger roundabout would be located at the intersection of the SR 1 southbound
19 off-ramp and SR 68 intersection, as shown in Figure 5-1.

20 Specific interchange modifications included in Alternative 5 are as follows:

- 21 • Widening the SR 1 southbound off-ramp to flair from two lanes to three lanes approaching the
22 roundabout at SR 68.
- 23 • Configuring the roundabout at SR 68 with two circulating lanes connecting the SR 1 southbound
24 off-ramp to Del Monte Forest.
- 25 • Configuring the roundabout at SR 68 to receive four eastbound lanes, including two lanes
26 toward SR 1 northbound, one lane toward SR 1 southbound, and one lane to Del Monte Forest.
- 27 • Configuring the roundabout at SR 68 to receive three northbound lanes (from Del Monte Forest)
28 including a lane for left-turning traffic and two lanes for right-turning traffic.
- 29 • Replacing the SR 68 overcrossing to provide two eastbound lanes and one westbound lane
30 including non-motorized connections to the Coastal Trail on the east side of SR 1.
- 31 • Providing a single lane roundabout at the intersection of 17-Mile Drive with the SR 1
32 southbound on-ramp.

⁴ The SR 1/SR 68/17-Mile Drive Intersection Reconfiguration (part of the proposed project) is a subset of the Highway 68 Widening Project. The Highway 68 Widening Project widens SR 68 from one to two lanes in each direction from the Community Hospital intersection to the ramp terminal intersection with SR 1; signalizes the Carmel Hill Professional Center driveway; widens the SR 1 southbound off-ramp to provide a left-turn lane; reconfigures the SR 1 southbound on-ramp to separate Pebble Beach-related and highway-related traffic; replaces the Scenic Drive and SR 68 overcrossings to accommodate four lanes on SR 68; and would provide non-motorized connections to the planned Coastal Trail on the east side of SR 1.

- 1 • Widening SR 68 from two lanes to four lanes between the roundabout at the SR 1 southbound
2 off-ramp and the Community Hospital of the Monterey Peninsula intersection.
- 3 • Providing three grade-separated Class I bicycle paths under SR 68 connecting the regional path
4 system, Del Monte Forest, and SR 68. Two at-grade crossings would also be provided at the SR 1
5 southbound off- and on-ramps.
- 6 • Restricting traffic at the Carmel Hill Professional Center driveway from making a left turn out
7 toward SR 1. All other movements would remain.

8 The footprint of the roundabout (Alternative 5) is similar to the footprint of the proposed project
9 modifications. Compared to the proposed project, Alternative 5 results in an increase in the
10 disturbed area to the east and west of the southbound off-ramp to accommodate the Class I bike
11 lane, and on the south side of the ramp lanes leading from SR 68 to the Pebble Beach gate. There
12 would be small decreases in the disturbed area at other locations (e.g., west side of the
13 northernmost portion of the southbound off-ramp, northwest of the corner of SR 68 and Carmel Hill
14 Professional Center driveway, south side of SR 68 adjacent to Sunridge Road, east of the southbound
15 on-ramp and a small piece to the west of the southbound on-ramp). The retaining walls required
16 under Alternative 5 would be similar to the proposed project, except along the Sunridge Road
17 corridor where they would be smaller and shorter with Alternative 5 than with the proposed
18 project's retaining walls to accommodate the third eastbound lane.

19 Table 5-2 includes a summary of the alternative characteristics. This alternative would meet all the
20 project objectives.

21 **Impact Analysis**

22 The impacts and mitigation measures under this alternative would be the same as the proposed
23 project, except at the SR 1/SR 68/17-Mile Drive interchange. In this specific area, the impacts would
24 be similar to those identified for the proposed project. Under Alternative 5, there would be less
25 grading and visual impacts because there would be less retaining wall structure along Sunridge
26 Road, but disturbance to biological resources would be approximately the same as the proposed
27 project because the overall footprint is similar to the proposed project. However, all the impacts
28 identified, the significance determinations, and the required mitigation measures would be the same
29 as those for the proposed project, and there would be no additional significant impacts nor any
30 eliminated significant impacts. In some cases, the degree of an impact might be slightly more or less,
31 as described below.

32 **Aesthetics**

33 The impacts and required mitigation measures under this alternative would be similar to those
34 identified for the proposed project. In the SR 1/SR 68/17-Mile Drive interchange area, views are
35 dominated by pine forest. All three roadways are County-designated Scenic Highways and Routes,
36 and SR 1 and SR 68 are Officially Designated State Scenic Highways.⁵ Under both Alternative 5 and
37 the proposed project, Impacts AES-A2 (roadway improvements adverse affect on views from 17-
38 Mile Drive) and AES-B1 (degrade visual character and quality of 17-Mile Drive intersections) would
39 be less than significant with the following Mitigation Measure:

⁵ http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm;
[http://www.co.monterey.ca.us/planning/gpu/GPU_2007/2010_Mo_Co_General_Plan_Adopted_102610/Figures/
Fig14_Gr_Mty_Visual.pdf](http://www.co.monterey.ca.us/planning/gpu/GPU_2007/2010_Mo_Co_General_Plan_Adopted_102610/Figures/Fig14_Gr_Mty_Visual.pdf)

- 1 • AES-A2 (prepare and implement a landscape plan for SR 1/SR 68/17-Mile Drive intersection
2 reconfiguration).

3 The degree of impact would be slightly less under Alternative 5 because there would be fewer pine
4 trees removed and the retaining wall along Sunridge Road would be lower and shorter.

5 **Air Quality**

6 The impacts and required mitigation measures under this alternative would be similar as those
7 identified for the proposed project. In the SR 1/SR 68/17-Mile Drive area, sensitive receptors (e.g.,
8 residences) exist approximately 200 feet away along the south side of SR 68 west of the intersection,
9 between the development site and the Community Hospital of the Monterey Peninsula. Both
10 Alternative 5 and the proposed project would result in Impact AQ-C1 (short-term increase in PM10
11 emissions due to grading and construction) from construction equipment and vehicle exhaust and
12 fugitive dust in the North Central Coast Air Basin, and Impact AQ-D1 (emission of diesel TACs) from
13 construction near sensitive receptors (residences approximately 200 feet away). Although
14 emissions could be less with Alternative 5 because the lower and shorter retaining wall would
15 require less grading, this lesser impact would be offset by the greater disturbance required for the
16 new bike lane. The following Mitigation Measures during construction would be required for both
17 Alternative 5 and the proposed project:

- 18 • AQ-C1 (measures to control dust).
19 • AQ-C2 (measures to control exhaust emissions).

20 In both cases, Impact AQ-D1 would be reduced to a less-than-significant level, but Impact AQ-C1
21 would remain significant and unavoidable.

