

DRAFT
ENVIRONMENTAL IMPACT REPORT

CORRAL DE TIERRA NEIGHBORHOOD RETAIL VILLAGE
COUNTY OF MONTEREY, CALIFORNIA



May 2010

LSA

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CORRAL DE TIERRA NEIGHBORHOOD RETAIL VILLAGE PROJECT
COUNTY OF MONTEREY, CALIFORNIA

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May 2010

TABLE OF CONTENTS

1.0. EXECUTIVE SUMMARY 1

 1.1. SUMMARY OF PROJECT DESCRIPTION AND LOCATION 1

 1.2. ALTERNATIVES TO THE PROPOSED PROJECT 1

 1.3. AREAS OF CONTROVERSY 2

 1.4. SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS 2

 1.5. SUMMARY OF IMPACTS AND MITIGATION MEASURES 4

2.0 INTRODUCTION 29

 2.1 PURPOSE AND TYPE OF EIR/INTENDED USES OF THE EIR 29

 2.2 PUBLIC REVIEW PROCESS 30

 2.3 SCOPE OF THIS EIR 31

 2.4 FORMAT OF THIS EIR 31

 2.5 AGENCY USE OF THE DOCUMENT 33

 2.6 COUNTY CONTACT AND PROJECT SPONSORS 33

3.0 PROJECT DESCRIPTION 35

 3.1 PROJECT SITE LOCATION AND SETTING 35

 3.2 PROJECT OBJECTIVES 41

 3.3 PROJECT CHARACTERISTICS 41

 3.4 DISCRETIONARY ACTIONS 67

4.0 EXISTING ENVIRONMENTAL SETTING, ENVIRONMENTAL ANALYSIS,
IMPACTS, AND MITIGATION MEASURES 73

 4.1 AESTHETIC RESOURCES 77

 4.2 AIR QUALITY 115

 4.3 BIOLOGICAL RESOURCES 131

 4.4 CULTURAL RESOURCES 167

 4.5 GEOLOGY AND SOILS 177

 4.6 HAZARDS AND HAZARDOUS MATERIALS 189

 4.7 HYDROLOGY AND WATER QUALITY 203

 4.8 LAND USE AND PLANNING 267

 4.9 NOISE 327

 4.10 POPULATION, EMPLOYMENT, AND HOUSING 345

 4.11 PUBLIC SERVICES 353

 4.12 TRAFFIC AND TRANSPORTATION 367

 4.13 UTILITIES 393

 4.14 GLOBAL CLIMATE CHANGE 427

 4.15 ENVIRONMENTAL ISSUE AREAS DETERMINED TO BE LESS THAN
SIGNIFICANT 447

5.0 OTHER CEQA CONSIDERATIONS 449

 5.1. SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE
 AVOIDED 449

 5.2. SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES 449

 5.3. GROWTH INDUCING IMPACTS 450

6.0 ALTERNATIVES TO THE PROJECT 453

 6.1 INTRODUCTION 453

 6.2 ALTERNATIVES TO THE PROJECT 454

 6.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE 484

7.0	MITIGATION MONITORING AND REPORTING PLAN	487
8.0.	ORGANIZATIONS AND PERSONS CONTACTED	509
9.0	REFERENCES	511
10.0	LIST OF PREPARERS	521

FIGURES AND TABLES

FIGURES

Figure 3.1: Toro Area Boundary.....	37
Figure 3.2: Regional and Project Location Map.....	39
Figure 3.3: Vesting Tentative Map.....	43
Figure 3.4: Conceptual Site Plan.....	45
Figure 3.5a: Floor Plans and Elevations.....	49
Figure 3.5b: Floor Plans and Elevations.....	51
Figure 3.5c: Floor Plans and Elevations.....	53
Figure 3.6a: Rendering 1.....	55
Figure 3.6b: Rendering 2.....	57
Figure 3.6c: Rendering 3.....	59
Figure 3.6d: Rendering 4.....	61
Figure 3.6e: Rendering 5.....	63
Figure 3.7: Conceptual Landscaping Plan.....	65
Figure 3.8: Storm water Retention/Detention System.....	69
Figure 3.9: Conceptual Lighting Plan.....	71
Figure 4.1: Cumulative Projects.....	75
Figure 4.1.1: Regional Visual Setting.....	79
Figure 4.1.2: Local Visual Setting.....	81
Figure 4.1.3: Visual Sensitivity and Scenic Highways (Figure 9 –Toro Area Plan).....	85
Figure 4.1.4: Critical Viewshed and Area of Visual Sensitivity on the Subject Property.....	91
Figure 4.1.5: Landscape Unit.....	93
Figure 4.1.6: Viewshed Location Map.....	95
Figure 4.1.7: View Simulation No. 1.....	101
Figure 4.1.8: View Simulation No. 2.....	103
Figure 4.1.9: View Simulation No. 3.....	105
Figure 4.3.1: Soils of the Site.....	133
Figure 4.3.2: Biotic Habitats of the Site.....	137
Figure 4.3.3: Special Status Species within a 3-Mile Radius of the Site.....	141
Figure 4.7.1: Toro Planning Area Study Location.....	205
Figure 4.7.2: Drainage Basins.....	207
Figure 4.7.3: Floodplain Map.....	209
Figure 4.7.4: Geologic Cross Section D-D.....	213
Figure 4.7.5: Geologic Cross Section A-A.....	215
Figure 4.7.6: Water Budget Components.....	217
Figure 4.7.7: Aquifer Thickness.....	221
Figure 4.7.8: Ground Water Level Elevations.....	223
Figure 4.7.9: Calculated Drop in Water Level with Time for a Range of Overdraft Scenarios.....	227
Figure 4.7.10: Toro & Ambler Pumping Trends.....	229
Figure 4.7.11: B-8 Zoning.....	233
Figure 4.7.12: Arsenic Data for Ambler Park Wells.....	237
Figure 4.7.13 Stormwater Retention/Detention System.....	253
Figure 4.8.1: Regional Setting.....	269
Figure 4.8.2: Land Uses in the Project Vicinity.....	271

Figure 4.8.3: Project Vicinity Zoning 275
 Figure 4.11.1: Line 21 Transit Schedule 357
 Figure 4.11.2: Line 53 Transit Schedule 359
 Figure 4.12.1: Transportation Study Area..... 369
 Figure 4.13.1 Ambler Park Well Locations and Screened Intervals 395
 Figure 4.13.2 Geologic Cross Section D-D..... 397
 Figure 4.13.3 Geologic Cross Section A-A..... 399
 Figure 4.13.4 Toro and Ambler Pumping Trends 401
 Figure 4.13.5 B-8 Zoning Overlay Areas..... 405
 Figure 4.13.6 Water Treatment Plant Locations 407
 Figure 6.2: Reduced Density/Redesigned Project Alternative Site Plan..... 469
 Figure 6.3 Reduced Density/Redesigned Project Alternative Site Design Modifications Along
 SR-68 471
 Figure 6.4: Reduced Density/Redesigned Project Alternative Site Design Modifications Along
 Corral de Tierra Road..... 473

TABLES

Table 1.A: Summary Comparison of Alternatives 3
 Table 1.B: Summary of Mitigation Measures 5
 Table 3.A: Existing and Proposed Lots and Uses 42
 Table 3.B: Proposed Building Uses, Square Footage, and Heights 42
 Table 4.A: Cumulative Projects List 74
 Table 4.2.A: State and Federal Ambient Air Quality Standards (AAQS)..... 117
 Table 4.2.B: Health Effects of Air Pollutants 118
 Table 4.2.C: Attainment Status of the North Central Cost Air Basin, January 2009 121
 Table 4.2.D: Ambient Air Quality at the 867 E Laurel Drive, Salinas Monitoring Station..... 122
 Table 4.2.E: Monterey Bay Unified Air Pollution Control District Thresholds of Significance 124
 Table 4.2.F: Operational Emissions (Pounds Per Day)..... 126
 Table 4.2.G: CO Intersection Concentrations (Parts Per Million) 126
 Table 4.3.A: Soils of the Site 132
 Table 4.3.B: Trees Located on the Site 135
 Table 4.3.C: Trees Proposed to be Removed From the Site 159
 Table 4.5.A: Faults Considered Significant by State of California Geological Survey 179
 Table 4.7.A: Existing and Future Estimated Demand and Groundwater Recharge at Site 256
 Table 4.7.B: Corral de Tierra Neighborhood Retail Village Project – Proposed Water Balance
 Analysis 256
 Table 4.8.A Development Standards Required by the “B” District 305
 Table 4.8.B: Policy Consistency Analysis Summary 306
 Table 4.8.A Development Standards Required by the “B” District 320
 Table 4.9.A: Definitions of Acoustical Terms 329
 Table 4.9.B: Typical A-Weighted Sound Levels 330
 Table 4.9.C: Existing Traffic Noise Levels..... 331
 Table 4.9.D: Summary of EPA Noise Levels..... 332
 Table 4.9.E: Summary of Human Effects in Areas Exposed to 55 dBA L_{dn}..... 333
 Table 4.9.F: County Land Use Compatibility Standards for Community Noise Environments 334
 Table 4.9.G: Typical Construction Equipment Maximum Noise Levels, L_{max} 336

Table 4.9.H: Background Plus Project Traffic Noise Levels.....	338
Table 4.9.I: Cumulative (2034) Plus Project Traffic Noise Levels	341
Table 4.12.A: Existing Level of Service at Study Intersections	372
Table 4.12.B Intersection Level of Service for Existing Conditions (Harper Canyon).....	373
Table 4.12.C: Background Level of Service at Study Intersections	374
Table 4.12.D Intersection Level of Service for Background Conditions (Harper Canyon)	375
Table 4.12.E: Project Trip Generation.....	377
Table 4.12.F: Background Plus Project Level of Service at Study Intersections	379
Table 4.12.G: Existing Plus Project Level of Service at Study Intersections With SR-68 Improvements.....	381
Table 4.12.H: Cumulative Plus Project Level of Service at Study Intersections.....	388
Table 4.13.A: California Utilities Service Estimated Wastewater Flow	422
Table 4.14.A: Global Warming Potential of Greenhouse Gases	428
Table 4.14.B: County of Monterey 2006 GHG Emissions	433
Table 4.14.C: Corral de Tierra Project-Related GHG Emissions	440
Table 4.14.D: Project Compliance with Greenhouse Gas Emission Reduction Strategies	441
Table 6.A: Water Balance Comparison of Project and LEED Silver Alternative	461
Table 6.B: Water Balance Analysis for Alternative 2: LEED Silver Design	462
Table 6.C: Project Size Reductions with Alternative 3: Reduced Density/Redesign Project.....	468
Table 6.D: Water Balance Comparison of Project and Reduced Density/Redesigned Project Alternative.....	478
Table 6.E: Water Balance Analysis for Reduced Density/Redesigned Project Alternative	479
Table 6.F: Summary Comparison of Alternatives	485

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1.0. EXECUTIVE SUMMARY

The California Environmental Quality Act (CEQA) (Public Resources Code 21000–21177) requires that local government agencies, before taking action on a project over which they have discretionary approval authority, consider the environmental consequences of such projects. An Environmental Impact Report (EIR) is a public document designed to provide to the public and to the local and State governmental agency decision makers an analysis of potential environmental consequences to support informed decision making.

This Draft EIR has been prepared by County of Monterey (County) to analyze the environmental impacts associated with the proposed Corral de Tierra Neighborhood Village Retail Project; to propose mitigation measures for identified potential significant environmental impacts that would minimize, offset, or otherwise reduce or avoid those impacts; and to discuss alternatives to the Project.

This Draft EIR has been prepared pursuant to the requirements of CEQA, the State CEQA Guidelines (California Code of Regulations Title 14, Division 6, Chapter 3, Sections 15000–15387) and County CEQA procedures. The County is the Lead Agency, and County staff has reviewed all submitted drafts, technical studies, and reports for consistency with County regulations and policies. The County has commissioned the preparation of this Draft EIR to reflect its own independent judgment. Data for this Draft EIR was obtained from on-site field observations; discussion with affected agencies; review of adopted plans and policies; review of available studies, reports, and data; and specialized environmental assessments prepared for the project (e.g., hydrology, biology and traffic).

1.1. SUMMARY OF PROJECT DESCRIPTION AND LOCATION

The Project would subdivide two existing lots of record encompassing approximately 11 acres into seven (7) lots ranging from 0.72 acres to 2.67 acres. The proposed neighborhood retail village would include 10 retail buildings, a one-story market building (grocery store) with a mezzanine as the “anchor”, and a two-story office building totaling 126,523 square feet (sf), and a total of 508 surface parking spaces. The retail component, consisting of the grocery store and retail spaces, would occupy 114,185 sf. The grocery store would occupy 40,000 sf, while office building would occupy 12,338 sf. Establishments that may be developed as part of the retail component include a drug store, hardware store, sporting goods store, bank, florist, mail store, post office branch, video, barber/beauty salon, dry cleaner drop-off/pick-up facility, day care center, and various small restaurants.

1.2. ALTERNATIVES TO THE PROPOSED PROJECT

The following four alternatives to the proposed project were selected for consideration as a reasonable range of alternatives, including the No Project Alternatives and Alternative Project Location as required by CEQA:

- No Project Alternative (Alternative 1)
- LEED Silver: Reduced Water Consumption/Full Recharge Alternative (Alternative 2)
- Reduced Density/Redesigned Project Alternative (Alternative 3)
- Alternative Project Location (Alternative 4)

The alternatives analysis is described in greater detail in Chapter 6.0, Alternatives Analysis; however, a summary comparison of the alternatives is provided in Table 1.A.

1.3. AREAS OF CONTROVERSY

Pursuant to CEQA Guidelines Section 15123, this Draft EIR acknowledges the areas of controversy and issues to be resolved that are known to the County or were raised during the scoping process. Major issues and concerns about the proposed project that have been brought to the County's attention include: aesthetics and visual impacts, long-term water supply and removal of the B-8 Overlay Zone, traffic, and direct project impacts to the intersections of SR-68 and Laureles Grade and SR-68 and Corral de Tierra Road.

This Draft EIR addresses each of these areas of concern or controversy in detail, examines project-related and cumulative environmental impacts, identifies significant adverse environmental impacts, and provides proposed mitigation measures designed to reduce or eliminate the potentially significant impacts.

1.4. SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires that an EIR discuss significant impacts. When such impacts cannot be reduced to a less than significant level, the EIR must describe their implications and the reasons why the project is being proposed in spite of the impacts. The implementation of the Project will result in alteration of the physical environment. Chapter 4: Existing Environmental Setting, Environmental Analysis Impacts, and Mitigation Measures of this DEIR provides a description of the potential environmental impacts for the Project as well as measures to reduce the environmental impacts to the maximum extent feasible. After implementation of the project and all related mitigation measures, it has been determined that the only significant unavoidable impacts are related to:

- Long-term groundwater supply and removal of the B-8 Overlay Zone; (refer to Chapter 4.7 Hydrology); and
- Direct Project impacts to the intersections of SR-68 and Laureles Grade and SR-68 and Corral de Tierra Road (refer to Chapter 4.12).

Table 1.A: Summary Comparison of Alternatives

Environmental Topic	Project	No Project Alternative	LEED Silver Alternative	Reduced Density/Redesigned Project Alternative
Project Objectives	Meets all objectives	Meets none of the project objectives	Meets all objectives	Meets all objectives
Aesthetics	Less than significant impacts with proposed mitigation measures	Less impacts than Project	Same impacts as Project	Less impacts than Project
Air Quality	No Impacts	No Impacts	No Impacts	No Impacts
Biological Resources	Less than significant impacts with proposed mitigation measures	Less impacts than Project	Same impacts as Project	Same impacts as Project
Cultural Resources	No Impacts	No Impacts	No Impacts	No Impacts
Geology and Soils	Less than significant impacts with proposed mitigation measures	Less impacts than Project	Same impacts as Project	Same impacts as Project
Hydrology and Water Quality	Potentially significant impacts	Less impacts than Project	Less impacts than Project	Less impacts than Project
Hazards and Hazardous Materials	No Impacts	No Impacts	No Impacts	No Impacts
Land Use and Planning	Potentially significant impacts	No impacts	Same impacts as Project	Less impacts than Project
Noise	Less than significant with proposed mitigation measures.	No impacts	Same impacts as Project	Less impacts than Project
Population and Housing	No impacts	No impacts	No impacts	No impacts
Public Services	No impacts	No impacts	No impacts	No impacts
Traffic and Transportation	Potentially significant impacts	Less impacts than Project	Same impacts as Project	Less impacts than Project
Utilities	Less than significant impacts with proposed mitigation measures	Less impacts than Project	Same impacts as Project	Same impacts as Project
Global Climate Change	Less than significant impacts with proposed mitigation measures	Less impacts than Project	Less impacts than Project	Less impacts than Project

1.5. SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table 1.B identifies the environmental impacts associated with implementation of the Project, proposed mitigation measures, and the level of significance after mitigation is incorporated into the Project¹. In accordance with CEQA, Table 1.B identifies the following types of potential impacts associated with the proposed development:

- **Class I Impacts**—Significant environmental impacts that cannot be fully mitigated or avoided. The decision maker must adopt a “Statement of Overriding Considerations” as required under CEQA Guidelines Section 15093 if the Project is approved.
- **Class II Impacts**—Significant environmental impacts that can be feasibly mitigated or avoided. The decision maker must issue “Findings” under CEQA Guidelines Section 15091(a) if the Project is approved.
- **Class III Impacts**—Environmental impacts which are adverse but not significant for which the decision maker does not have to adopt “Findings” under CEQA.
- **Class IV Impacts** – Project impacts which are considered to be positive or of benefit to the site or the adjacent environment.