22 **Biological Resources**

23 The impacts and required mitigation measures under this alternative would be similar to those
24 identified for the proposed project. In the SR 1/SR 68/17-Mile Drive interchange area, biological
25 resources include 0.33 acre of Monterey pine forest (Table 3.3-2 in Section 3.3, Biological
26 Resources). As described in Section 3.3, it is a disturbed, degraded, and urbanized area of Monterey
27 pine forest, and the trees are not indigenous to the site (they were planted as part of the
28 landscaping). The proposed project would result in the removal of approximately 53 Monterey pine
29 trees and no coast live oak trees for the intersection modifications (Table 3.3-9).

30 Additional tree surveys would need to be conducted to determine the number of trees removed with
31 the roundabout alternative. Based on comparing project footprints, it appears that Alternative 5 may
32 remove a few less trees than the proposed project because Alternative 5 proposes a lower and
33 shorter retaining wall. Both Alternative 5 and the proposed project would result in Impacts BIO-B1
34 (direct disturbance and indirect effects on Monterey pine forest), BIO-I1 (potential disturbance to
35 nesting raptors), and BIO-J1 (removal or disturbance of Monterey pine trees and coast live oak
36 trees), requiring the following mitigation measures.

- 37 • BIO-B1(C) (dedicate additional area of undeveloped Monterey pine forest).
38 • BIO-I1 (conduct pre-construction and breeding-season raptor surveys and implement
39 protection measures).
40 • BIO-J1 (incorporate specific tree removal and replanting guidelines into the site-specific RMPs).

- 1 • BIO-J2 (protect retained trees from construction disturbance).

2 Additionally, Alternative 5 would require that a qualified biologist survey the site areas that are
3 outside the Phase 1B footprint to determine the trees and other biological resources that would be
4 affected because the disturbance area is slightly greater to the east and west of the southbound off-
5 ramp (to accommodate the Class I bike lane) and on the south side of the ramp lanes leading from
6 SR 68 to the Pebble Beach gate. A special-status plant survey will be required to assess the areas
7 outside of the Phase 1B footprint. If special-status plants are found, the mitigation measures
8 identified for the project related to Yadon's piperia or pine rose or possibly different mitigation
9 measures may be required for different special-status plants, if found. However, the areas outside of
10 the Phase 1B footprint (which has been surveyed previously) are relatively small areas and based on
11 aerial photography are likely to be highly similar to the condition of the adjacent areas within the
12 Phase 1B footprint.

13 No wetlands are located in the Phase 1B footprint; this would need to be assessed for the portion of
14 Alternative 5 outside the Phase 1B footprint.

15 **Climate Change**

16 The impacts and required mitigation measures under this alternative would be similar to those
17 identified for the proposed project. Both Alternative 5 and the proposed project would result in
18 project-related greenhouse gas emissions, during construction and from operation that could
19 considerably contribute to climate change impacts and be inconsistent with the goals of AB 32
20 (Impact CC-A1). Construction-related emissions would be slightly less with Alternative 5 because
21 there would be less grading associated with the lower and shorter retaining wall; operational
22 emissions would be slightly less because it is expected that traffic would have somewhat shorter
23 queues with the roundabout because vehicles would not be idling at a traffic signal. In both cases,
24 Impact CC-A1 would be reduced to a less-than-significant level by implementing the following
25 mitigation measures:

- 26 • CC-A1 (best management practices for GHG emissions during construction).
- 27 • CC-A2(reduce annual greenhouse gas emission by 26% relative to business as usual by either A)
28 using a combination of design features, replanting, and/or offset purchases; or B) validating the
29 greenhouse gas emission offset value of preserving Monterey pine forest designated for
30 development using the Climate Action Registry Forest Project Protocol and preserve the lands in
31 perpetuity).

32 **Cultural Resources**

33 The impacts and required mitigation measures under this alternative would be similar to those
34 identified for the proposed project. There are no known cultural or historical resources in the Phase
35 1B footprint. Compared to the proposed project, Alternative 5 would result in a very slight reduction
36 in the potential of disturbing previously undiscovered archaeological or paleontological resources
37 or human remains because slightly less grading would be required to construct the shorter and
38 lower retaining wall. However, Alternative 5 would result in a slight increase in the disturbed area
39 to the east and west of the southbound off-ramp (to accommodate the Class I bike lane) and on the
40 south side of the ramp lanes leading from SR 68 to the Pebble Beach gate. Although there are no
41 known archaeological resources within the Phase 1B footprint, a qualified archaeologist would need
42 to survey the small areas of the Alternative 5 footprint outside the Phase 1B footprint. Both the

- 1 Alternative 5 roundabout and the proposed project would have the same impacts (potential
2 discovery of unknown resources) and would require the following Mitigation Measures
- 3 • CR-B1 (conduct worker awareness training for archaeological and paleontological resources
4 prior to ground-disturbing construction activities).
 - 5 • CR-B2 (stop work if buried cultural deposits or human remains are found).
 - 6 • CR-D1 (stop work order if vertebrate fossil materials are found).

7 Additionally, Alternative 5 would require a qualified archaeologist to ensure that no additional
8 resources would be affected in the area where the new bike lanes would be constructed.

9 **Geology, Seismicity and Soils**

10 The impacts and required mitigation measures under this alternative would be similar as those
11 identified for the proposed project. In the SR 1/SR 68/17-Mile Drive intersection area, there are
12 expansive soils. Both Alternative 5 and the proposed project would result in Impact GSS-A1
13 (potential structural damage from earthquakes), GSS-C1 (soil erosion, loss of top soil,
14 sedimentation), and GSS-D1 (potential damage from constructing structures and roadways on
15 expansive soils). Although Impact GSS-C1 could be slightly less with Alternative 5 because there
16 would be less grading associated with the lower and shorter retaining wall, this lesser impact would
17 be offset by the greater disturbance footprint associated with the new bike lane. Both Alternative 5
18 and the proposed project would require the following mitigation measures:

- 19 • GSS-A1 (implement recommendations in site-specific geologic/geotechnical reports).
- 20 • GSS-C1 (implement erosion and sediment control plan).
- 21 • HYD-A1 (prepare and implement final drainage plan).
- 22 • HYD-A2 (maintain and monitor drainage facilities).

23 Additionally, because site-specific geologic/geotechnical and drainage reports have not yet been
24 prepared specifically for the roundabout option, the applicant or the City of Monterey would need to
25 hire qualified civil engineers to prepare these reports, and then implement the reported
26 recommendations into project design.

27 **Hydrology and Water Quality**

28 The impacts and required mitigation measures under this alternative would be similar as those
29 identified for the proposed project. The SR 1/SR 68/17-Mile Drive intersection area is on the
30 western edge of the Carmel Bay ASBS watershed, near the upstream end of Pescadero Creek
31 tributary (Figure 3.7-1). Both Alternative 5 and the proposed project would result in Impact HYD-C1
32 (degrade surface water quality due to increased sediment and pollutant loading in stormwater
33 drainage during construction and operation). Although construction-related impacts would be
34 slightly less with Alternative 5 because there would be less grading associated with the lower and
35 shorter retaining wall, this lesser impact would be offset by the greater disturbance footprint
36 associated with the new bike lane. Operation-related impacts would be similar because the
37 impervious surfaces would be similar. Although Alternative 5 has a larger footprint (to
38 accommodate the Class 1 bicycle path), overall there appears to be less paved area with Alternative
39 5 when the Alternative 5 footprint is compared to that of the proposed project. Both Alternative 5

1 and the proposed project would require several mitigation measures to ensure the protection of
2 water quality, including the following mitigation measures:

- 3 • HYD-A1 (prepare and implement final drainage plan).
- 4 • HYD-A2 (maintain and monitor drainage facilities).
- 5 • HYD-C1 (prepare and implement stormwater pollution prevention plan during construction).
- 6 • HYD-C2 (inspect and maintain operation BMPs to ensure function of drainage facilities).
- 7 • GSS-C1 (implement erosion and sediment control plan).

8 Additionally, because a site-specific drainage report was not prepared specifically for the
9 roundabout option, the applicant or the City of Monterey will need to hire a qualified civil engineer
10 to prepare this report, and then implement the reported recommendations into the project design.

11 **Land Use and Recreation**

12 The impacts under this alternative would be the same as those identified for the proposed project.
13 Additionally, at the SR 1/SR 68/17-Mile Drive intersection area, Alternative 5 includes providing
14 three grade-separated Class I bicycle paths under SR 68 connecting the regional Coastal Recreation
15 Trail system from the east side of SR 1 to the southbound on-ramp with minimal at-grade crossings.
16 It also provides a connection for cyclists traveling eastbound and westbound on SR 68 and entering
17 and exiting the Pebble Beach Gate with minimal at-grade crossings. These impacts are considered
18 beneficial for recreation resources.

19 **Noise and Vibration**

20 The impacts under this alternative would be similar to those identified for the proposed project. In
21 the SR 1/SR 68/17-Mile Drive intersection area, sensitive receptors (e.g., residences) exist
22 approximately 200 feet away along the south side of SR 68 west of the intersection, between the
23 development site and the Community Hospital of the Monterey Peninsula. Because the construction
24 significance criteria of 85 dBA would not be exceeded at locations 125 feet or less from construction
25 activities, Impact NOI-B1 (expose outdoor activity areas of noise-sensitive land uses to construction
26 noise) would be less than significant for both Alternative 5 and the proposed project.

27 **Public Services and Utilities**

28 The impacts under this alternative would be the same as those identified for the proposed project.

29 **Transportation and Circulation**

30 The impacts under this alternative would be similar to those identified for the proposed project
31 except at the SR 1/SR 68/17-Mile Drive intersection. As mentioned above, the proposed project
32 includes several improvements and modifies the existing signal operation, while Alternative 5
33 includes several modifications and replaces the signal with two roundabouts.

34 The Alternative 5 roundabout operations were evaluated by Parsons Brinckerhoff (2011), based on
35 the conceptual layout (Figure 5-1). The two buildout scenarios evaluated were the 2015 interim
36 (Figure 5-2), which maintains two lanes on the existing SR 68 overpass, and the 2030 ultimate
37 buildout, which requires the addition of an eastbound lane to the existing overpass structure (Figure
38 5-1). The roundabout would perform at an acceptable LOS A through the 2030 forecast year. The
39 forecasted queues for the interchange approaches were also evaluated by Parsons Brinckerhoff

1 (2011) and estimated to result in a minimal average delay and short backups on the southbound
 2 approach of the SR 1/SR 68 off-ramp, indicating the queues would not likely spill onto the freeway
 3 mainline. Similarly, the queues at the eastbound approach of the 17-Mile Drive/southbound SR 1 on-
 4 ramp are not expected to back up to the Pebble Beach Gate. The roundabout alternative was also
 5 evaluated by Fehr & Peers (2011), based on the geometries shown in Figure 5-1. The report
 6 concurred that the intersection operations with the roundabout would be LOS A under 2030
 7 conditions for the AM and PM peak hours. Table 5-4 shows the comparative performance of the
 8 Roundabout Alternative and the Proposed Project in 2015 and 2030.

9 As shown in Table 5-4, the Phase 1B improvement, the Highway 68 Widening Project, and
 10 Alternative 5 (roundabout) would result in substantially improved level of service conditions in
 11 2015 when compared to the no project. For 2030, either the proposed Highway 68 Widening
 12 Project⁶ plus Mitigation (i.e., a third eastbound lane on SR 68), or the roundabout would result in
 13 acceptable level of service (LOS C or better) conditions.

14 **Table 5-4. Level of Service Comparison for the SR 68/ SB SR 1 Off-Ramp Intersection**

Scenario	Year	AM			PM		
		LOS	Delay (seconds)	v/c*	LOS	Delay (seconds)	v/c*
Phase 1B (Signal)	2015	C	34.3	0.85	D	40.2	0.90
Highway 68 Widening Project (Signal)	2015	C	26.3	0.80	A	16.4	0.54
Roundabout	2015	B	10.8	0.76	A	6.5	0.53
Highway 68 Widening Project (Signal)	2030						
Highway 68 Widening Project + Mitigation (Signal)	2030	C	20.4	0.79	B	18.3	0.75
Roundabout	2030	A	8.2	0.83	A	8.2	0.61

Sources:

Roundabout: Parsons- Brinckerhoff 2011. (Table 5. Results for Roundabout are from SIDRA analysis.)

Phase 1B/SR68 Widening Project: Fehr & Peers 2011.

Notes:

* v/c = volume/capacity; LOS = level of service

15

16 Fehr & Peers (2011) completed micro-simulation analyses of the Phase 1B improvement, the
 17 Highway 68 Widening Project, and the Highway 68 Widening Project plus Mitigation (i.e., a third
 18 eastbound lane on SR 68) under different development scenarios to illustrate the vehicle queue
 19 differences between the signalized alternative and Alternative 5. Table 5-5 shows the queue results.
 20 The queue results for the signalized alternative were derived using SimTraffic and micro-simulation,
 21 which gives a more accurate account of the expected traffic queues than the SIDRA analysis results

⁶ The SR 1/SR 68/17-Mile Drive Intersection Reconfiguration (an element of the proposed project) is a subset of the Highway 68 Widening Project, part of the Transportation Agency for Monterey County's Regional Transportation Plan (RTP) for Monterey County. The Highway 68 Widening Project widens SR 68 from one to two lanes in each direction from the Community Hospital intersection to the ramp terminal intersection with SR 1; signalizes the Carmel Hill Professional Center driveway; widens the SR 1 southbound off-ramp to provide a left-turn lane; reconfigures the SR 1 southbound on-ramp to separate Pebble Beach-related and highway-related traffic; replaces the Scenic Drive and Highway 68 overcrossings to accommodate four lanes on Highway 68; and would provide non-motorized connections to the planned Coastal Trail on the east side of SR 1.