Environmental topics addressed in this EIR include: Aesthetic Resources, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazard/Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Population, Employment, and Housing, Public Services, Traffic and Transportation, Utilities and Energy (includes Wastewater), Global Climate Change, and Environmental Issue Areas Determined to be Less Than Significant.

¹ Please note that applicable standard conditions are included in Chapter 4.0 of this EIR.

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
<p>4.1 AESTHETIC RESOURCES</p> <p>The Project has the potential to significantly impact the views from SR-68, a State designated scenic highway.</p>	<p>4.1.1 State Route 68 Scenic Corridor. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the Site plan is modified to:</p> <ul style="list-style-type: none"> Eliminate approximately eight parking spaces in the parking area fronting on SR-68 and increase the landscaping area in this part of the Site to a width of approximately 40 feet to provide additional landscaping and mounding to buffer the visibility of the parking areas and buildings from the SR-68 scenic corridor; Eliminate the proposed driveway and four parking spaces adjacent to the existing service station site and convert the area of the driveway into additional pedestrian and landscaping areas consistent with applicable Toro Area Plan policies; Provision of an improved transit stop (bus turnout lane or bus stop) consistent with Monterey-Salinas Transit standards and as required by the mitigation measures contained in the Traffic and Transportation Chapter of the EIR; <p>Reduce the total square footage of the Project to correspond with the loss of parking spaces in this area and parking spaces that may be lost per Mitigation Measure 4.1.2.</p>	<p>Less than significant (Class II Impact)</p>
<p>The Project has the potential to significantly impact the visual character of the Site and designated critical viewsheds along Corral de Tierra Road, a County designated scenic route.</p>	<p>4.1.2 Corral de Tierra Road County Scenic Corridor. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the Site Plan shall be modified to widen the landscaping area directly in front of the Market building to include additional landscaping and land mounding to buffer the visibility of the proposed Market building and Retail Building numbers 9 and 10 from Corral de Tierra Road, as well as the visibility of the parking areas fronting on this road. If the Site plan changes required in Mitigation Measure 4.1.2.4 include significant changes to parking and vehicle circulation, the relocation of these buildings towards Corral de Tierra Road could be considered provided that appropriate building materials and colors and additional landscaping features such as mounding are used to buffer the visibility of these buildings.</p>	<p>Less than significant (Class II Impact)</p>
<p>The Project has the potential to significantly impact the character of the surrounding visual area and the project area.</p>	<p>4.1.3 Building Aesthetics/Hardscape Elements. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the building and overall project design including exterior construction materials, colors and style blend and are consistent with the surrounding natural setting and rural ranch properties of the Corral de Tierra area. Specific design components for the project parking lots shall include materials such as light colored asphalt, light colored interlocking pavers, and/or reinforced gravel products to mimic the existing landscape colors; dark green paint for space striping and recycled plastic vehicle stops.</p>	<p>Less than significant (Class II Impact)</p>

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
<p>The proposed exterior lighting sources have the potential to significantly impact the nighttime views from SR-68, Corral de Tierra Road, and the surrounding residential areas.</p>	<p>4.1.4 Landscape Plan. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the landscaping plan is modified by a landscape architect to include the Site plan changes required under Mitigation Measures 4.1.1 and 4.1.2. The plan shall include appropriate tree species to provide maximum shading in the parking areas; shall include native drought-tolerant and rapid growth shrub and tree species to buffer the visibility of the Project from the scenic corridors; xeriscape principles; and shall include such techniques and materials as low precipitation sprinkler heads, bubblers, drip irrigation systems and timing devices. The plans shall be in sufficient detail to identify the location, species, and size of the proposed landscaping and shall include an irrigation plan. The landscaping shall be installed and inspected prior to occupancy. All landscaped areas and/or fences shall be continuously maintained by the applicant and all plant material shall be continuously maintained in a litter-free, weed-free, healthy condition.</p> <p>4.1.5 Lighting Plan Specifications. A Final Lighting Plan for the Project shall be submitted for review to the County of Monterey RMA-Planning Department prior to issuance of any building permits. The plan would be reviewed for adequacy and its ability to reduce lighting impacts. All exterior lighting shall be unobtrusive, down-lit, harmonious with the local area, and constructed or located so that only the intended area is illuminated and off-site glare is fully controlled. Exterior lights shall have recessed lighting elements. Exterior light sources that would be directly visible when viewed from a common public viewing area, as defined in Section 21.06.195, are prohibited shall be minimized to provide only minimum safety requirements. The lighting shall comply with the requirements of the California Energy Code set forth in California Code of Regulations, Title 24, Part 6. The plan shall include the following components to minimize adverse visual effects during nighttime:</p> <ul style="list-style-type: none"> • All exterior project light lamps shall be focused downward within the Site boundaries to avoid light spill upward to the night sky or out on adjacent properties; this includes luminaries with a distance of 2.5 times the mounting height from the property boundary; • The majority of the lighting on-site shall be limited to business hours only, with minimal lighting left on during off-business hours for security purposes. The lighting plan shall be reviewed by the County Sheriff's Department for consistency with security and safety requirements; • Project exterior luminaries with more than 1,000 initial lamp lumens shall be shielded to direct lighting downward and within the Site; and exterior luminaries with more than 3,500 initial lamp lumens shall meet the Full Cutoff IESNA (Illuminating Engineering Society of North America) Classification; 	<p>Less than significant (Class II Impact)</p>

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
<p>Installation of necessary utilities lines has the potential to significantly impact the visual character of the project area.</p> <p>The Project would not contribute to cumulative aesthetic impacts in the project area.</p>	<ul style="list-style-type: none"> All interior project lighting shall have a maximum candela value such that the light falls within the buildings; Lamps shall be rural in style to be consistent with the rural character of the Site and surrounding community <p>4.1.6 Underground Utility Lines. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall verify that plan specifications include notes specifying that all utilities shall be placed underground.</p>	<p>Less than significant (Class II Impact)</p>
<p>The Project would not contribute to cumulative aesthetic impacts in the project area.</p> <p>4.2 AIR QUALITY</p>	<p>No mitigation measures necessary</p>	<p>No impact (Class III Impact)</p>
<p>Implementation of the Project is consistent with the policies outlined in the Monterey County General Plan, the Toro Area Plan, and Monterey Bay Unified Air Pollution Control District 2008 Air Quality Management Plan.</p>	<p>No mitigation measures necessary</p>	<p>No impact (Class III Impact)</p>
<p>Particulate matter (PM₁₀) generated during construction activities would be below threshold established by the MBUAPCD.</p>	<p>No mitigation measures necessary</p>	<p>No Impact (Class III Impact)</p>
<p>The Project would not result in project-related CO concentrations that would exceed federal or State standards.</p>	<p>No mitigation measures necessary</p>	<p>No impact (Class III Impact)</p>
<p>The Project would not result in a net increase of any criteria pollutant for which the project region is in nonattainment.</p>	<p>No mitigation measures necessary</p>	<p>No impact (Class III Impact)</p>
<p>The Project is not located in an area of known NOA and would not expose sensitive receptors to substantial concentrations of NOA.</p>	<p>No mitigation measures necessary</p>	<p>No impact (Class III Impact)</p>

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
Diesel emissions and acrolein generated during construction activities would not impact air quality.	No mitigation measures necessary	No Impact (Class III Impact)
The Project would not result in any long-term objectionable odors. Although construction activity could result in some short-term odors, they would not be significant.	No mitigation measures necessary	No impact (Class III Impact)
The Project would not result in a cumulative impact on air quality, including exceedence of short or long-term operational thresholds such as CO concentrations, ozone precursors, or PM ₁₀ concentrations.	No mitigation measures necessary	No impact (Class III Impact)
4.3 BIOLOGICAL RESOURCES The Project would not result in impacts to riparian habitat, federally protected wetlands, or other sensitive natural communities.	No mitigation measures necessary	No impact (Class III Impact)
The Project would not impede the movement of any resident or migratory fish or wildlife species or interfere with the movement of an established native resident or with the use of migratory wildlife corridors.	No mitigation measures necessary	No impact (Class III Impact)
The Project would not conflict with adopted Habitat Conservation Plans or Natural Community Conservation Plans for the Site since none currently exist.	No mitigation measures necessary	No impact (Class III Impact)
The Project has the potential to impact special-status species including greater western mastiff, red, and yuma myotis bats, burrowing owl, northern harrier, white tailed kite, California horned lark, loggerhead shrike, California tiger salamander, California	4.3.1 Special Status Bat Species. Prior to issuance of grading permit, the applicant shall contract with a qualified biologist to conduct preconstruction surveys for bats; such surveys shall be conducted at least 30 days before any construction or grading regardless of the time of year. Tree removal and construction shall occur in late fall to minimize the likelihood of impacting individuals within one or more species of bats. To be in compliance with Fish and Game Code 1801, the applicant shall have a qualified biologist examine the trees within 100 feet of the development area on the	Less than significant (Class II Impact)

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
<p>red-legged frog, and western spadefoot toad.</p>	<p>Site for use by bats. If no bats, or evidence of, are found during preconstruction surveys, a survey report shall be prepared that documents the findings of the surveys, and requirements for avoidance, minimization, mitigation, and monitoring. The contract between the biologist and the applicant must be submitted for review and approval by the County of Monterey RMA-Planning Department prior to issuance of any permits.</p> <p>If bats are found to be using the trees as night roosts, construction can proceed during daylight hours with no impact, so long as trees used by roosting bats are not directly impacted. In the event that trees to be removed are being used as day roosts, a plan shall be developed under the consultation of a qualified biologist to exclude bats from these areas before construction can proceed. Construction related activities shall be prohibited within the exclusion zone until the bats have abandoned the roost site. Passive exclusion measures that allow bats to leave but not return to the roost would be allowed unless the roost site supports a maternity colony. Exclusion measures would only be allowed at maternity roost sites when the young have fledged. A qualified biologist shall monitor each roost one per week in order to track the status of each roost and inform the project applicant when a roost site has been cleared for construction. Once all bats have been evicted, tree removal can resume. Weekly monitoring reports shall be prepared by the bat biologist and submitted to the County of Monterey RMA-Planning Department.</p> <p>4.3.2 Nesting Birds. The following measures shall be implemented to mitigate for potential impacts to nesting birds (including but not limited to Northern Harrier, white-tailed kite, California horned lark, and loggerhead shrike):</p> <ol style="list-style-type: none"> 1) Should construction occur during the nesting season (February 21 through August 22), the applicant shall contract with a qualified biologist to conduct preconstruction surveys for nesting raptors. The biologist shall submit a report documenting the results of the preconstruction surveys, avoidance, minimization, mitigation and monitoring requirements. The contract between the biologist and the applicant must be submitted for review and approval by the County of Monterey RMA-Planning Department prior to the issuance of any building and grading permits. 2) If possible, all trees, brush and other potential nesting habitat that would be impacted by project construction shall be removed during the non-nesting season (August 22 through February 21). These specific dates and survey distances have been established by the County of Monterey RMA-Planning Department, per the Tree Assessment Workshop attended by LSA's Certified Arborist' on August 7, 2009. 	

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
	<p>3) If suitable nesting habitat cannot be removed during the non-nesting season and project construction is to begin during the nesting season (February 22 through August 21), prior to initiating construction-related activities, all suitable nesting habitat within the limits of work and a 500-foot buffer shall be surveyed by a qualified biologist. Surveys shall be conducted no more than 14 days prior to the start of work. The qualified biologist shall locate active nests within 300 feet of the footprint of development. If no nesting is discovered, construction can begin as planned. If an active nest is discovered, a buffer shall be established on the Site around the nest and delineated using orange construction fence or equivalent. Buffers for raptor nests shall be 300 feet; buffers for non-raptor nests shall be 100 feet. The buffer shall be maintained in place until the end of the breeding season or until the young have fledged, as determined by a qualified biologist. The active nest sites within the exclusion zone shall be monitored by the qualified biologist on a weekly basis throughout the nesting season to identify any signs of disturbance. These protection measures shall remain in effect until the young have left the nest and are foraging independently or the nest is no longer active. A report shall be prepared at the end of the construction season detailing the results of the preconstruction surveys. The report shall be submitted the California Department of Fish and Game (CDFG) by November 30 of each year.</p> <p>Construction beginning during the non-nesting season and continuing into the nesting season shall not be subject to these measures.</p> <p>Alternatively, CDFG may be consulted to determine if it is appropriate to decrease the specified buffers with or without implementation of other avoidance and minimization measures (e.g., having a qualified biologist on-site during construction activities during the nesting season to monitor nesting activity).</p> <p>4.3.3 Burrowing Owl. Prior to issuance of a grading permit, the following measures shall be implemented to mitigate for potential impacts to burrowing owl:</p> <p>1) Prior to issuance of a grading permit, the applicant shall contract with a qualified biologist to conduct burrowing owl presence and absence surveys. Preconstruction surveys shall be completed and if necessary, avoidance and minimization measures shall be implemented. The biologist shall submit a report documenting the results of the preconstruction surveys, avoidance, minimization, mitigation and monitoring requirements. The contract between the biologist and the applicant must be submitted for review and approval by the County of Monterey RMA-Planning Department prior to the issuance of any building and grading permits.</p>	

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
	<p>2) Burrowing Owl presence and/or absence surveys shall be conducted in accordance with the California Department of Fish and Game (CDFG) Staff Report on Burrowing Owls (CDFG, 1995). The protocol requires four surveys during the nesting season (April 15 through July 15) and four surveys during the winter season (December 1 through January 31). If the survey results are negative, measures 3 and 4 are not required.</p> <p>3) If burrowing owls are found to be occupying burrows within the Site in either season, and if occupied burrows are to be removed or lost as part of the Project, compensation for loss of foraging habitat shall be required in accordance with the CDFG Staff Report on Burrowing Owls (CDFG, 1995). Compensation shall consist of preservation of 6.5-acres of suitable foraging habitat for each breeding pair or unpaired winter resident. Preservation of this habitat shall be accomplished through:</p> <ul style="list-style-type: none"> a) Acquisition of suitable habitat and recording a conservation easement over the property. Preparation of a management plan and establishment of an endowment in an amount to be determined by the County and CDFG for maintenance and management of the mitigation site in perpetuity shall also be established; b) purchasing sufficient credits at an approved conservation bank; c) a combination of the above methods, or d) another method acceptable to CDFG. <p>4) Prior to issuance of a grading permit or other project-related disturbance of the Site, the Project proponent shall provide evidence that adequate mitigation has been provided for the loss of burrowing owl foraging habitat, as described above.</p> <p>5) No more than 30 days prior to any ground disturbing activities, a qualified biologist shall conduct a preconstruction survey for burrowing owls. A preconstruction survey is not necessary if the last presence and/or absence survey was conducted within 30 days of the start of ground disturbing activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the initial preconstruction surveys, the Site shall be resurveyed. All surveys shall be conducted in accordance with the CDFG Staff Report on Burrowing Owls (CDFG, 1995). If no burrowing owls are present, construction can begin as planned. Construction beginning during the non-nesting season and continuing into the nesting season shall not be subject to these measures.</p>	