1 shown in Table 5-5; a direct comparison between the queue results would require micro-simulation
 2 of Alternative 5. However, Table 5-5 does show substantially less vehicle queues with the
 3 roundabout under all comparisons, which is a strong indication that the roundabout would operate
 4 more efficiently with less vehicle congestion than the RTP Highway 68 Widening Project plus
 5 Mitigation.

6 **Table 5-5. Comparative 95th Percentile Queue Distances for the SR 68/ SB SR 1 Off-Ramp Intersection**
 7 **(feet)**

Scenario	Year	AM				PM			
		EB	WB	NB	SB	EB	WB	NB	SB
Phase 1B (Signal)	2015	2,160 ¹	155	158	441	2,040 ^a	438	237	681
Highway 68 Widening Project (Signal)	2015	895	173	153	440	293	129	236	175
Roundabout	2015	300	52	41	190	107	47	74	51
Highway 68 Widening Project (Signal)	2030	1,903 ¹	288	187	904	2,217 ¹	201	218	369
Highway 68 Widening Project + Mitigation (Signal)	2030	331	270	133	664	285	157	225	251
Roundabout	2030	94	77	15	60	95	60	35	26

Sources:

Roundabout: Parsons Brinckerhoff 2011. (Table 7. Results for Roundabout are from SIDRA analysis.)

Phase 1B/SR68 Widening Project: Fehr & Peers 2011. (Results from SimTraffic software and micro-simulation using 10 random seed runs out of 20 total runs.)

Notes:

^a Queue extends beyond Community Hospital intersection. While queues are extensive, the improvement increases the green time allocated to eastbound SR 68 from 29% to 39% of total green time, which reduces queues over the no project condition.

8

9 The Highway 68 Widening Project is included in the TAMC Regional Impact Fee Program. As
 10 explained in Section 3.12, Transportation and Circulation, the Applicant would be required under
 11 Mitigation Measure TRA-C8(C) to make a fair-share contribution for the construction of the Highway
 12 68 Widening Project taking into account any offset of costs provided by the Applicant for the Phase
 13 1B Improvement. Thus, the roundabout could be an alternative to the portion of Highway 68
 14 Widening Project at the SR 1/SR 68/17-Mile Drive interchange. Parts of the Highway 68 Widening
 15 Project outside of the roundabout would still be required to address other traffic issues. The other
 16 elements still required as part of a roundabout design would include:

- 17 ● Widen SR 68 from a two-lane to four-lane cross-section from the ramp terminal intersection
 18 with SR 1 through the Community Hospital intersection. These additional lanes on SR 68 are
 19 needed to handle the cumulative traffic demands transitioning between SR 68 and SR 1.
- 20 ● Replace the Scenic Drive overcrossing and the SR 68 overcrossing to accommodate the four
 21 lanes on SR 68. The SR 68 overcrossing could be designed as a 3-lane bridge with the
 22 roundabout rather than a 4-lane bridge as included in the Highway 68 Widening Project. Either
 23 SR 68 overcrossing option would require facilities to connect to the Coastal Trail.
- 24 ● Alternative 5 would prohibit left turning traffic out of the Carmel Hill Professional Center
 25 driveway. This intersection would be signalized with the Highway 68 Widening Project. With the
 26 roundabout the left turning traffic would need to turn right and use the Community Hospital
 27 intersection to turn around either by making a u-turn or turning onto the Community Hospital

1 campus to turn around. The City of Monterey has also indicated that they are considering a
2 roundabout at the hospital intersection to facilitate the u-turn movement.

3 Compared to the proposed project, Alternative 5 would include the following design elements that
4 would result in less construction but would also require a Caltrans design exception (Fehr & Peers
5 2011):

- 6 • Less widening and thus less retaining wall needed along the SR 1 southbound on-ramp because
7 its traffic is combined with Del Monte Forest traffic via the smaller single lane roundabout. The
8 proposed project would separate these two movements and extend the merge distance a couple
9 hundred feet to meet Caltrans' freeway standard requirements. The roundabout design
10 maintains the existing condition. Maintaining the existing deficient condition (combining the
11 movements) would require a mandatory design exception from Caltrans.
- 12 • Less widening (3 lanes instead of 4 lanes) for the SR 68 overcrossing at SR 1. However, either
13 bridge widening would require facilities to accommodate the Coastal Trail access.

14 Additionally, the Fehr & Peers assessment identified one operational issue for the Alternative 5
15 roundabout (see Figure 5-2) that requires further study if the roundabout is constructed in phases.
16 The eastbound SR 68 traffic would need to transition from two- to one-lane between the roundabout
17 and the existing SR 68 overcrossing. Del Monte Forest traffic also merges at this location. The
18 preliminary SIDRA analysis supports the transition to one lane through about 2030 (without
19 Presidio of Monterey traffic). However, further sensitivity testing and micro-simulation analyses are
20 needed to more fully understand the merging characteristics and operations of the interim
21 roundabout design.

22 In summary, the Alternative 5 roundabout would result in similar overall traffic conditions, although
23 some traffic conditions such as vehicle queues at the SR1/SR68/17-Mile Drive Interchange would be
24 better than the proposed project. The lead agency for the roundabout (presumed to be the City of
25 Monterey) would be required to coordinate with Caltrans, TAMC, and the other stakeholders to
26 obtain the necessary design exceptions (including design exception fact sheets and a roundabout
27 report of conceptual approval), determine additional improvements required, and conduct
28 additional studies for the additional improvements to be approved by Caltrans District 5 and
29 Caltrans Headquarters.

30 Separate from the SR 1/SR 68/17-Mile Drive interchange, this alternative would have the same
31 traffic impacts as the proposed project due to project-related increases in traffic that cannot be
32 mitigated until construction of the full widening project, including the following significant and
33 unavoidable impacts.

- 34 • TRA-A1: Construction traffic would result in short-term increases in traffic volumes that would
35 affect level of service and intersection operations.
- 36 • TRA-C1: The proposed project would add substantial traffic to certain intersections along SR 68
37 or SR 1 to decrease from acceptable levels of service to unacceptable levels or to worsen existing
38 unacceptable levels of service.
- 39 • TRA-C2: The proposed project would add traffic to regional highway sections that are projected
40 to operate at unacceptable levels of service.
- 41 • TRA-C3: The proposed project would add traffic to an SR 68 highway ramp projected to operate
42 at an unacceptable level of service.