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
	<p>6) If the preconstruction surveys identify burrowing owls on the Site during the non-breeding season (September 1 through January 31), burrowing owls occupying the Site shall be evicted from the Site by passive relocation as described in the CDFG Staff Report on Burrowing Owls (CDFG 1995).</p> <p>If the preconstruction surveys identify burrowing owls nesting on the Site during the breeding season (February 1 through August 31), a 250-foot buffer shall be established on the Site around the nest burrow and delineated using orange construction fence or equivalent. The buffer shall be maintained in place until the end of the breeding season or until a qualified biologist determines through non-invasive methods that 1) the birds have not begun egg laying, or 2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once the fledglings are capable of independent survival, the burrow(s) can be destroyed.</p> <p>4.3.4 California Tiger Salamander. Prior to issuance of any grading or building permit for the Project, the applicant shall retain a qualified biologist to conduct a Site Assessment following the Fish and Wildlife Service (USFWS) 2003 <i>Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander</i>. Written documentation of the Site Assessment results shall be provided to the USFWS and California Department of Fish and Game (CDFG) within two weeks of completion of the Site Assessment. Additional California Tiger Salamander (CTS) site assessment/survey requirements may be required by USFWS and CDFG pending the results of the Site Assessment.</p> <p>If the USFWS and CDFG determine that no further CTS surveys are warranted, construction may proceed at any time with implementation of the prescribed CTS avoidance and minimization measures described below.</p> <p>Avoidance and Minimization Measures:</p> <ol style="list-style-type: none"> 1) Exclusion fencing shall be installed along the limits of work associated with construction of the retail village to prevent encroachment into adjacent California Tiger Salamander upland habitat to be preserved. Fencing shall consist of silt fence or equivalent material, and shall be installed such that no openings are present. Additionally, the bottom three inches of fence shall be buried. The exclusion fencing shall be maintained in good condition until project construction is complete. 2) Following completion of work, areas of potential California Tiger Salamander upland habitat in the project area that are denuded during project construction shall 	

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
<p>The Project could potentially impact suitable nesting areas for birds and thereby impact native bird nursery sites.</p> <p>The Project would not result in cumulative impacts associated with biological resources.</p>	<p>be revegetated with locally occurring native species as described in the Landscape Plan.</p> <p>4.3.5 California Red-legged Frog and Western Spadefoot Toad. Prior to issuance of a grading permit, the project applicant shall retain a qualified biologist to ensure implementation of the following avoidance and minimization measures pertaining to California red-legged frog (CRLF) and western spadefoot. The contract must be submitted for review and approval by the County of Monterey RMA-Planning Department prior to issuance of any permits.</p> <ol style="list-style-type: none"> 1) Exclusion fencing shall be installed along the limits of work associated with construction of the retail village to prevent encroachment into adjacent upland habitat to be preserved. Fencing shall consist of silt fence or equivalent material, and shall be installed such that no openings are present. Additionally, the bottom three inches of fence shall be buried. The exclusion fencing shall be maintained in good condition until project construction is complete. 2) Following completion of work, areas of potential upland habitat on the Site that are denuded during Project construction shall be revegetated with locally occurring native species as described in the Landscape Plan. 3) All burrows in the area to be disturbed shall be surveyed during the dry season for presence of aestivating CRLF or spadefoot. Surveys shall be conducted at each burrow either by hand excavation or surveying with a fiber optic camera. Written documentation of the survey results shall be provided to the United States Fish and Wildlife Service (USFWS) within two weeks of completion of the surveys. <p>Refer to Mitigation Measure 4.3.2 discussed above.</p> <p>No mitigation measures necessary</p>	<p>Less than significant (Class II Impact)</p> <p>No impact (Class III Impact)</p>

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
4.4 CULTURAL RESOURCES		
The Project would not impact known historical or archeological materials during construction.	No mitigation measures necessary	No impact (Class III Impact)
The Project would not impact any known human remains during construction.	No mitigation measures necessary	No impact (Class III Impact)
The Project would not impact known archeological sites during construction.	No mitigation measures necessary	No impact (Class III Impact)
Implementation of the Project would not have a cumulative impact on known historical or archeological resources or human remains.	No mitigation measures necessary	No impact (Class III Impact)
4.5 GEOLOGY AND SOILS		
The Project is not located in a currently designated Alquist-Priolo Earthquake zone and therefore the Project would not result in significant impacts resulting from fault rupture on the Site.	No mitigation measures necessary	No impact (Class III Impact)
Structures and buildings associated with the Project have the potential to be significantly impacted by strong seismic-related ground shaking and ground lurching.	<p>4.5.1 Uniform Building Code for Seismic Zone IV. Prior to the issuance of a building permit, the project engineer shall prepare and submit project design specifications to the County of Monterey RMA-Planning Department for review and approval. The project design specifications shall be in accordance with the requirements of the Uniform Building Code's current edition for Seismic Zone IV. The requirements state that all buildings are to be founded on undisturbed native soils and/or accepted engineering fill to prevent resonance amplification between soils and the structure.</p> <p>4.5.2 Ground Lurching. Prior to issuance of a building permit, the applicant shall submit operation and emergency response plans to the County of Monterey, Health Department, Environmental Health Division for review and approval. The plans shall consider the potential for ground lurching to occur in response to seismic events, and the potential for lurching to damage lifelines, utilities, and structures. The operation and emergency response plans shall include an employee-training plan; an evacuation plan; a checklist for emergency response including responsible parties; a facility site plan; a storage map for hazardous materials; and a records management plan.</p>	Less than significant (Class II Impact)

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
Structures and buildings associated with the Project have the potential to be significantly impacted by liquefaction and seismic settlement associated with alluvial soils.	<p>4.5.5 Building Construction Plans. Prior to the issuance of a building permit, the project engineer shall prepare and submit project building construction plans including design specifications consistent with the design level geotechnical engineering investigation to the County of Monterey RMA-Planning Department for review and approval. The project design specifications shall detail the design and construction of the buildings and the method to be used (e.g., removing the alluvial soil that is prone to liquefaction and seismic settlement and replacing it with properly compacted (engineered) fill, deeply compacting the soils in-place, or supporting structures on deep foundations bearing below the settlement-prone soil to address impacts associated with potential liquefaction and seismic settlement associated with alluvial soils on-site.</p> <p>4.5.4 Design Level Geotechnical Report. Prior to issuance of a grading permit, the applicant shall submit a design-level Geotechnical Report to the County of Monterey RMA-Planning Department for review and approval. The Geotechnical Report should specifically address the site preparation and grading, foundation design, estimated differential settlement due to liquefaction, foundation and seismic loading, and the design of the Site's retaining walls that would support the adjacent slope.</p>	Less than significant (Class II Impact)
The Project has the potential to expose people and structures on the Site to landslides.	Refer to Mitigation Measure 4.5.5 discussed above.	Less than significant (Class II Impact)
The Project has the potential to increase erosion on the Site.	<p>4.5.3 Erosion Control Plan. Prior to issuance of a grading permit, the contractor shall prepare and submit an erosion control plan to the County of Monterey RMA-Planning Department for review and approval. The erosion control plan shall include the following measures:</p> <ul style="list-style-type: none"> • Graded cut and fill slopes shall be vegetated or landscaped in a manner that would reduce the potential for soil erosion following construction. • Site drainage shall be provided to control surface water, direct water away from slopes, and control surface water discharge. 	Less than significant (Class II Impact)
The Project would not cause lateral spreading at the Site.	No mitigation measures necessary	No impact (Class III Impact)
The upper five feet of soil at the Site is prone to hydro collapse.	Refer to Mitigation Measure 4.5.1 and 4.5.4 discussed above.	Less than significant (Class II Impact)
The proposed project has the potential to result in subsidence if significant dewatering or lowering of the groundwater level occurs.	Refer to Mitigation Measure 4.5.4 discussed above.	Less than significant (Class II Impact)

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
The Site consists predominantly of silty sand having a very low potential for expansion.	No mitigation measures necessary	No impact (Class III Impact)
The Project would not contribute to cumulative impacts associated with geologic and soils hazards.	No mitigation measures necessary	No impact (Class III Impact)
4.6 HAZARDS/HAZARDOUS MATERIALS		
The Project would not create a significant hazard to the public or environment through routine transport, use, or disposal of hazardous materials.	No mitigation measures necessary	No Impact (Class III Impact)
The Project would not result in hazardous material spills and stormwater contamination.	No mitigation measures necessary	No Impact (Class III Impact)
The Project would not result in significant impacts related to the emission or handling of hazardous substances near a school.	No mitigation measures necessary	No impact (Class III Impact)
Development of the Project would not create significant hazards to the public or the environment from the presence of hazardous materials sites.	No mitigation measures necessary	No impact (Class III Impact)
The Project would not result in impacts to airport operations or create airport related safety hazards.	No mitigation measures necessary	No impact (Class III Impact)
The Project must have an emergency access and evacuation plan as required by the County of Monterey.	No mitigation measures necessary	No Impact (Class III Impact)
There would be no impacts from wildfire risk to people from the Project.	No mitigation measures necessary	No impact (Class III Impact)
The Project would not contribute to cumulative impacts associated with hazards and hazardous materials.	No mitigation measures necessary	No impact (Class III Impact)

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
<p>4.7 HYDROLOGY AND WATER QUALITY The Project would not impact water quality due to erosion and stormwater discharges of sediment and pollutants associated with construction operations.</p>	<p>No mitigation measures necessary</p>	<p>No Impact (Class III Impact)</p>
<p>The Project would not impact water quality due to pollution runoff and erosion associated with long term Project operations.</p>	<p>No mitigation measures necessary</p>	<p>No Impact (Class III Impact)</p>
<p>The Project would not impact water quality as a result of on-site and off-site runoff during construction operations.</p>	<p>No mitigation measures necessary</p>	<p>No Impact (Class III Impact)</p>
<p>The Project has the potential to cause significant impacts associated with erosion or siltation on- or off-site during long term Project operations.</p>	<p>4.7.5 Drainage Plan. Prior to issuance of any grading or building permits, the applicant shall provide the County of Monterey Water Resources Agency, a final Drainage Plan and maintenance plan prepared by a registered civil engineer addressing on- and off-site impacts. The drainage plan shall be accompanied by a hydrologic report that would include calculations certifying that storm water detention/percolation facilities are designed to limit the 100-year post-development runoff rate to the 10-year pre-development runoff rate. The drainage plan shall include an oil-water separator/sediment trap upstream from the retention/detention basin and construction details, utilizing Caltrans standards, for the proposed 24-inch storm drain line that would convey stormwater to an existing box culvert under SR-68. Calculations shall be provided certifying the oil-water separator/sedimentation trap has been sized to accommodate the flow from the Site during the County recommended storm event. Drainage improvements shall be constructed in accordance with the plans approved by the County of Monterey Water Resources Agency.</p> <p>The Drainage Plan for the Project shall also include calculations demonstrating the adequacy of the existing culvert along El Toro Creek under SR-68 to pass the Caltrans-specified design flood events, including any additional stormwater discharge volumes originating from the Site after construction. If the capacity of the existing culvert is insufficient to meet Caltrans design criteria, the applicant shall submit plans for upgrading or replacing the culvert and shall upgrade or replace the culvert as part of the Project.</p>	<p>Less than significant (Class II Impact)</p>
<p>4.7.6</p>	<p>Drainage and Flood Control Systems Agreement. Prior to filing the final map, a signed and notarized <i>Drainage and Flood Control Systems Agreement</i> shall be provided by the</p>	

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
<p>The Project has the potential to significantly impact drainage at the Site in a manner that would result in flooding on- or off-site.</p> <p>The Project has the potential to exceed the capacity of existing or planned storm drainage systems.</p> <p>The Project would not degrade surface water quality due to Project operations such as from siltation, storm water pollutants, or hazardous spills.</p> <p>The Project is not located within a 100-year flood hazard zone and the Project would not result in any impacts associated with locating a development in the 100-year flood zone.</p> <p>The Project has the potential to impact slope instability and thereby cause significant impacts associated with mudflows.</p>	<p>applicant to the County of Monterey Water Resources Agency for review and approval. The agreement shall include a summary of required annual maintenance activities and provisions for the preparation of an annual drainage report. The annual report shall be prepared by a registered civil engineer and submitted to the County of Monterey Water Resources Agency for review and approval. If the applicant and/or subsequent property owners, after notice and hearing, fails to properly maintain, repair, or operate the site drainage and flood control facilities, the County of Monterey Water Resources Agency shall be granted the right by the property owners to enter any and all portions of the property to perform repairs, maintenance or improvements necessary to properly operate the drainage and flood control facilities in the Project. The County of Monterey Water Resources Agency shall have the right to collect the cost for said repairs, maintenance or improvements from the property owners upon their property tax bills. A hearing shall be provided by the Board of Supervisors as to the appropriateness of the costs. The <i>Drainage and Flood Control Systems Agreement</i> shall be recorded concurrently with the final map.</p> <p>Refer to Mitigation Measures 4.7.5 and 4.7.6 discussed above.</p> <p>Refer to Mitigation Measures 4.7.5 through 4.7.6 discussed above.</p> <p>No mitigation measures necessary</p> <p>No mitigation measures necessary</p>	<p>Less than significant (Class II Impact)</p> <p>Less than significant (Class II Impact)</p> <p>No Impact (Class III Impact)</p> <p>No impact (Class III Impact)</p>
<p>4.7.7</p> <p>Retaining Walls. Prior to issuance of grading and site development permits, the applicant shall submit a design approved by a registered civil engineer for retaining walls/debris deflection walls along areas of the eastern Site boundary where evidence of slope instability has been observed or areas that pose a risk of future instability. The wall shall be adequately sized so as not to be overtopped by potential mudflows, and shall be designed to withstand the impact of any mudflows travelling down the slope. The</p>	<p>Refer to Mitigation Measures 4.7.5 and 4.7.6 discussed above.</p> <p>Refer to Mitigation Measures 4.7.5 through 4.7.6 discussed above.</p> <p>No mitigation measures necessary</p> <p>No mitigation measures necessary</p>	<p>Less than significant (Class II Impact)</p>

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
<p>The Project's cumulative impact associated with water quality is less than significant. The Project's cumulative impact on groundwater supplies would be significant and unavoidable.</p>	<p>applicant shall implement a maintenance program to remove any debris that is accumulated behind the wall after any mudflow event, and at the end of every rainy season.</p> <p>No feasible mitigation measures are available to address the identified impacts.</p>	<p>Significant Unavoidable Impact (Class I Impact)</p>
<p>4.8 LANDUSE AND PLANNING</p>		
<p>The Project would not physically divide an established community.</p>	<p>No mitigation is required</p>	<p>No Impact (Class III Impact)</p>
<p>The Project is consistent with all the land use policies applicable to the Project except for Policy 26.1.4.3 which requires evidence of an assured long-term water supply before a subdivision can be approved.</p>	<p>No feasible mitigation measures are available to address the identified impacts.</p>	<p>Significant Unavoidable Impact (Class I Impact)</p>
<p>The Site is not covered by and therefore would not conflict with any habitat conservation plans or natural community conservation plans.</p>	<p>No mitigation measures are required.</p>	<p>No impact (Class III Impact)</p>
<p>The Project's contribution to the cumulative impact associated with the supply of water in the project area is significant.</p>	<p>No feasible mitigation measures are available to address the identified impacts.</p>	<p>Significant Unavoidable Impact (Class I Impact)</p>
<p>4.9 NOISE</p>		
<p>Construction operations associated with the Project would not expose sensitive receptors to short-term/temporary noise levels that exceed normally acceptable standards.</p>	<p>No mitigation measures necessary</p>	<p>No Impact (Class III Impact)</p>
<p>The Project would not result in short-term construction-related or permanent noise sources that would expose persons to excessive groundborne vibration or noise.</p>	<p>No mitigation measures necessary</p>	<p>No impact (Class III Impact)</p>

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
<p>The Project would potentially result in a substantial increase in project-related and cumulative noise levels associated with areas used for loading and unloading activities.</p>	<p>4.9.2a Loading Dock. Prior to issuance of the grading permit, the County of Monterey shall review the site design to ensure that the loading dock facility is enclosed so that all adjacent noise sensitive land uses are completely shielded from a direct line of sight to the loading dock;</p> <p style="text-align: center;"><i>Or</i></p> <p>4.9.2b Loading Dock. Prior to issuance of the grading permit, the County of Monterey shall review the site design to ensure that it includes specifications that the use of the loading dock for noise producing activities shall be restricted to the daytime hours of 7:00 a.m. to 10:00 p.m. daily.</p>	<p>Less than significant (Class II Impact)</p>
<p>Implementation of the Project would not expose persons residing or working in the project area to excessive aviation-related noise levels.</p>	<p>No mitigation measures necessary</p>	<p>No impact (Class III Impact)</p>
<p>The Project would not contribute to cumulative impacts associated with noise.</p>	<p>No mitigation measures necessary</p>	<p>No impact (Class III Impact)</p>
<p>4.10 POPULATION AND HOUSING</p>		
<p>The Project would not induce substantial population growth in the Toro area either directly or indirectly.</p>	<p>No mitigation measures are required.</p>	<p>No impact (Class III Impact)</p>
<p>The Project would not displace substantial numbers of existing housing.</p>	<p>No mitigation measures are required.</p>	<p>No impact (Class III Impact)</p>
<p>The Project would not displace substantial numbers of people.</p>	<p>No mitigation measures are required.</p>	<p>No impact (Class III Impact)</p>
<p>When considered in conjunction with other projects proposed in the area, particularly East Garrison, the Project would result in a positive cumulative impact on employment opportunities both within and near the Toro Area.</p>	<p>No mitigation measures are required.</p>	<p>No impact (Class IV Impact)</p>

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
<p>4.11 PUBLIC SERVICES</p> <p>The Project would not result in the need for additional governmental facilities the construction of which would cause a significant environmental impact, in order to meet performance objectives for fire protection, police protection, public schools, public parks, or other public facilities.</p> <p>The Project would not contribute to cumulative impacts associated with the provision of public services.</p>	<p>No mitigation measures are required.</p>	<p>No impact (Class III Impact)</p>
<p>4.12 TRAFFIC AND TRANSPORTATION</p> <p>The Project would potentially result in an increase in traffic in relation to the existing traffic load and capacity of SR-68 at the intersections of San Benancio Road, Corral de Tierra Road, and Laureles Grade.</p>	<p>No mitigation measures are required.</p>	<p>No impact (Class III Impact)</p>
<p>4.12.1</p> <p>Impact Fee for Project Impacts at SR-68/San Benancio Road; SR-68/Corral de Tierra Road; and SR-68/Laureles Grade. Prior to the issuance of building permits, the Project applicant shall comply with one of the following actions to address Project level impacts to intersections along SR-68:</p> <ol style="list-style-type: none"> 1. Upon issuance of each building permit for proposed development on the Site, the applicant shall contribute the proportionate fair share, as calculated by the County, towards the “State Route 68 Commuter Improvements” through payment of the TAMC Regional Development Impact Fee (RDIF) in effect at that time. The TAMC RDIF payment will be earmarked for completion of the Caltrans Project Study Report (PSR) for the 2.3 miles “State Route 68 Commuter Improvements” project identified with the TAMC RDIF; or 2. Prior to the issuance of the first building permit for proposed development on the Site, the applicant shall pay the entire fair share for the proposed development toward the “State Route 68 Commuter Improvements” through payment of the TAMC RDIF or; 3. The Project applicant shall fund, initiate and complete a Caltrans Project Study Report for the 2.3 mile “State Route 68 Commuter Improvements” project identified in the TAMC RDIF. The PSR process will identify the total roadway improvement costs, as well as each project applicant’s proportionate fair share of those costs. If costs of the PSR exceeds the Project’s proportionate fair share of the TAMC RDIF obligation, the applicant shall be reimbursed the amount in excess of the 	<p>Less than significant (Class II Impact)</p>	

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
<p>Congestion management facilities are not part of the project study area; therefore, the Project would not exceed a level of service standard established by the County Congestion Management Agency.</p> <p>The Project would not affect air traffic patterns and therefore would not result in a change in air traffic patterns or a change in location that results in substantial safety risks.</p> <p>The Project would increase hazards due to Project design features associated with frontages and accessways.</p>	<p>proportionate fair share. Monterey County will enter into a reimbursement agreement with the Project applicant to refund the costs in excess of the proportionate fair share of the TAMC RDIF as additional fees are collected from other applicants and sources.</p> <p>No mitigation measures necessary</p> <p>No mitigation measures necessary</p>	<p>No impact (Class III Impact)</p> <p>No impact (Class III Impact)</p>
<p>4.12.2 Street Frontage and Accessways. In order to mitigate the potentially hazardous situations created by inadequate street frontage and access improvements, prior to the issuance of grading permits, the Project applicant shall modify the Project Site Plan to the satisfaction of the County of Monterey departments of Public Works and Planning to provide the following design features on Corral de Tierra Road and SR-68:</p>	<p>A. Extend the twelve-foot southbound merge lane to the main entrance; B. Stripe an eleven-foot southbound through lane; C. Construct an eleven-foot southbound turn lane; D. Construct a raised center divide to prevent left turning movements; E. Restripe an eleven-foot northbound through/left turn lane; F. Construct a twelve-foot northbound right turn lane; G. Construct a northbound four-foot Class II bicycle lane; H. Construct a five-foot sidewalk on east side of Corral de Tierra Road; I. Provide a three-foot foot utility, traffic sign, and public facilities easement behind back of walk; J. Redesign the site plan to provide a minimum 40 foot throat depth for all driveways on Corral de Tierra Road; and K. Eliminate the northernmost driveway on Corral de Tierra Road.</p> <p>Additionally the following modifications are required on SR-68:</p> <p>L. Redesign the site plan to provide a 60 foot deep driveway throat on the eastern most</p>	<p>Less than significant (Class II Impact)</p>

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
The Project would not result in inadequate emergency access.	<p>driveway on SR-68;</p> <p>M. Eliminate the westernmost driveway on SR-68;</p> <p>No mitigation measures are required.</p>	No impact (Class III Impact)
The project would not result in inadequate parking capacity.	No mitigation measures are required.	No impact (Class III Impact)
The Project would conflict with adopted policies supporting alternative transportation.	<p>4.12.3 Class II Bikeway. In order to maintain consistency with the General Plan policy 37.4.1 and Toro Area Plan policy 39.2.2.2, the applicant shall install a Class II Bikeway along the Project frontage on Corral de Tierra Road.</p>	Less than significant (Class II Impact)
The Project would contribute to a cumulative increase in traffic on the regional roadway network.	<p>4.12.4 Impact Fee for Cumulative Traffic Impacts at SR-68/San Benancio Road; SR-68/Corral de Tierra Road; and SR-68/Laureles Grade. Prior to the issuance of building permits, the Project applicant shall comply with one of the following actions to address cumulative impacts to intersections along SR-68:</p> <ol style="list-style-type: none"> 1. Upon issuance of each building permit for proposed development on the Site, the applicant shall contribute his proportionate fair share, as calculated by the County, towards the "State Route 68 Commuter Improvements" through payment of the TAMC Regional Development Impact Fee (RDIF) in effect at that time. The TAMC RDIF payment will be earmarked for completion of the Cal Trans Project Study Report (PSR) for the 2.3 miles "State Route 68 Commuter Improvements" project identified with the TAMC RDIF; or 2. Prior to the issuance of the first building permit for proposed development on the Site, the applicant shall pay the entire fair share for the proposed development toward the "State route 68 Commuter Improvements" through payment of the TAMC RDIF or; 3. The Project applicant shall fund, initiate and complete a Caltrans Project Study Report for the 2.3 mile "State Route 68 Commuter Improvements" project, identify the total roadway improvement costs, as well as each Project applicant's proportionate fair share of those costs. If costs of the PSR exceed the Project's proportionate fair share of the TAMC RDIF obligation, the applicant shall be reimbursed the amount in excess of the proportionate fair share. Monterey County will enter into a reimbursement agreement with the Project applicant to refund the costs in excess of the proportionate fair share of the TAMC RDIF as additional fees are collected from other applicants and sources. 	Less than significant (Class II Impact)
4.13 UTILITIES AND SERVICE SYSTEMS The Project would be served by an existing landfill that has the capacity	No mitigation measures are required.	No impact (Class III Impact)

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
<p>The Project's waste disposal needs and would comply with federal, State, and local statutes and regulations related to solid waste.</p> <p>The Project has the potential to increase energy consumption through the heating and cooling of buildings associated with the Project.</p>	<p>4.13.1 Passive Solar Design Elements. Prior to final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a building plan which incorporates the following passive solar design elements to the extent feasible:</p> <ul style="list-style-type: none"> • Building orientation that maximizes energy gain from the sun, shade, and wind. • Thermal mass materials, such as tile or brick, used in flooring or walls, especially south-facing walls, to store the sun's heat during the day and release it back into the building at night or when the temperature drops. • Insulation of both the ceilings and walls. • Passive solar design techniques such as large south and west-facing windows with proper window overhangs and/or reflective window film to improve heating and cooling of the building naturally, reducing the need for artificial heating or cooling mechanisms. • A daylighting system to effectively integrate daylight with electrical lighting systems to reduce electricity consumption when sufficient daylight is present within the building. 	<p>Less than significant (Class II Impact)</p>
<p>The Project has the potential to result in a significant impact on the net consumption of energy and associated GHG emissions.</p>	<p>Refer to Mitigation Measure 4.13.1 discussed above.</p> <p>4.13.2 Energy Efficient Building Equipment and Design Elements. Prior to the final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a building plan which incorporates the following energy efficient building equipment and design elements to the extent feasible:</p> <ul style="list-style-type: none"> • Water heating equipment which includes integral automatic temperature controls and circulating service water system controls such as geothermal heat pumps - • Geothermal heat pumps provide heating, cooling, and hot water, and are generally more efficient and less expensive to operate and maintain than conventional systems. • The installation of lighting systems with automatic time switch controls, occupant-sensing devices such as motion detectors, automatic daylighting controls, dimmers, indoor photosensors, and efficient security, street, and parking lot lighting (e.g. high 	<p>Less than significant (Class II Impact)</p>

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
	<p>pressure low sodium fixtures).</p> <ul style="list-style-type: none"> The use of alternative energy sources such as photovoltaic (i.e., solar electric) systems on all building rooftops to reduce the Project's electrical energy consumption. The use of alternative building materials that contain post-consumer recycled materials to the greatest extent possible. <p>4.13.3 Energy Management Design Systems. Prior to final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a building plan which incorporates energy management systems to control space conditioning or heating, ventilating, or air conditioning (HVAC) systems including operating hours, set point, scheduling of chillers, etc.</p> <p>4.13.4 Landscape Design Plan. Prior to final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a landscape design plan which integrates heat island minimization, xeriscape principals, and native drought-tolerant plants.</p> <p>4.13.5 Alternative Transportation Design. Prior to final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a site plan which increases the potential for the use of alternative transportation to access the Site. The plan shall include a transit stop on SR-68 as recommended and approved by Caltrans and Monterey-Salinas Transit, and an improved pedestrian area connecting the transit stop to the shopping village (refer to mitigation measures in Section 4.1.8 of the EIR).</p> <p>4.13.6 LEED Compliance. As defined by the LEED Program of the United States Green Building Council, the project design shall comply with the requirements that are consistent with a "LEED Certified" designation. As part of the application for building permits, the applicant shall provide evidence to the County of Monterey RMA-Planning Department that the Project has received a LEED Certified designation or evidence that the Project design includes sufficient elements that demonstrate consistency with the LEED Certified designation.</p>	

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
<p>The needs of the Project would not exceed the wastewater treatment requirements of the RWQCB nor require the construction of a new water or wastewater treatment facility. Impacts associated with stormwater drainage facilities and water supplies are addressed in Section 4.7 above.</p> <p>There would be no cumulative impacts associated with infrastructure necessary to deliver water to the Project, carry and treat wastewater from the Project, or dispose of solid waste generated from the Project.</p> <p>The cumulative contribution of the Project to the consumption of electricity and natural gas and energy related impacts may be significant. The Project's cumulative contribution to impacts associated with the supply of water in the area is address in Section 4.7 above.</p>	<p>4.13.7 Capacity of Wastewater Treatment Facility. Prior to approval of any building permits, the applicant shall verify that there is sufficient capacity in the California Utilities Service, Inc. (CUS) wastewater treatment facility to address the wastewater needs of the Project. If the CUS facility has exceeded 60% of its existing capacity or the Project would cause the facility to exceed its permitted capacity, then the County of Monterey would not issue a building permit until such time as the CUS has attained a revised permit from the Regional Water Quality Control Board.</p> <p>Refer to Mitigation Measures 4.13.1 through 4.13.6 discussed above</p>	<p>Less than significant (Class II Impact)</p> <p>No Impact (Class III Impact)</p> <p>Less than significant (Class II Impact)</p>
<p>4.14 GLOBAL CLIMATE CHANGE</p> <p>Construction and operation of the Project has the potential to generate greenhouse gas emissions that would significantly impact the environment.</p>	<p>4.14.1 Construction and Building Materials. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the following measures are incorporated into the design and construction of the Project:</p> <ul style="list-style-type: none"> • Use locally produced and/or manufactured building materials for construction of the Project; • Recycle/reuse demolished construction material; and • Use "Green Building Materials," such as those materials which are resource efficient, and recycled and manufactured in an environmentally friendly way, including low Volatile Organic Compound (VOC) materials. <p>4.14.2 Water Conservation and Efficiency Measures. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the following</p>	<p>Less than significant (Class II Impact)</p>

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
<p>The Project has the potential to generate construction waste.</p>	<p>measures are incorporated into the design and construction of the Project:</p> <ul style="list-style-type: none"> • Devise a comprehensive water conservation strategy appropriate for the Project and location. The strategy may include the following, plus other innovative measures that might be appropriate: • Water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls; • Energy-efficient irrigation systems and devices; • Water –efficient building design: • Energy-efficient and water-efficient fixtures and appliances, including low-flow faucets, dual-flush toilets and waterless urinals; • Restrictive watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff; and • Separate, non-potable distribution system to accommodate the potential future use of recycled water for landscape irrigation needs of large areas with irrigated landscaping. <p>4.14.3 Incentives for the Reduction of Automobile Trips. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the following measures are incorporated into the design and construction of the Project:</p> <ul style="list-style-type: none"> • The applicant shall designate 5% of all parking spaces within the development for shared employee parking (e.g., carpools and vanpools). • The applicant shall designate two areas in the development for bicycle parking. Each shall accommodate at least 25 non-motorized vehicles. <p>4.14.4 Waste Disposal. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the following measure is incorporated into the design and construction of the Project: The applicant shall include notes on all site plan specifications stating that all construction contracts for the Project would be required to separate all construction waste into recyclable and non-recyclable materials and that construction waste must be taken to the closest waste disposal site.</p>	<p>Less than significant (Class II Impact)</p>

Table 1.B: Summary of Mitigation Measures

Description of Impact	Mitigation Measures Summary	Residual Impact
The Project would potentially conflict with the State of California's Air Resources Board Climate Change Proposed Scoping Plan.	Refer to Mitigation Measures 4.14.1 and 4.14.3 discussed above.	Less than significant (Class II Impact)
The Project has the potential to result in cumulatively significant impacts associated with the increase in GHG emissions and global climate change.	Refer to Mitigation Measures 4.14.1 and 4.14.3 discussed above.	Less than significant (Class II Impact)

EIR = Environmental Impact Report
 ft = feet/foot
 SR-68 = State Route 68

2.0 INTRODUCTION

The Draft Environmental Impact Report (EIR) has been prepared to evaluate the environmental impacts associated with the proposed Corral de Tierra Neighborhood Retail Village Project (Project) at the intersection of Corral de Tierra Road and State Route 68 (SR-68) in the Toro Area in the County of Monterey (County). The Project would require the following discretionary approvals: 1) rezoning to remove the B-8 overlay zoning district from the Site, 2) Standard Subdivision, 3) Use Permit, 4) General Development Plan approval, and 5) design approval. The County is the “public agency which has the principal responsibility for carrying out or approving the project” and as such is the “Lead Agency” for the Project under the California Environmental Quality Act of 1970 (CEQA) and the CEQA Guidelines Section 15367. CEQA requires the Lead Agency to consider the information contained in the Draft EIR prior to taking any discretionary action. This Draft EIR is intended to serve as an informational document to be considered by the County and Responsible Agencies during deliberations on the Project.

The Proposed Site (Site) has been zoned for commercial development since the early 1970s and is the only remaining area zoned for commercial development along SR-68. In 2002, the applicants submitted a land use application to develop the Site as a neighborhood retail village. In 2004, the County determined that an application for the Project was complete. As a result, this Draft EIR has been prepared in accordance with CEQA, as amended (Public Resources Code Section 21000 et seq.), and the CEQA Guidelines for Implementation of CEQA (California Code of Regulations, Title 14, Section 15000 et seq.). This Draft EIR also complies with the procedures established by the County for implementation of CEQA.

Questions regarding the preparation of this document and County review of the Project should be referred to the following person:

Mr. Luis Osorio, Senior Planner
County of Monterey, Resource Management Agency-Planning Department
168 West Alisal Street, 2nd Floor
Salinas, CA 93901
Phone: (831) 755-5177
Fax: (831) 757-9516
Email: osoriol@co.monterey.ca.us

2.1 PURPOSE AND TYPE OF EIR/INTENDED USES OF THE EIR

As previously mentioned, the County is the Lead Agency for the Project under CEQA (CEQA Guidelines Section 15367). CEQA requires the Lead Agency to consider the information contained in the Draft EIR prior to taking any discretionary action. This Draft EIR provides information to the Lead Agency, responsible agencies, and other public agencies, the general public, and decision-makers regarding the potential environmental impacts from the construction and operation of the Project. The purpose of the public review of the Draft EIR is to evaluate the adequacy of the

environmental analysis in terms of compliance with CEQA. Section 15151 of the CEQA Guidelines states the following regarding standards from which adequacy is judged:

“An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.”