1 This alternative would require all of the same mitigation measures for impacts not related to the SR
2 1/SR 68/17-Mile Drive interchange that are described in Section 3.12, Transportation and
3 Circulation.

4 **Water Supply and Demand**

5 The Alternative 5 roundabout would require slightly more landscaping than the Phase 1B
6 Improvements which would result in a little more water use than the proposed project. The
7 difference in water use is expected to be minimal. The overall impact of this alternative would be the
8 same as the proposed project including the significant unavoidable impacts related to project water
9 demand in the event of no new regional water supply and related to indirect impacts associated
10 with new regional water supply development.

11 **Environmentally Superior Alternative**

12 Based on the assessment of environmental impacts for the feasible alternatives described above, the
13 environmentally superior alternative is the No Project Alternative, which would have lesser
14 significant adverse impacts of the proposed project, particularly as it relates to biological resources,
15 and would reduce, but not completely avoid the unavoidable impacts associated with air quality,
16 traffic, and water supply. It should be noted that the No Project Alternative would also not result in
17 the dedication of the proposed preservation areas. As noted above, the environmental impact of one
18 single-family dwelling unit per existing lot of record (perhaps as many as 41 units overall, of which
19 only 20 would be in areas considered ESHA with perhaps 8 acres of disturbance in ESHA) with
20 implementation of conditions through the permit review process, is expected to be less than the 90
21 to 100 units included in the proposed project including 76 units in areas considered to be mostly or
22 entirely ESHA (Areas F-1, I-2, J, K, L, U, and V) with associated disturbance of sensitive habitat over
23 40 acres. The No Project Alternative would result in fewer units than any action alternative (77 to
24 108 units within Del Monte Forest, depending on alternative) reducing traffic and water supply
25 impacts). While it is possible that foregoing formal dedication of conservation easements for
26 substantial areas within Del Monte Forest could leave the window open for more extensive
27 subsequent future development of these areas, such potential is not considered in this
28 determination.

29 If the No Project Alternative is selected as the environmentally superior alternative, the State CEQA
30 Guidelines require that an environmentally superior alternative among the other analyzed
31 alternatives be identified. Based on the assessment of environmental impacts above and
32 summarized in Table 5-2, the environmentally superior “action” alternative is Alternative 2C
33 (Clustered Development Alternative C) because it reduces the impacts on biological resources
34 (Monterey pine forest and Yadon’s piperia, in particular, see comparison in Table 5-6 below), has
35 lower air quality impacts (due to less construction), less traffic and a lower water demand compared
36 to the other action alternatives (as well as the proposed project). This alternative would also reduce
37 the levels of impact related noise and water quality. This alternative would reduce but not eliminate
38 any of the significant unavoidable impacts of the proposed project.

1 **Table 5-6. Comparison of Biological Resources Impacts of Project Alternatives Analyzed in Draft EIR**

Proposed Project and Project Alternatives	Biological Resource Impacts					
	MPF ^a Direct Impact (acres)	MPF Indirect Impact (acres)	MPF Total Impact (acres)	YP ^b Direct Impact (acres)	YP Indirect Impact (acres)	YP Total Impact (acres)
Proposed Project	41.49	44.49	85.98	6.15	2.55	8.70
Alternative 1: Clustered Development						
1A: Option A (fewer acres than proposed project)	40.98 (-0.51)	36.47 (-8.02)	77.45 (-8.53)	3.42 (-2.73)	2.55 (0)	5.97 (-2.73)
1B: Option B (fewer acres than proposed project)	40.03 (-1.46)	32.31 (-12.18)	72.34 (-13.64)	3.70 (-2.45)	2.55 (0)	6.25 (-2.45)
1C: Option C (fewer acres than proposed project)	41.35 (-0.14)	41.14 (-3.35)	82.49 (-3.49)	0.00 (-6.15)	5.40 (-2.85)	5.40 (-3.30)
Alternative 2: Reduced Development						
2A: Option A (fewer acres than proposed project)	36.50 (-4.99)	40.95 (-3.54)	77.45 (-8.53)	3.42 (-2.73)	0.91 (-1.64)	4.33 (-4.37)
2B: Option B (fewer acres than proposed project)	33.83 (-7.66)	38.51 (-5.98)	72.34 (-13.64)	3.70 (-2.45)	1.44 (-1.11)	5.14 (-3.56)
2C: Option C (fewer acres than proposed project)	32.11 (-9.38)	30.41 (-14.08)	62.52^c (-23.46)	0.00 (-6.15)	1.34 (-1.21)	1.34^c (-7.36)
Alternative 3: Driving Range Redesign (fewer acres than proposed project)	41.49 (0)	44.49 (0)	85.98 (0)	6.15 (0)	2.55 (0)	8.70 (0)
Alternative 4: Spanish Bay Underground Employee Parking (fewer acres than proposed project)	38.68 (-2.81)	44.49 (0)	83.17 (-2.81)	6.15 (0)	2.55 (0)	8.70 (0)
5. Roundabout at the SR 68/SR 1 intersection off-ramp (~similar to the proposed project; possible slight differences only)	41.49 (0)	44.49 (0)	85.98 (0)	6.15 (0)	2.55 (0)	8.70 (0)
Notes:						
^a MPF = Monterey pine forest						
^b YP = Yadon's piperia.						
^c Alternative 2C would have the least impact on Monterey pine forest habitat and Yadon's piperia compared to the proposed project and other alternatives.						

1 **Alternatives Considered but Dismissed from Further Analysis in** 2 **this Draft Environmental Impact Report**

3 All of the following alternatives were dismissed from more detailed impact analysis because they
4 are considered infeasible, would not meet at least some of the project objectives, or would not avoid
5 or substantially lower one or more significant impacts identified for the proposed project. Each
6 dismissed alternative is briefly described below along with the reason for dismissing it from further
7 analysis.

8 **Alternative A—New Access Road near SR 1 Gate**

9 Under this alternative, there would be a new road from the SR 1 Gate to the lower Sunridge Road
10 and Lopez Road area in central Pebble Beach to alleviate traffic on upper Sunridge Road near the SR
11 1 gate. This alternative was suggested in scoping.

12 This alternative would not serve as an alternative to any element of the project. It would not serve
13 as an alternative to the proposed SR1/SR68/17-Mile Drive interchange. Project significant traffic
14 impacts were not identified for upper Sunridge Road.

15 This alternative was not considered further because it would create substantially more impacts in
16 all issue areas than the proposed project would create and does not meet the project objectives.
17 Further, there is no feasible alignment given the existing land uses and topography.