Under CEQA, “The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the Project, and to indicate the manner in which those significant effects can be mitigated or avoided” (Public Resources Code Section 21002.1[a]). As previously discussed in Chapter 1.0, Executive Summary, an EIR is the most comprehensive form of environmental documentation identified in CEQA and the CEQA Guidelines and provides the information needed to assess the environmental consequences of a Project. EIRs are intended to provide an objective, factually supported, full-disclosure analysis of the environmental consequences associated with a Project that have the potential to result in significant, adverse environmental impacts.

2.2 PUBLIC REVIEW PROCESS

In compliance with the CEQA Guidelines, the County has taken steps to maximize opportunities for the public and other public agencies to participate in the environmental review process. During the environmental determination process, an effort was made to contact various federal, State, regional, and local governmental agencies and other interested parties to solicit comments and inform the public of the Project. This included the distribution of the Notice of Preparation (NOP) on September 21, 2007 to various agencies, organizations, and interested persons throughout the County and surrounding area. The Project was described, the scope of the environmental review was identified, and the agencies and the public were invited to review and comment on the NOP. Agencies, organizations, and interested parties not contacted or who did not respond to the request for comments about the project during the NOP phase currently have the opportunity to comment during the minimum 45-day public review period for the Draft EIR.

The Draft EIR is being distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code 21092(b)(3).

All comments received from agencies and individuals on the Draft EIR would be accepted during the public review period. All comments on the Draft EIR should be sent to the following County contact:

Mr. Luis Osorio, Senior Planner
County of Monterey, Resource Management Agency-Planning Department
168 West Alisal Street, 2nd Floor
Salinas, CA 93901

Phone: (831) 755-5177
Fax: (831) 757-9516
Email: osoriol@co.monterey.ca.us

Following the close of the review period, the County would prepare responses to all comments and would compile these comments and responses into a Final EIR. The County of Monterey Board of Supervisors would make findings regarding the extent and nature of the impact as presented in the Final EIR. The Final EIR will need to be certified as complete by the County prior to making a decision to approve or deny the project. Public input is encouraged at all public hearings before the County.

2.3 SCOPE OF THIS EIR

As required by CEQA Guidelines, Section 15126.2, this Draft EIR must consider and discuss the significant environmental effects of the Project including: 1) direct and indirect and short- and long-term significant effects on the environment; 2) significant environmental effects which cannot be avoided if the Project is implemented; 3) significant irreversible environmental changes which would be caused by the Project should it be implemented; and 4) growth inducing and cumulative impacts of the Project.

2.4 FORMAT OF THIS EIR

Pursuant to CEQA Guidelines, Section 15120, this Draft EIR contains the information and analysis required by Sections 15122–15131. Each of the required elements is covered in one of the Draft EIR chapters described below.

Chapter 1.0: Executive Summary

Chapter 1.0 contains the Executive Summary of the Draft EIR document and lists all significant project impacts, mitigation measures that have been recommended to reduce any significant impacts of the Project, and the level of significance of each impact following mitigation. The summary is presented in a matrix (tabular) format as Table 1.B.

Chapter 2.0: Introduction

Chapter 2.0 contains a discussion of the purpose and intended use of the Draft EIR, a background on project initiation and the public review process, and a description of the EIR format.

Chapter 3.0: Project Description

Chapter 3.0 includes a discussion of the project's location, geographical setting, the current land use and zoning, and the project's goals, objectives, characteristics, components, and phasing.

Chapter 4.0: Existing Environmental Setting, Environmental Analysis, Impacts, and Mitigation Measures

Section 15123 of the CEQA Guidelines requires that the EIR Summary identify areas of controversy, including issues raised by other agencies and the public. Areas of controversy identified during the development of the EIR include the following:

- Long Term Water Supply
- Proposal to remove the B-8 Overlay Zone
- Traffic Congestion and Circulation

This Draft EIR addresses each of these issues and concerns in detail. This Draft EIR examines long-term impacts, construction-related impacts, and cumulative environmental impacts. It also identifies significant adverse environmental impacts and proposes mitigation measures designed to reduce or eliminate potentially significant impacts. Chapter 4.0 provides conclusions for each environmental issue area regarding the level of significance after implementation of mitigation measures.

Chapter 5.0: Long-Term Implications of the Project

Chapter 5.0 includes CEQA-mandated discussions of the following topics as required by Section 15126 of the CEQA Guidelines: (1) significant environmental effects that cannot be avoided; (2) significant irreversible environmental changes that would result from implementation of the Project; and (3) growth-inducing impacts of the Project.

Chapter 6.0: Alternatives Analysis

In accordance with CEQA, the alternatives discussion in Chapter 6.0 describes a reasonable range of alternatives that could feasibly attain most of the objectives of the project and are capable of eliminating any significant adverse environmental effects or reducing them to a level of insignificance. The four alternatives analyzed in Chapter 6.0 include: (1) No Project; (2) LEED Silver: Reduced Water Consumption/Full Recharge Alternative; (3) Reduced Density/Redesigned Alternative; and (4) Alternative Project Location.

Chapter 7.0: Mitigation Monitoring and Reporting Plan

This section contains a listing of all mitigation measures contained in the EIR, the requirements of the mitigation measures, the applicant's responsibility and timing for implementation of these measures, the party responsible for verification, the method of verification, and verification timing.

Chapter 8.0: Organizations and Persons Contacted

This section contains a list of all the organizations and persons contacted during the preparation of this Draft EIR.

Chapter 9.0: References

This chapter contains a bibliographic list of references used in the preparation of this EIR and technical studies.

Chapter 10.0: List of Preparers

This chapter contains a list of all the individuals, by agency and company, involved in the preparation and production of this Draft EIR.

2.5 AGENCY USE OF THE DOCUMENT

The County, as the CEQA Lead Agency, is responsible for administering the preparation of the EIR and will be responsible for certifying the Final EIR. Lead agency decision makers (i.e., the Board of Supervisors) will use the Final EIR as an informational document to assist in the decision-making process, ultimately resulting in the approval, denial or assignment of conditions to the project.

2.6 COUNTY CONTACT AND PROJECT SPONSORS

Key contact persons are as follows:

Lead Agency: County of Monterey
Resource Management Agency - Planning Department
168 West Alisal Street, 2nd Floor
Salinas, CA 93901
Contact: Mr. Luis Osorio.

Project Applicant: Omni Resources, Ltd
5 Corral de Tierra Road
Corral de Tierra, CA 93908

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3.0 PROJECT DESCRIPTION

3.1 PROJECT SITE LOCATION AND SETTING

The proposed project, herein referred to as the Project is located in an unincorporated part of Monterey County (County) known as the Toro Area. The Toro Area is approximately 74 square miles (sq. mi.) and is located in the north-central portion of the County, southwest of the City of Salinas and east of the Monterey Peninsula (refer to Figure 3.1). Regional access to the Toro Area is provided by SR-68, a two-lane highway that follows the Toro Area's northwest boundary and US Highway 101 (US 101), which runs generally east of the Toro Area boundary. SR-68 is one of two access routes to the Monterey Peninsula, the other being Route 1 from the north and south. The terrain of the Toro Area varies greatly and includes ridgelines, steep ravines, rolling hills, valleys, and floodplains. Elevations range from 40 feet (ft) to 3,600 ft above mean sea level.

The proposed project site, herein referred to as the Site, is located at the three-legged intersection of Corral de Tierra Road and SR-68¹, a County-designated Scenic Route and a State-designated Scenic Highway respectively. The Site is approximately 10 miles east of the City of Monterey and seven miles southwest of the City of Salinas (refer to Figure 3.2). The Site consists of two lots (APN 161-581-001 and 161-571-003) totaling approximately 11 acres of land, and is owned by Omni Resources, LTD. The topography of the Site is relatively flat with slopes ranging from 0 to 3%, and is characterized by ruderal (disturbed) California annual grassland series that is interspersed with mature Coast live oak, and other native and non-native tree species. There are currently 45 mature trees including oak, olive, pine, cedar, eucalyptus, sycamore and walnut on the Site. Of the 45 trees located on the Site, 21 oak, olive, and cedar trees are proposed to be retained and protected. In addition, one large sycamore and one large eucalyptus would also be retained and protected.

The Site is surrounded by small-scale commercial uses to the west and north, and residential uses to the east, west, and south. To the west, across Corral de Tierra Road, there is a small commercial development consisting of a gas station, convenience market, and vacant buildings. Adjacent to the Site, to the north and at the southeast intersection of Corral de Tierra Road and SR-68, is a real estate office. The real estate office is on a site that was previously used as a service station but the station is no longer in operation and the underground tanks have been removed. Additionally, there are public/quasi-public land uses across SR-68 to the north, which include portions of the former Fort Ord, now owned by the Bureau of Land Management, as well as the Cypress Community Church. Adjacent to the Site to the east is the Villas residential condominium community; and to the south is a single-family residential area. The Site is zoned for commercial development according to both the Monterey County General Plan and the Toro Area Plan. Currently, the Site is the only remaining site zoned for commercial development along SR-68 in the Toro Area.

¹ A recent project to realign the driveway to the Cypress Community Church property north of SR-68/Corral de Tierra Road intersection has been approved which will turn what is currently a three-legged intersection into a four-legged intersection.

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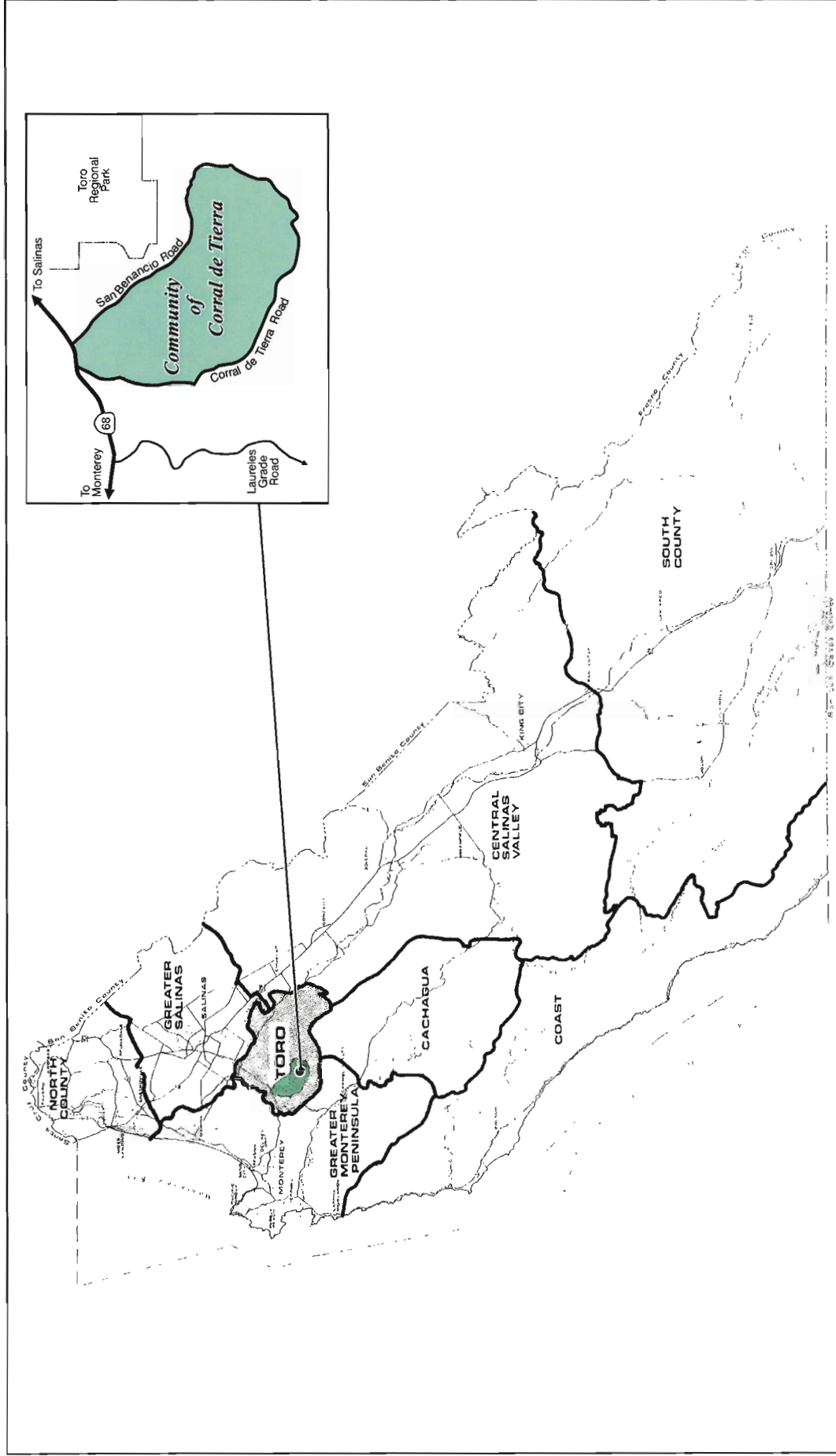
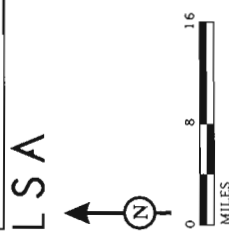


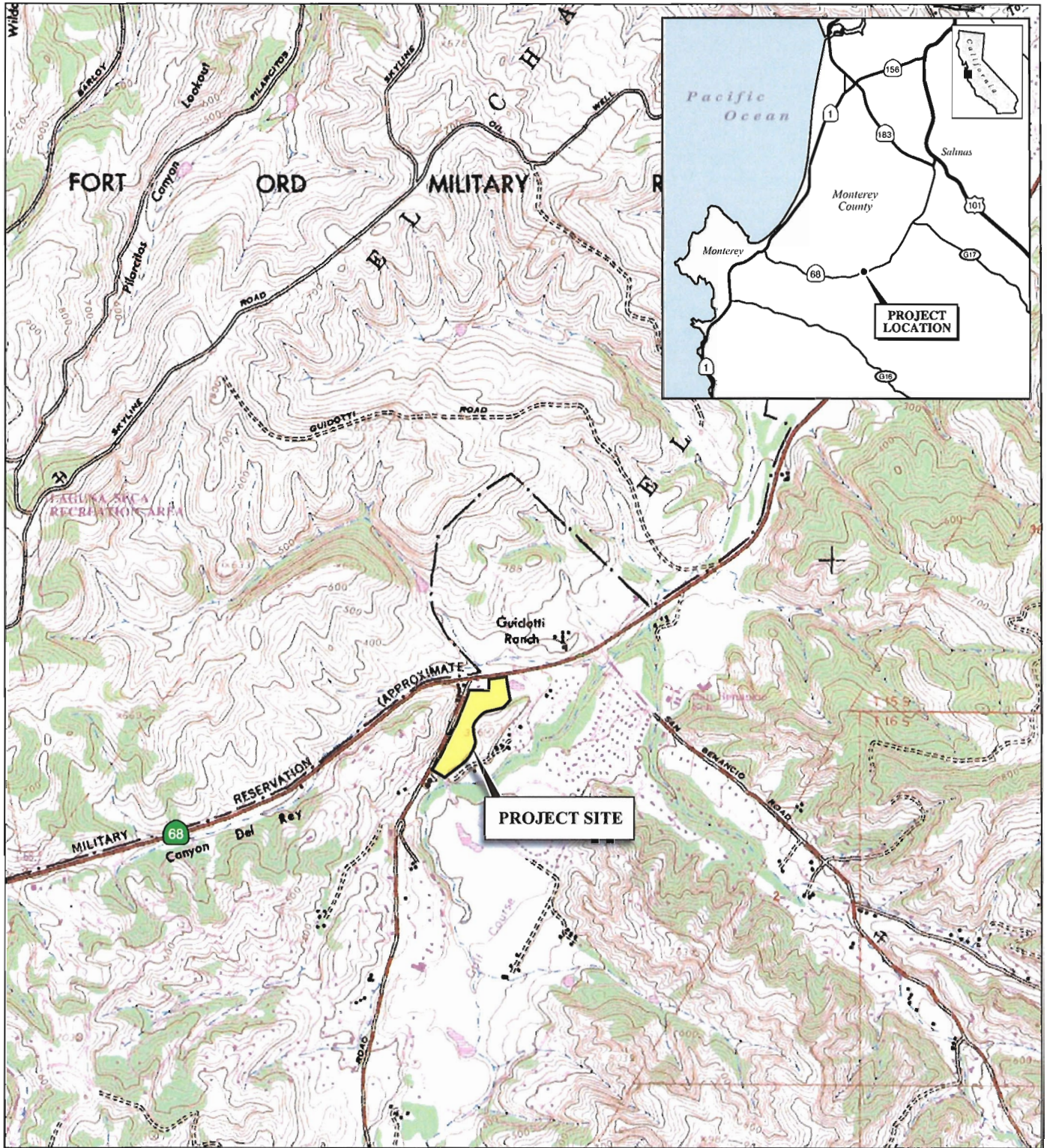
FIGURE 3.1

LEGEND
 - Community of Corral de Tierra (See Inset)



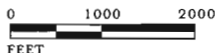
SOURCE: Monterey County Planning Department
 I:\MOC0701G\Toro Area Boundary.cdr (12/6/07)

Corral de Tierra Neighborhood Retail Village Project
 Toro Area Boundary



LSA

FIGURE 3.2



SOURCE: USGS 7.5' QUADS - Scaside & Spreckels, Ca.

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Corral de Tierra Neighborhood Retail Village Project
Project Location

3.2 PROJECT OBJECTIVES

The objectives of the Project are to:

- Establish a retail neighborhood shopping village and office uses to meet demands currently not being fulfilled in this portion of the County.
- Provide a sufficient scope of goods and services to reduce the need for residents of the Toro Area to travel on SR-68 to Salinas or Monterey for their daily needs.
- Develop the only remaining commercially zoned parcel of land in the Toro Area of the Monterey County General Plan.
- Create a sense of place and identity where the greater Corral de Tierra Community can gather for shopping, services, dining and social interaction.
- Create a commercial design of high quality consistent with the configuration of the Site and compatible with the rural character of the Toro Area.
- Place a retail center centrally located between the developed areas of Serra Village and the top of Laureles Grade Road.
- Utilize existing utility capacity available to the Site, including public utility water and sewage treatment.
- Develop a center of adequate size and quality to be financially feasible and capable of attracting on a sustained basis high-quality tenants consistent with the needs and desires of Toro Area residents.
- Provide a variety of retail and office uses consistent with the commercial designation of the Site as identified in the Toro Area Plan.

3.3 PROJECT CHARACTERISTICS

The Site is designated as Commercial by both the Monterey County General Plan - Land Use Element and the Toro Area Plan. The Site is zoned LC-D-B-8 (Light Commercial with the Design Review and Building Site Overlay Districts) pursuant to Title 21 of the Monterey County Code (Zoning for Inland Areas). The B-8 overlay zoning district restricts additional development within a substantial area of the Toro Area Plan, including the Site, because of constraints in water availability¹. The Project includes the rezoning of the Site to remove the B-8 zoning overlay to allow the proposed development.

To create the proposed Corral de Tierra Neighborhood Retail Village, the Project includes the subdivision of two existing lots of record encompassing approximately 11 acres into seven lots ranging from 0.72 acre to 2.67 acres (refer to Table 3.A and Figure 3.3). The proposed retail village would include 10 retail buildings, a one-story Market building (grocery store) with a mezzanine as the anchor and a two-story office building, totaling 126,523 sf and a total of 508 surface parking spaces (refer to Table 3.B). Figure 3.4 shows the proposed Conceptual Site Plan.

¹ Refer to Chapter 4.8.2 for background and a description of the B-8 Overlay District regulations, and Chapter 4.8.4 for discussion of the Project's consistency with those regulations.

Table 3.A: Existing and Proposed Lots and Uses

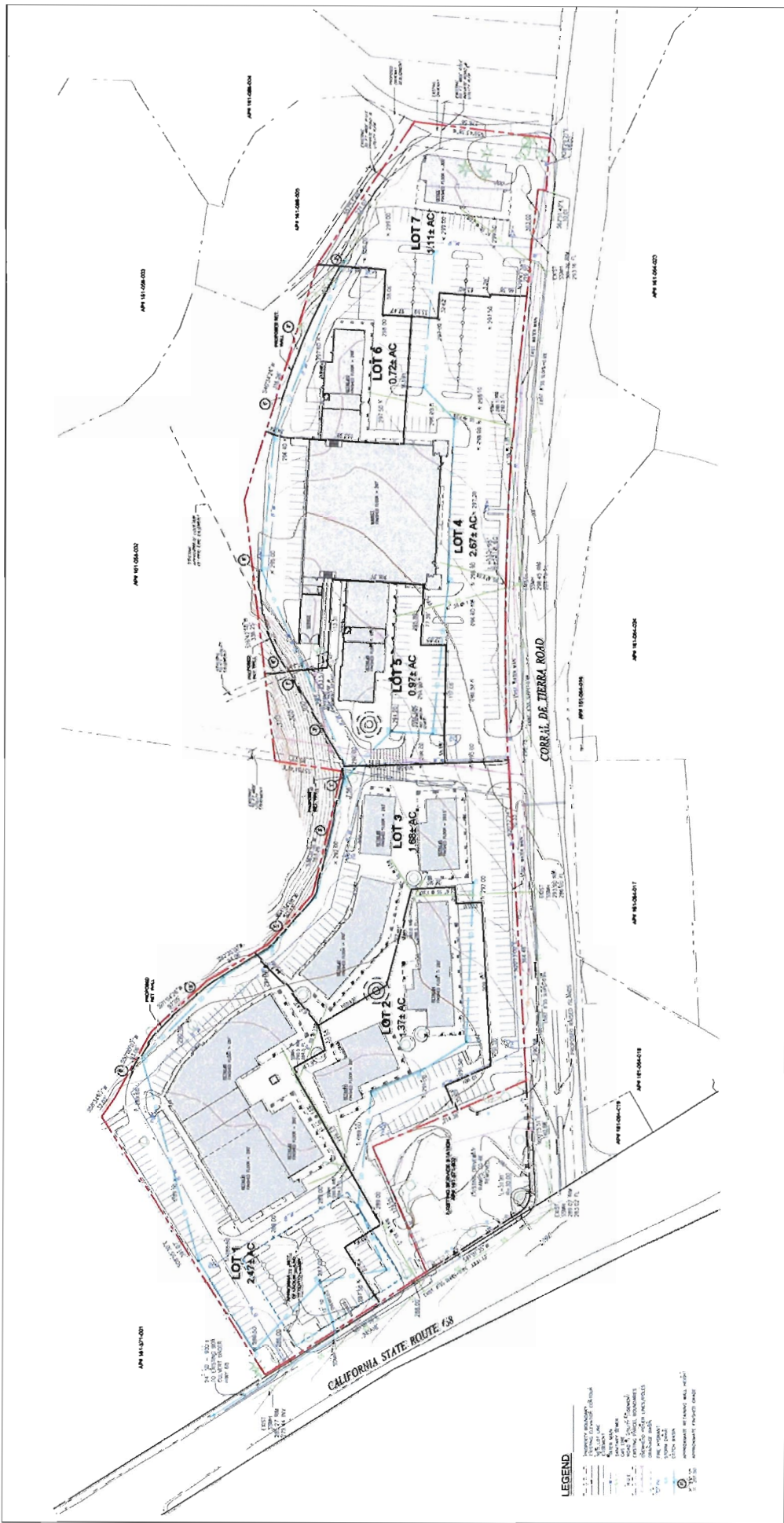
Existing Lots (LC-D-B-Zone)	Proposed Lots	Proposed Uses (LC-D Zone)
Lot 1 5.3 ac.	Lot 1 ~ 2.47 ac. Lot 2 ~ 1.37 ac. Lot 3 ~ 1.68 ac.	Retail and Parking
Lot 2 5.6 ac.	Lot 4 ~ 2.67 ac. Lot 5 ~ 0.97 ac. Lot 6 ~ 0.72 ac.	Grocery, Retail and Parking
	Lot 7 ~ 1.11 ac.	Office and Parking

Note: Uses shown are proposed. Other uses may be undertaken depending on market conditions and as may be allowed in the Light Commercial Zoning District.

Table 3.B: Proposed Building Uses, Square Footage, and Heights

Building Number and Use	Building Square Footage	Building Stories (Building Height)
Retail Building No. 1	12,000 sf (10,000 sf first story + 2,000 sf mezzanine)	2 stories (31 ft)
Retail Building No. 2	4,000 sf	1 story (31 ft)
Retail Building No. 3	6,200 sf	1 story (31 ft)
Retail Building No. 4	6,875 sf	1 story (23 ft)
Retail Building No. 5	4,200 sf	1 story (23 ft)
Retail Building No. 6	15,000 sf (9,000 sf first story + 6,000 sf second story)	2 stories (31 ft)
Retail Building No. 7	7,700 sf	1 story (31 ft)
Retail Building No. 8	3,000 sf	1 story (31 ft)
Grocery Store (Market)	40,073 sf (30,434 sf first story + 9,639 sf mezzanine)	2 stories (45 ft)
Retail Building No. 9	8,037 sf	1 story (45 ft)
Retail Building No. 10	7,100 sf	1 story (45 ft)
Office Building	12,338 sf (6,414 sf first story + 5,924 sf second story)	2 stories (37 ft)

The retail component and the grocery store would occupy 114,185 sf, while the office building would occupy 12,338 sf. Most of the retail buildings would be located on the area of the existing northern parcel in a “village” setting; the grocery store would occupy approximately 40,000 sf and would be located on the southern parcel with two of the retail buildings attached to it; the office building would occupy 12,338 sf and would be located in the southernmost portion of the Site. The parking areas are proposed mostly in the areas fronting on both Corral de Tierra Road and SR-68 and along a truck circulation/delivery area and fire truck access lane on the eastern boundary of the Site. Tenant mix and area designations have been blended in response to market research and demographics. Establishments that may be developed as part of the retail component include, but would not be limited to, a drug store, hardware store, sporting goods store, bank, florist, mail store, post office branch, video, barber/beauty salon, dry cleaner drop-off/pick-up facility, day care center, and various small restaurants. Figures 3.5a, 3.5b, and 3.5c show the Floor Plans and Elevations.



LSA

FIGURE 3.3

Corral de Tierra Neighborhood Retail Village Project
Vesting Tentative Map

0 60 120
FEET

SOURCE: Wilbur Smith Engineers

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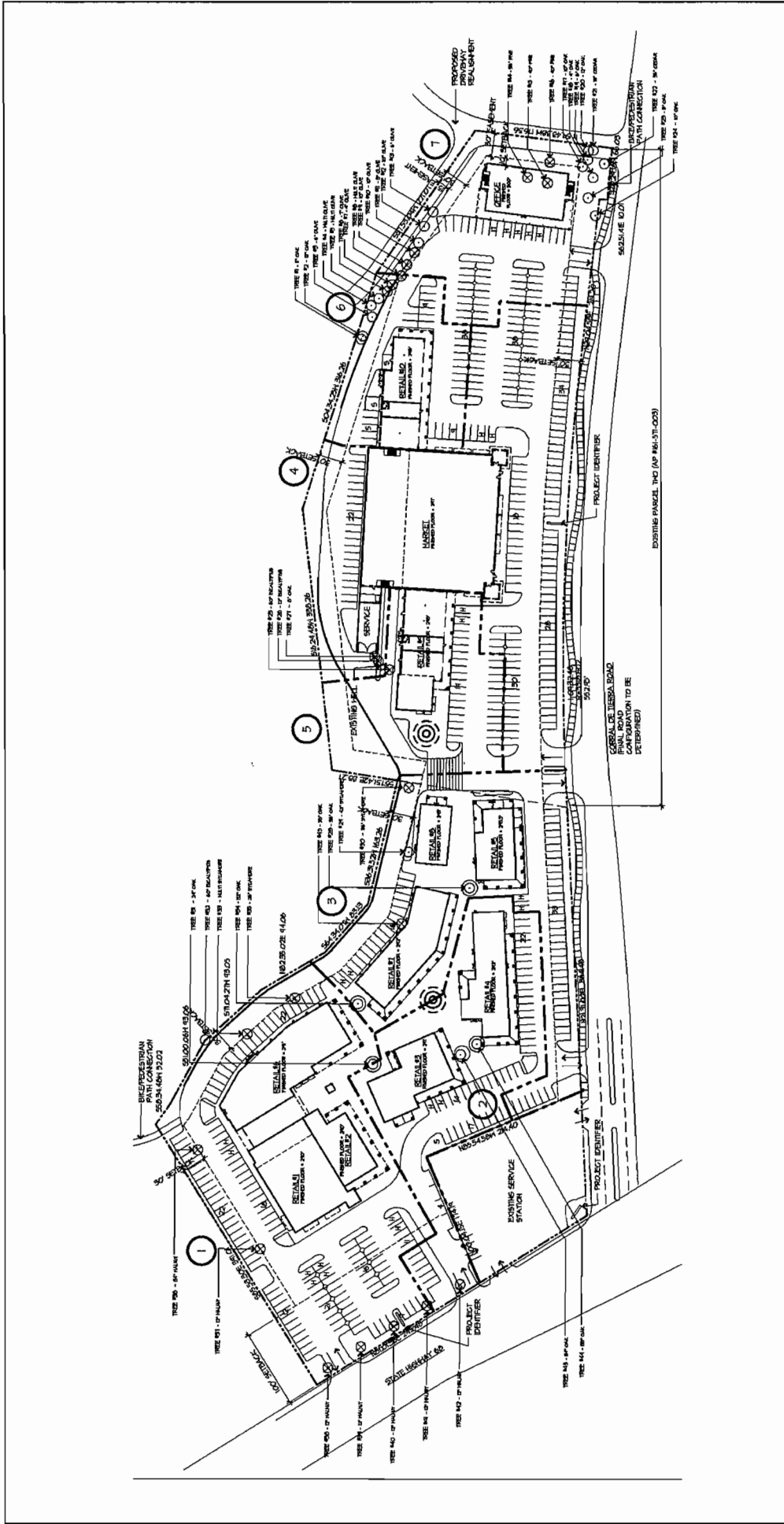


FIGURE 3.4

Corral de Tierra Neighborhood Retail Village Project
 Conceptual Site Plan

LSA



SOURCE: HardsFlow.com, LTD.

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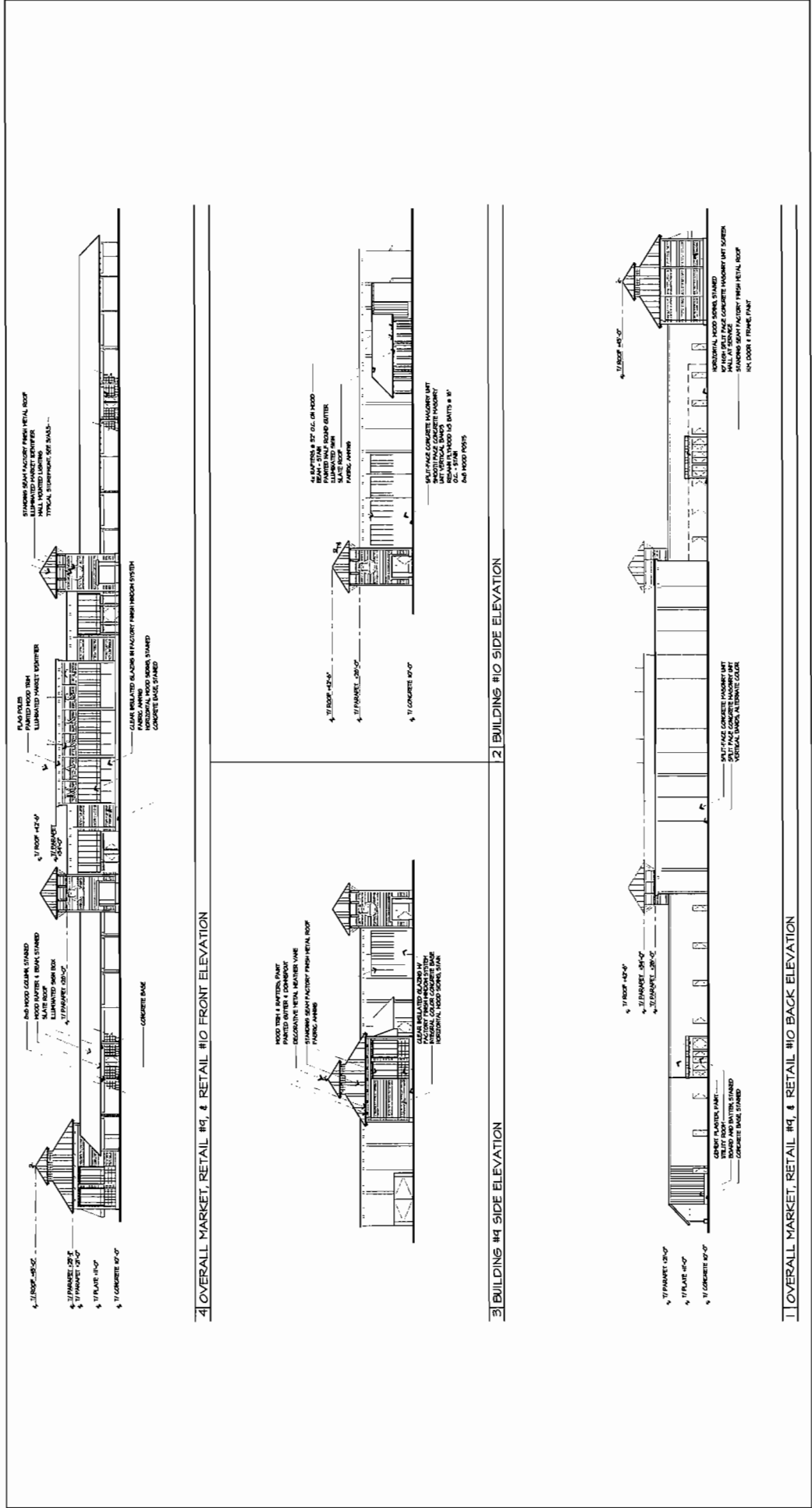
The Project's design vision and concept is to create a shopping village and not a shopping center or strip mall. The scale and organization of the buildings focus on a pedestrian core and the creation of a variety of different public spaces. The architectural style is proposed to preserve the Site's natural setting and to be compatible with the rural character of the area. Building design includes some of the features and characteristics of the ranch and farm structures of the surrounding rural areas. Buildings would be designed as a mix of concrete masonry, cement plaster with mission texture, and horizontal wood siding. The roofs would be made primarily of seam factory finish metal and some of the buildings would include wood trim, rafters and wood trusses. Some of the store designs would also include fabric awnings. Building heights would range from approximately 23 ft to 45 ft, with architectural features, (i.e. towers), encompassing the highest parts of the buildings. The overall imagery would create a village complex of individual buildings with a variety of massing, material and color combinations. Figures 3.6a, 3.6b, 3.6c, 3.6d and 3.6e show renderings of the views of the proposed buildings from SR-68 and the proposed parking areas.