18 **Alternative B—Residential Development at Sawmill Gulch**

19 This alternative would eliminate development in Area K (8 lots) and Area L (10 lots) and locate the
20 18 residential units instead to Sawmill Gulch. Sawmill Gulch is the only other undeveloped area
21 within Del Monte Forest owned by the applicant that is somewhat disturbed other than the
22 Corporation Yard. The forest at the site is in a slow state of recovery due to restoration following
23 sand quarry mining and is not as intact as other areas, and there is no Yadon's piperia within the
24 areas that could be used for residential development. However, this alternative is considered
25 infeasible because the site is under scenic and conservation easements and because the Coastal
26 Commission has previously determined that the only compliant use of the site is for ecological
27 restoration (the existing easements were conditions of The Inn at Spanish Bay permits and the
28 Coastal Commission retains permit authority in this regard).

29 **Alternative C—No Residential Development**

30 Under this alternative, there would be no new residential development in Del Monte Forest as part
31 of the project. This alternative was eliminated from further consideration because it does not meet a
32 primary objective of the project to increase the number of residential lots.

33 **Alternative D—No Visitor-Serving Development**

34 Under this alternative, there would be no new visitor-serving development in Del Monte Forest as
35 part of the project. This alternative was eliminated from further consideration because it does not
36 meet a primary objective of the project to increase visitor-serving facilities.

1 **Alternative E—Reduced Visitor-Serving Development**

2 Under this alternative, visitor-serving development would be reduced to reduce potential significant
3 impacts of the proposed project related to proposed visitor-serving facilities.

4 This alternative would include the following changes to the proposed project:

- 5 • **Reduction in the number of units at the Fairway One Reconstruction locations.** This
6 alternative would reduce the number of allowable units at the Fairway One Reconstruction
7 locations to 20 units. The purpose of this reduction would be to reduce the level of operational
8 traffic and water demand of the project overall.
- 9 • **Elimination of the Area M Spyglass Hill new Resort Hotel or Reduction in Size.** This
10 alternative would either eliminate the Spyglass Hotel entirely or reduce the allowable footprint
11 to avoid Monterey pine forest removal and/or to allow a larger buffer area between the hotel
12 and the Signal Hill remnant dunes.
- 13 • **Reduction in the number of units at The Inn at Spanish Bay.** This alternative would reduce
14 the number of allowable units to 20 units. The purpose of this reduction would be to reduce the
15 level of operational traffic and water demand of the project overall.
- 16 • **Reduction of Special Events Area Expansion.** This alternative would reduce the area of the
17 special events area expansion to avoid all removal of Monterey pine forest and Yadon's piperia.

18 This alternative would not include any changes related to the Equestrian Center; the Equestrian
19 Center is proposed to be rebuilt in its current location, and doing so avoids the impacts resulting
20 from moving the center.

21 This alternative would nominally meet the project objectives, though not nearly as well as the
22 proposed project, and is technically feasible. However, this alternative was dismissed from further
23 consideration because while it would lower certain impacts relative to construction traffic, air
24 quality, operational traffic levels, biological resources and water supply, the lowering of impacts
25 would be marginal and would not reduce the significant unavoidable impacts of the project to a less
26 than significant level. Additionally, the other alternatives carried forward for more analysis were
27 considered a reasonable range of alternatives to the project.

28 **Previously Proposed Projects**

29 As described under Background in Chapter 1, Introduction, PBC has submitted previous applications
30 for development and preservation of its remaining undeveloped land within Del Monte Forest,
31 including the Pebble Beach Lot Program in 1992, Refined Alternative 2 in 1994, and the DMF PDP in
32 2002. Compared to these three projects, the proposed project includes less area for new
33 development and more area for preservation.

34 Compared to the DMF PDP, the current proposed project would eliminate three major prior
35 development proposals (new golf course, relocation of the Equestrian Center to the Sawmill Gulch
36 site, and new driving range at The Inn at Spanish Bay), increase the number of market-rate
37 residential lots from 33 to 90 (or 100 with Area M Option 2), decrease employee housing by 60
38 units, increase or decrease the number of visitor-serving units (depending on Area M Spyglass Hill
39 Option 1 or 2); and dedicate larger areas for preservation. A comparison of the proposed project

1 with previously proposed projects is provided in Table 5-7. Additional information on the
2 previously proposed projects is provided below.

3 **Pebble Beach Lot Program**

4 In 1992, PBC submitted applications, including LUP amendments and zoning changes, to build out
5 the remaining vacant land in the Pebble Beach area of Del Monte Forest (Pebble Beach Lot
6 Program). The Pebble Beach Lot Program proposed 403 residential units on 685 acres, including a
7 34-unit PUD; 53 low-cost housing units; an 18-hole golf course, clubhouse and related facilities; and
8 expansion of an existing driving range.

9 **Refined Alternative 2**

10 In response to public/agency input and concern regarding the intensity of the proposed
11 development and the effect on the Monterey pine forest and other resources, PBC submitted three
12 additional applications with design changes to the original project proposal. These changes reduced
13 the total number of proposed housing units to 364, relocated some housing units to different areas,
14 and moved the golf course location from Area PQR to Area MNOUV/Equestrian Center. The new
15 location of the golf course required relocating the existing Equestrian Center to the Sawmill Gulch
16 site near the city of Pacific Grove. This revised proposal became known as Refined Alternative 2.

17 Both the Pebble Beach Lot program and Refined Alternative 2 were analyzed in a Final EIR in 1997.
18 The project permits and Final EIR were brought before the Monterey County Standard Subdivision
19 Committee in spring of 1999. A staff recommendation of certification of the Final EIR and “approval”
20 of Refined Alternative 2 was made to the Monterey County Planning Commission in June 1999.
21 However, by August 1999, PBC was under new ownership, the project application was withdrawn,
22 and the Final EIR was never certified.

23 **Del Monte Forest Preservation and Development Plan**

24 The DMF PDP was a subsequent project that was presented on county-wide ballot in November
25 2000 as “Measure A” (The Del Monte Forest Plan: Forest Preservation and Development
26 Limitations), which was supported by 63.5% of Monterey County voters.

27 The DMF PDP included new development at several locations in Del Monte Forest:

- 28 • Construction of a new 18-hole golf course with clubhouse and 24 visitor-serving units on the
29 existing Equestrian Center site and adjacent undeveloped lands (in Area MNOUV).
- 30 • Relocation of the existing Equestrian Center to the Sawmill Gulch borrow site with construction
31 of clubhouse, dormitory building, arena, barns, and replacement employee housing.
- 32 • Construction of 91 visitor-serving units, additional meeting space, a new underground parking
33 lot and reconfigured surface parking lot, and a new driving range/golf instruction facility for The
34 Inn at Spanish Bay.
- 35 • Construction of 63 visitor-serving units, additional meeting and hospitality space, and new
36 underground parking structure at The Lodge at Pebble Beach.
- 37 • Creation of 33 residential lots in various locations.

- 1 • Construction of 12 employee-housing units near Spanish Bay and 48 employee-housing units at
2 the PBC Corporation Yard.
- 3 • Roadway improvements (SR 1/SR 68/17-Mile Drive interchange and internal roadways within
4 Del Monte Forest).
- 5 • Relocation of existing hiking/equestrian trail segments and construction of new trail segments,
6 for a net increase of 3.6 miles of new trails.
- 7 Additionally, the DMF PDP included dedication of conservation easements for the preservation of
8 approximately 436 acres and conservation of 56 acres within Del Monte Forest.
- 9 The DMF PDP was analyzed in a Final EIR that was certified by the County of Monterey Board of
10 Supervisors and approved by Monterey County in March 2005. However, the CCC denied the
11 corresponding Measure A in 2007, which would have amended the County's LCP to facilitate
12 development of the DMF PDF.
- 13 Subsequently, the applicant and CCC staff worked on a compromise project, which is represented by
14 the current proposed project.

1 **Table 5-7. Comparison of Proposed Project with Previously Proposed Projects**

Land Use	1992 Pebble Beach Lot Program	1994 Refined Alternative 2	2000 Del Monte Forest Preservation and Development Plan	2010 Proposed Project (Pebble Beach Company Project)
Golf Course/Driving Range	New golf course and driving range in Area PQR	New golf course in Area MNOUV	New golf course in Area MNOUV New driving range at Spanish Bay	No new golf course No new driving range at Spanish Bay Relocation of Pebble Beach driving range from Area V to Collins Field
Equestrian Center	In existing location	Relocated to Sawmill Site	Relocated to Sawmill Site	In existing location
Visitor-Serving Guest Units	0	0	160 new units	95 new units ^a
Visitor-Serving Meeting Space	0	0	~17,790 sf	~ 13,815 sf ^b
Residential Units/Lots	403 new units	364 new units	33 new lots	90 new lots
Area M Spyglass Hill				
Option 1, New Resort Hotel				100 new units 28,797 sf ^c
Option 2, New Residential Lots				10 new lots
Employee Housing Units	0	0	60 units	0
Inclusionary Housing Units ^d	53 (included in 403 total above)	48 (included in 364 total above)	14 (included in employee housing total)	Applicant pay in-lieu fee
Preservation ^e	25 acres ^h	254 acres ⁱ	436 acres	627 acres
Conservation ^f	52 acres ^h	31 acres ⁱ	56 acres	8
Resource Management Areas ^g	204 acres ^h	114 acres ⁱ	32 acres	0
All habitat areas	281 acres	399 acres	524 acres	635

Sources:

Monterey County 2005, Pebble Beach Company 2011.

Notes:

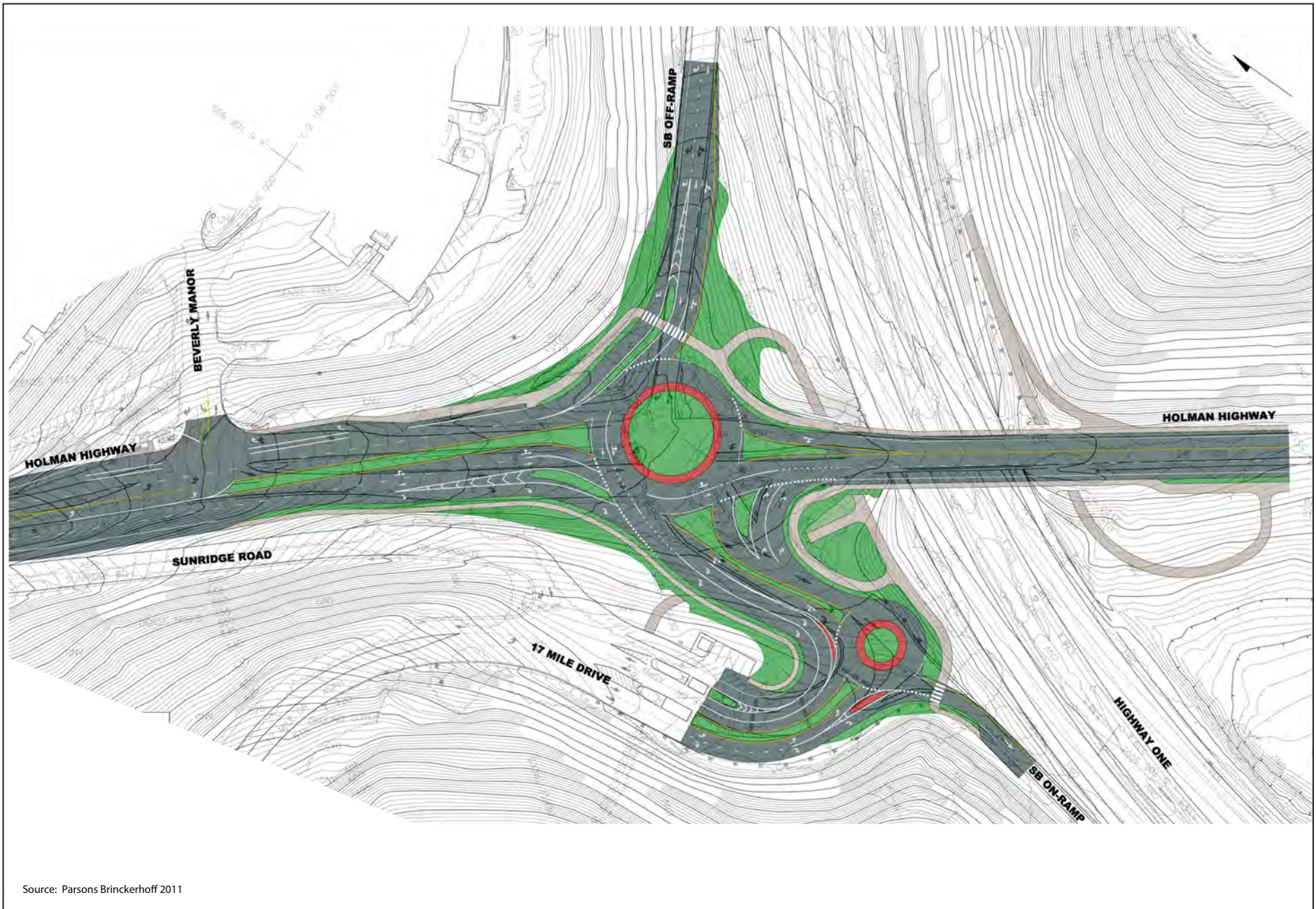
^a Includes an additional 40 units at The Inn at Spanish Bay and 55 units at The Lodge at Pebble Beach (20 units Colton Building, 35 Fairway One). There are already 5 units at Fairway One. Additional guest units would be located in Area M Spyglass Hill under Option 1 (see separate row).