The Project includes the removal of two oak trees protected under the Zoning Ordinance, including a landmark oak tree, as well as removal of 22 trees not protected. Trees not proposed for removal would be integrated into the Site's landscaping with plant types and texture to enhance the public spaces. The replacement trees would consist of Coast Live Oak or Valley Oak, minimum five gallon size, measuring 8 inches (in.) at 2 ft above finish grade.

A total of five driveways are proposed for vehicular access to the Site. Three driveways, including the main access, are proposed along Corral de Tierra Road, and two driveways are proposed along SR-68. Two of the driveways are proposed next to the service station site, one on each road. A truck circulation/delivery area and fire truck access lane is proposed along the eastern boundary of the Site. On site vehicular circulation is designed to allow for distinct vehicular and pedestrian zones. A sidewalk is proposed along Corral de Tierra Road connecting the Site's southernmost end to the service station site on the north end. The entryways to the Site would be bracketed by various species of trees. The proposed parking area would include a line of trees along the northeast edge of the Site and along the northern boundary with what is now a lot with a closed service station. Linear landscaping areas, including intermittent trees, are proposed along the Site's frontage on Corral de Tierra Road and SR-68. Trees would also be planted in and amongst some of the interior parking areas. The proposed landscaping plan would create small plazas between the proposed retail buildings that would be anchored by a large tree, such as cherry, pear or sycamore and would be surrounded by concrete bands and a variety of smaller plants around the base. These plazas would also generally include a fountain or bench. Figure 3.7 shows the Conceptual Landscaping Plan.

Water and sewer lines as well as three fire hydrants are available at the Site. The applicant has received can-and-will-serve letters for provision of water and sewer collection services. The Project includes low-flow water fixtures, drought-tolerant landscaping, the installation of sewer transmission lines, storm drainage facilities (refer to Figure 3.4), and the installation of 6 inch sanitary sewer lines to carry sewage from the Site to the existing 12inch sewer line located on Corral de Tierra Road along the frontage of the property. Sewage generated by the Project would be treated at the sewer treatment facility located on Reservation Road near Davis Road operated by California Utilities Service. The Project would require approximately 12,700 cubic yards of grading, including approximately 6,800 cubic yards of cut and 5,900 cubic yards of fill with 900 cubic yards to be exported off site. Grading is required for the overall preparation of the Site, including the construction of an underground storm water retention/detention facility (described below) and grading of a small portion of the base of the hillside to allow development of the access road along the eastern boundary of the property.

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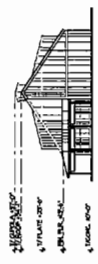


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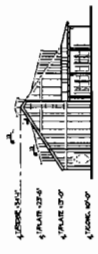
FIGURE 3.5A

Corral de Tierra Neighborhood Retail Village Project
Project Elevations

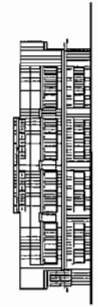
SOURCE: Harb/Invention, LTD.
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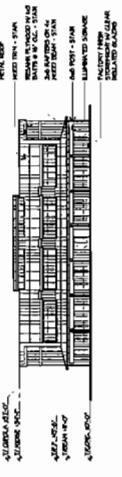
OFFICE - SIDE ELEVATION



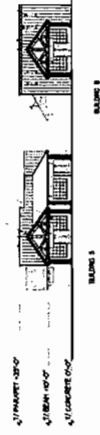
OFFICE - SIDE ELEVATION



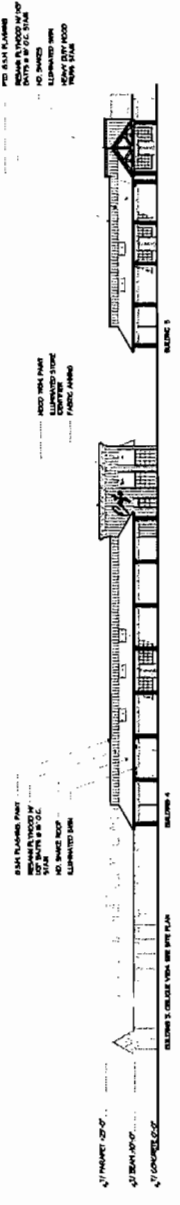
OFFICE - BACK ELEVATION



OFFICE - FRONT ELEVATION



2 | RETAIL BUILDINGS 5 + B SIDE ELEVATIONS



1 | RETAIL BUILDINGS 4 + 5 FRONT ELEVATIONS

LSA

FIGURE 3.5c

Corral de Tierra Neighborhood Retail Village Project
Project Elevations

SOURCE: Hardslow, LTD.

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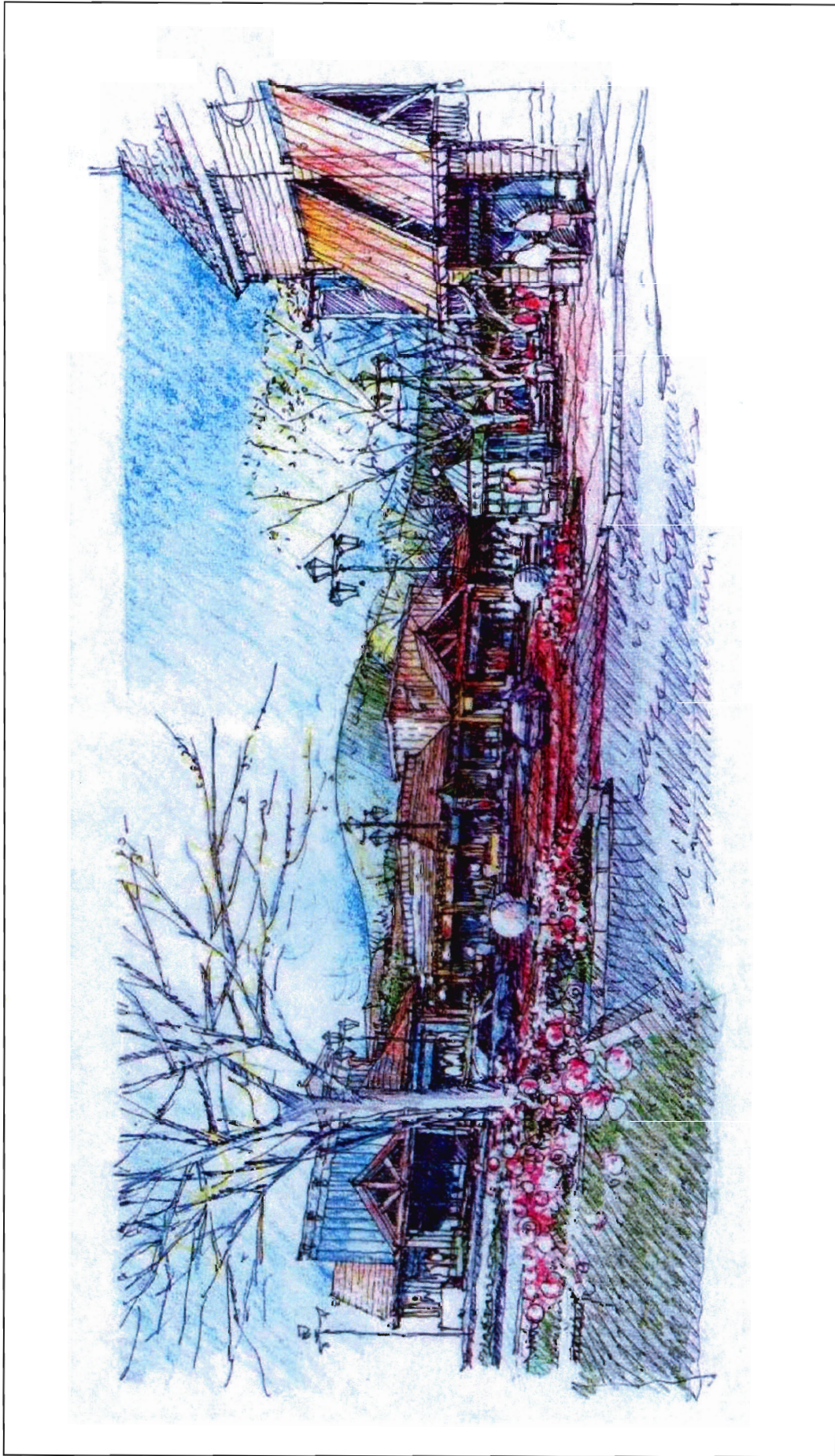
FIGURE 3.6A



Corral de Tierra Neighborhood Retail Village Project
View of Building 1 from Hwy 68

SOURCE: Hart/Howerton

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LSA

FIGURE 3.6b



Corral de Tierra Neighborhood Retail Village Project
View of Buildings 5 and 8 from Market Parking

SOURCE: Hart/Howerton

I:\MOC0901\G\View of Bldgs 5&8.cdr (4/15/10)



LSA

FIGURE 3.6c



Corral de Tierra Neighborhood Retail Village Project
View of Retail Buildings 1, 2, and 3

SOURCE: Hart/Howerton
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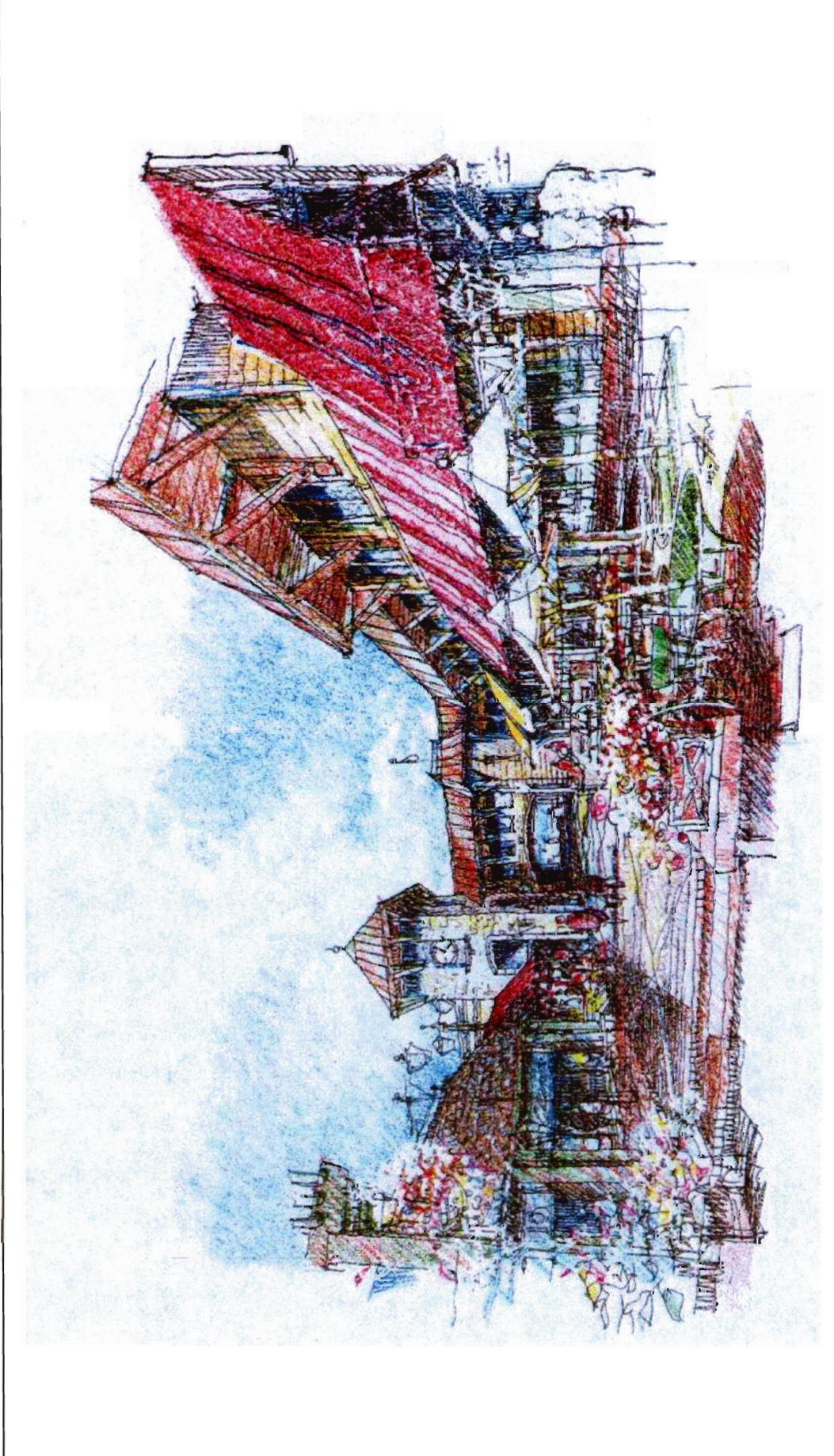
FIGURE 3.6D



Corral de Tierra Neighborhood Retail Village Project
View from Hwy 68

SOURCE: Hart/Howerton

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FIGURE 3.6E

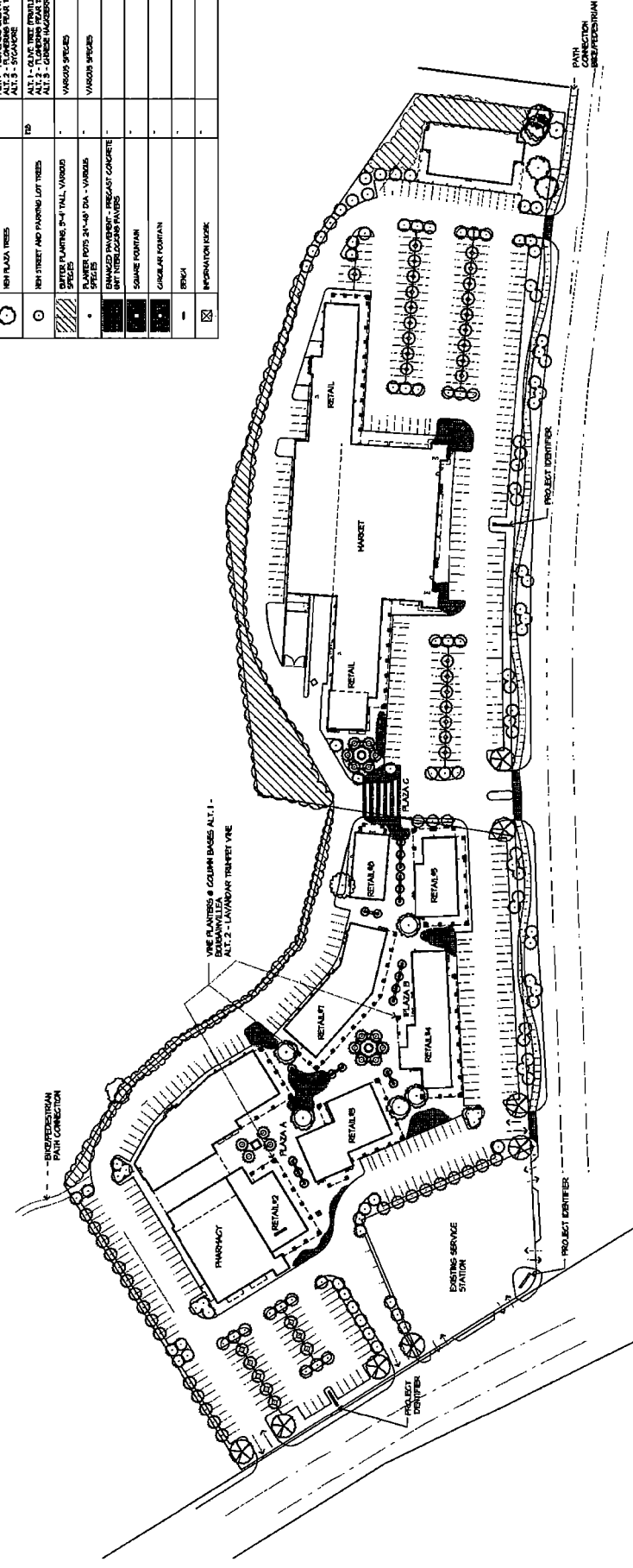
Corral de Tierra Neighborhood Retail Village Project
View of Courtyard Facing Building 6