^b Includes an additional 5,000 sf at The Lodge at Pebble Beach (2,100 sf meeting and 2,900 sf support/circulation) and 8,815 sf at The Inn at Spanish Bay (4,660 sf meeting and 4,155 sf support/circulation).

^c Includes a 6,677 sf restaurant/lounge, 5,120 sf meeting space, and 17,000 sf spa/fitness center.

^d The amount of inclusionary housing required depends on the amount of market-rate housing being developed (Monterey County Inclusionary Housing Ordinance requires 20%). The proposed project includes 90 market-rate units under Option 1 (requiring 18 inclusionary units) and 100 market-rate units under Option 2

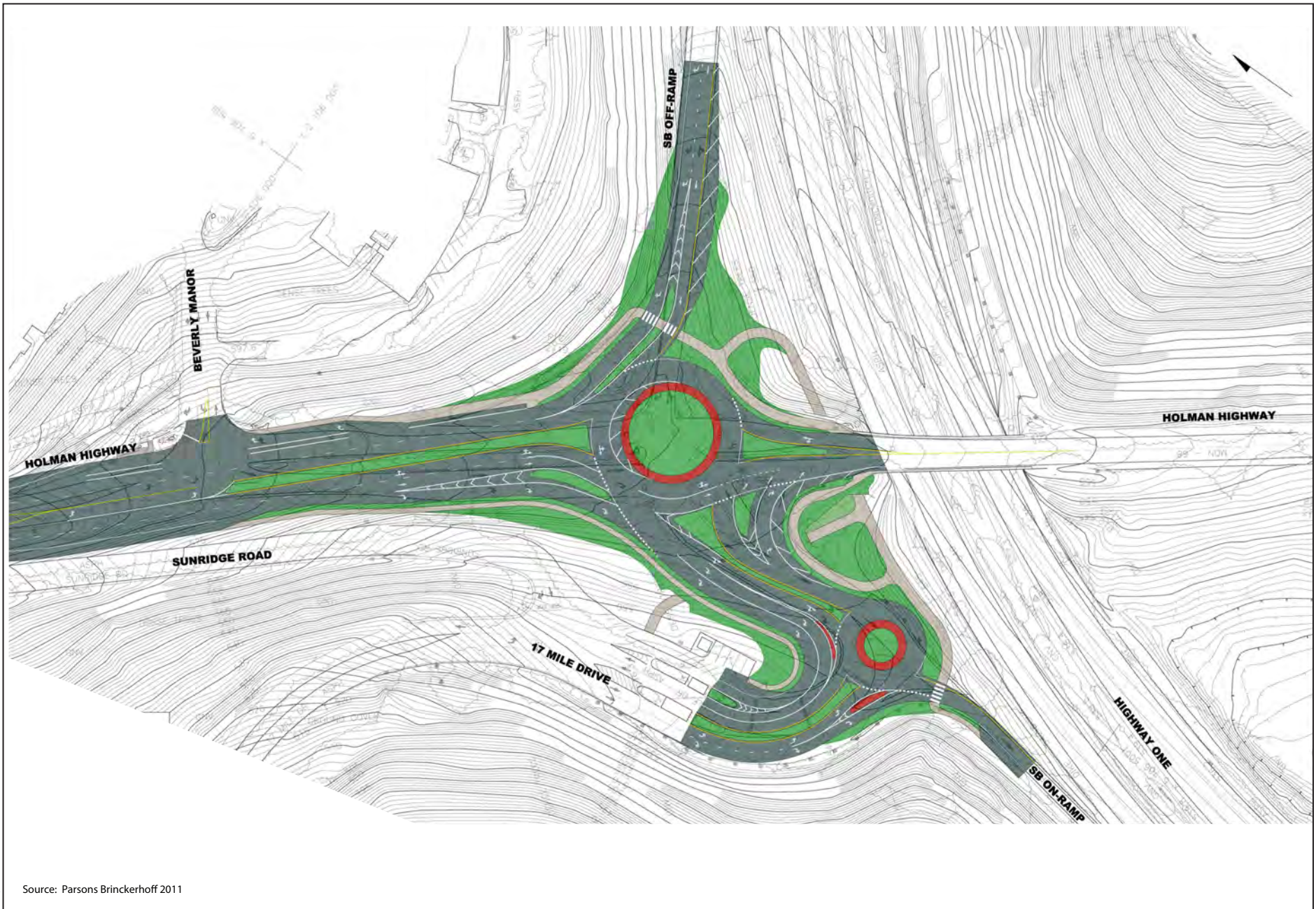
Land Use	1992 Pebble Beach Lot Program	1994 Refined Alternative 2	2000 Del Monte Forest Preservation and Development Plan	2010 Proposed Project (Pebble Beach Company Project)
(requiring 20 inclusionary units); however, the applicant instead proposes to pay an in-lieu fee.				
e <i>Preservation</i> is defined as areas not within development site boundaries to be managed for the sole purpose of preservation of natural resources. Project totals do not include the HHNHA, which was previously dedicated by the applicant in relation to implementation of the DMF LUP and permit conditions for the original Spanish Bay resort project.				
f <i>Conservation</i> is defined as areas within development site boundaries that are separable from development and can be managed for natural resources.				
g <i>Resource management areas</i> are defined as areas within development site boundaries that are not separable from development, but that would be managed for natural resources and for adjacent land use purposes.				
h The prior EIR did not use same categorization as this document. Preservation areas are in Area B and part of Area J. Total includes all areas identified in prior EIR as “open space forest” areas. Other areas for 1995 Lot Program are interspersed within proposed residential or golf course development and would thus meet this document’s definition of conservation or resource management areas. Categorization by Jones & Stokes based on prior development layout.				
i The prior EIR did not use same categorization as this document. Preservation areas are in Area B, part of Area J, and PQR. Total includes all areas identified in prior EIR as “open space forest” areas. Other areas for Refined Alternative 2 are interspersed within proposed residential or golf course development and would thus meet this document’s definition of conservation or resource management areas. Categorization by Jones & Stokes based on prior development layout.				



Graphics...00106.11 (10-11)

Source: Parsons Brinckerhoff 2011

Figure 5-1
Conceptual Roundabout Layout



Graphics... 00106.11 (11-11)

Source: Parsons Brinckerhoff 2011

Figure 5-2
Interim Roundabout

Chapter 6
Report Preparation

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Chapter 6
Report Preparation

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Chapter 7
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