SOURCE: Hart/Howerton

I:\MOC0901\G\View of Courtyard.cdr (4/15/10)

LANDSCAPE LEGEND

SYMBOL	DESCRIPTION	QUANTITY	PLANTING ALTERNATIVES
(Circle with diagonal lines)	EXISTING WORKING TREE TO BE PROTECTED AND RETAINED	1	
(Circle with horizontal lines)	EXISTING STAGNANT TREE TO BE PROTECTED AND RETAINED	1	
(Circle with vertical lines)	EXISTING DEVELOPED TREE TO BE PROTECTED AND RETAINED	1	
(Circle with cross-hatch)	NEW TREES - SPECIES & SIZE	9	VARIOUS SPECIES
(Circle with diagonal lines)	NEW TREES - SPECIES & SIZE	24	VARIOUS SPECIES
(Circle with vertical lines)	NEW TREES - SPECIES & SIZE	19	ALT. 1 - FLORISSING CHERRY TREE ALT. 2 - LINDEN TREE ALT. 3 - SPYGLASS TREE ALT. 4 - SPYGLASS TREE
(Circle with horizontal lines)	NEW TREES - SPECIES & SIZE	130	ALT. 1 - OLIVE TREE (FRUITLESS) ALT. 2 - OLIVE TREE (FRUITING) ALT. 3 - OLIVE TREE (FRUITING) ALT. 4 - OLIVE TREE (FRUITING)
(Circle with diagonal lines)	NEW STREET AND PARKING LOT TREES	-	VARIOUS SPECIES
(Circle with diagonal lines)	NEW PLAZA TREES	-	VARIOUS SPECIES
(Circle with diagonal lines)	PLANTERS 3'-4" TALL, VARIOUS SPECIES	-	VARIOUS SPECIES
(Circle with diagonal lines)	PLANTERS 21"-40" DIA. - VARIOUS SPECIES	-	VARIOUS SPECIES
(Circle with diagonal lines)	EMBEDDED PAVING - PRECAST CONCRETE AT INTERSECTIONS	-	
(Circle with diagonal lines)	SQUARE FOUNTAIN	-	
(Circle with diagonal lines)	CIRCULAR FOUNTAIN	-	
(Circle with diagonal lines)	BRICK	-	
(Circle with diagonal lines)	INFORMATION MARK	-	



LSA



SOURCE: Hurd/Flowers, LTD.

I:\MOC0901\GT_Landscape Plan.cdr (4/15/10)

FIGURE 3.7

Corral de Tierra Neighborhood Retail Village Project
Landscape Plan

Storm water runoff from the Project would flow through a system of storm drains and catch basins to a proposed underground retention/detention system in the northeast corner of the Site adjacent to SR-68 (refer to Figure 3.8). The system would include a subterranean facility comprised of modular “stormtech chambers” 6 or 8 ft below finished grade and set back 30-50 ft from the buildings. Excess overflow would be directed via a new 24 inch storm drain to an existing box culvert under SR-68 which carries storm water runoff to el Toro Creek. The Project would be supplied by the California American Water Company through the use of the Ambler Park water supply wells, which are within the Corral de Tierra subarea, approximately 500 ft southeast of the Site. All overhead utilities would remain, while any new utilities would be placed underground per County policy requirements.

Lighting plans (refer to Figure 3.9) include poles and “cutoff” fixtures throughout the Project which would eliminate night sky glow; poles and fixtures would blend with the design theme. Parking lighting would be the minimum for the size of the parking area.

3.4 DISCRETIONARY ACTIONS

The discretionary actions requested to be taken by the County as part of the Project include:

- Rezoning of the subject property to remove the B-8 overlay zoning district from the property’s overall LC-D-B-8 zoning designation;
- Standard subdivision tentative map for the division of two existing lots of record of 5.3 and 5.6 ac into seven lots of approximately 2.4, 1.3, 1.6, 0.9, and 0.7 ac respectively;
- Use permit for the development of a new approximately 126,500 square foot community; shopping center, including approximately 114,185 sq ft of retail space and 12,388 sq ft of non-retail space, 508 parking spaces and landscaping areas;
- General Development Plan approval;
- Design approval.

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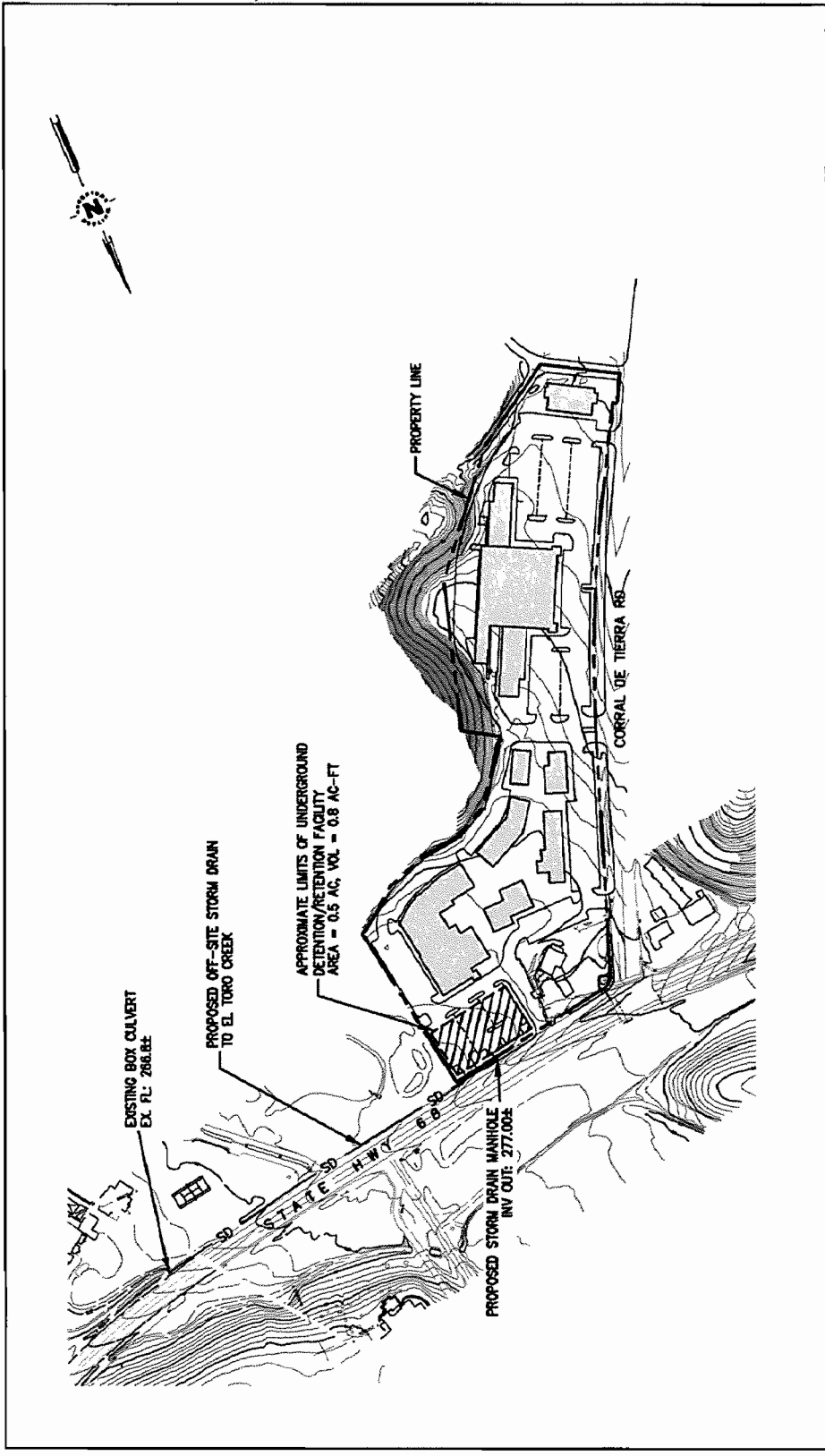
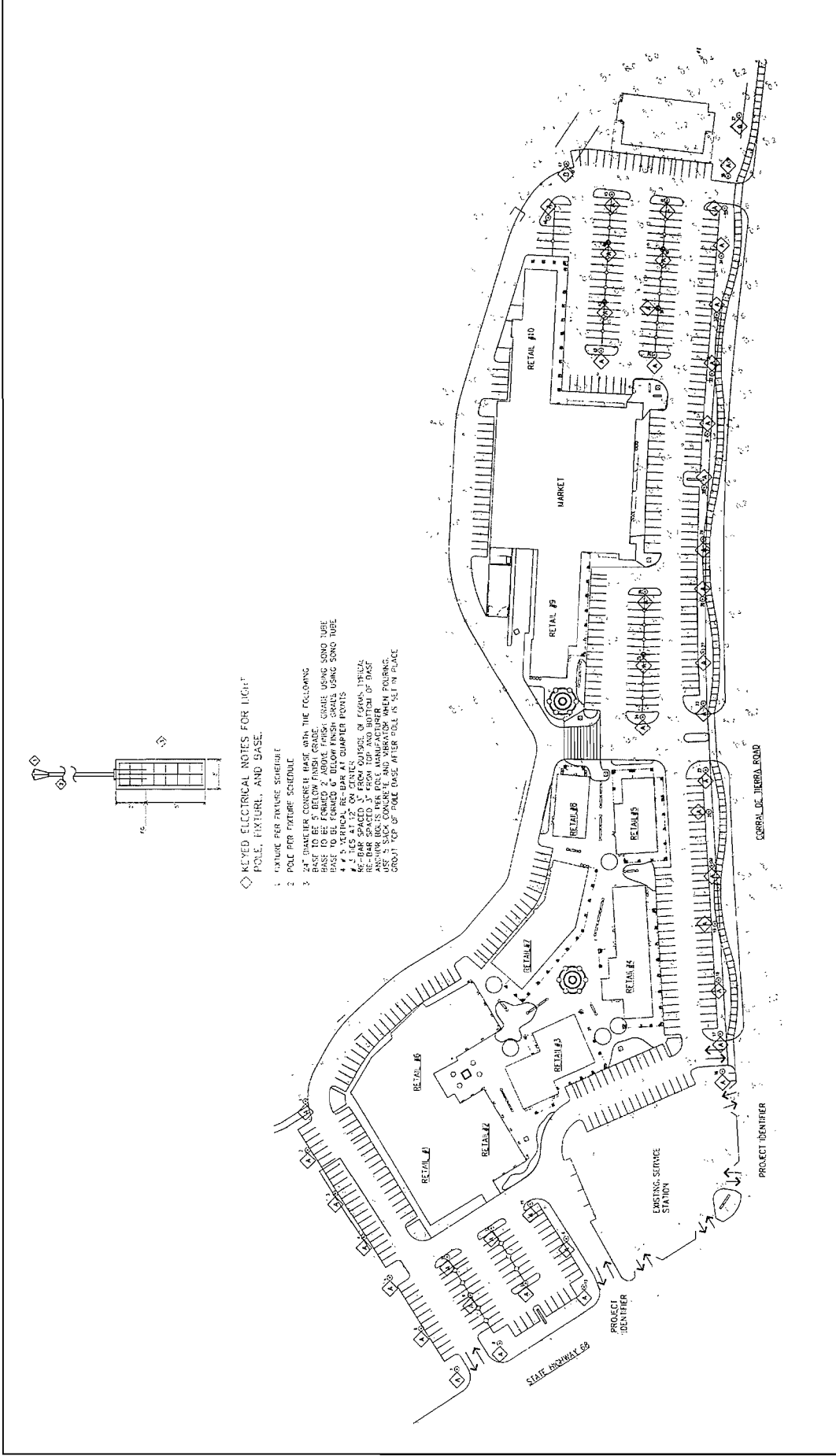


FIGURE 3.8

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Corral de Tierra Neighborhood Retail Village Project
Proposed Stormwater Retention/Retention System

SOURCE: Whitson Engineers
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- ◇ KEYED ELECTRICAL NOTES FOR LIGHT POLE, FIXTURE, AND BASE.
1. FIXTURE PER FIXTURE SCHEDULE
 2. POLE PER FIXTURE SCHEDULE
 3. 24" DIAMETER CONCRETE BASE WITH THE FOLLOWING:
 - BASE TO BE FORMED 2" ABOVE FINISH GRADE USING SOND TUBE
 - BASE TO BE SET 5" BELOW FINISH GRADE
 - BASE TO BE SET 1" BELOW FINISH GRADE
 - 4. 5" VERTICAL REBAR AT QUARTER POINTS
 - 5. 4" TIES AT 12" ON CENTER
 - 6. 4" TIES AT 12" ON CENTER
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 - 100. 4" TIES AT 12" ON CENTER

FIGURE 3.9

Corral de Tierra Neighborhood Retail Village Project
Conceptual Lighting Plan

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4.0 EXISTING ENVIRONMENTAL SETTING, ENVIRONMENTAL ANALYSIS, IMPACTS, AND MITIGATION MEASURES

The following chapter contains impact analysis sections for the environmental topics determined to be potentially impacted by the Project. Chapter 4.0 also provides a description of the affected environment and an analysis for each of the environmental resource areas evaluated. For each environmental impact analyzed, the EIR includes a detailed explanation of the existing conditions, thresholds of significance that would be applied to determine whether the project's impacts are significant or less than significant, analysis of the environmental impacts, and a determination of whether the project has a significant impact. A "significant impact" or "significant effect" means "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project (14 California Code of Regulations [CCR] 15382)." In addition, Chapter 4.0 includes within each environmental impact analyzed a discussion of the cumulative effects of the project when considered in combination with other projects causing related impacts as required by Section 15130 of the California Environmental Quality Act (CEQA) Guidelines. Refer to Table 4.A and Figure 4.1 for the list and location of development projects that were considered in the assessment of cumulative impacts.

Table 4.A: Cumulative Projects List

Development	Status	Land Use	Size
New Office Development at Ryan Ranch Business Park, City of Monterey	Approved	Office	Chomp Medical Offices (Remainder) 138,380 sf 6 & 8 Lower Ragsdale Dr. (Office) 69,985 sf Total: 202,365 sf
St. John the Baptist Greek Orthodox Church, City of Monterey	Approved	Church	8,300 sf
Calvary Chapel Expansion, City of Monterey	Approved	Church	25,932 sf
East Garrison Specific Plan –Fort Ord	Approved	Residential Commercial Institutional Artist Studios Parks & Open Space	1,470 Units 75,000 sf 11,000 sf 100,000 sf 50,000 sf
Monterra Ranch Subdivision	Approved	Residential	151 Units
Pasadera Subdivision	Approved	Residential	43 Units
Oaks Subdivision	Approved	Residential	11 Units
Laguna Seca Office Park – Jessen Office Building	Approved	Office	16,388 sf
Tanimura Family Residential Development - Town of Spreckels	Approved	Residential	73 Units
Wang Subdivision	Pending	Rural Residential	29 Units
Laguna Seca Office Park - Laguna Seca Villas	Pending	Residential	104 Condominium Units
Monterey Horse Park – Fort Ord	Pending	Recreation	16 Units
September Ranch Subdivision – Carmel Valley	Pending	Residential	110 Units
Rancho Canada Subdivision – Carmel Valley	Pending	Residential	281 Units
Harper Canyon (Encina Hills) Subdivision	Pending	Residential	17 Units

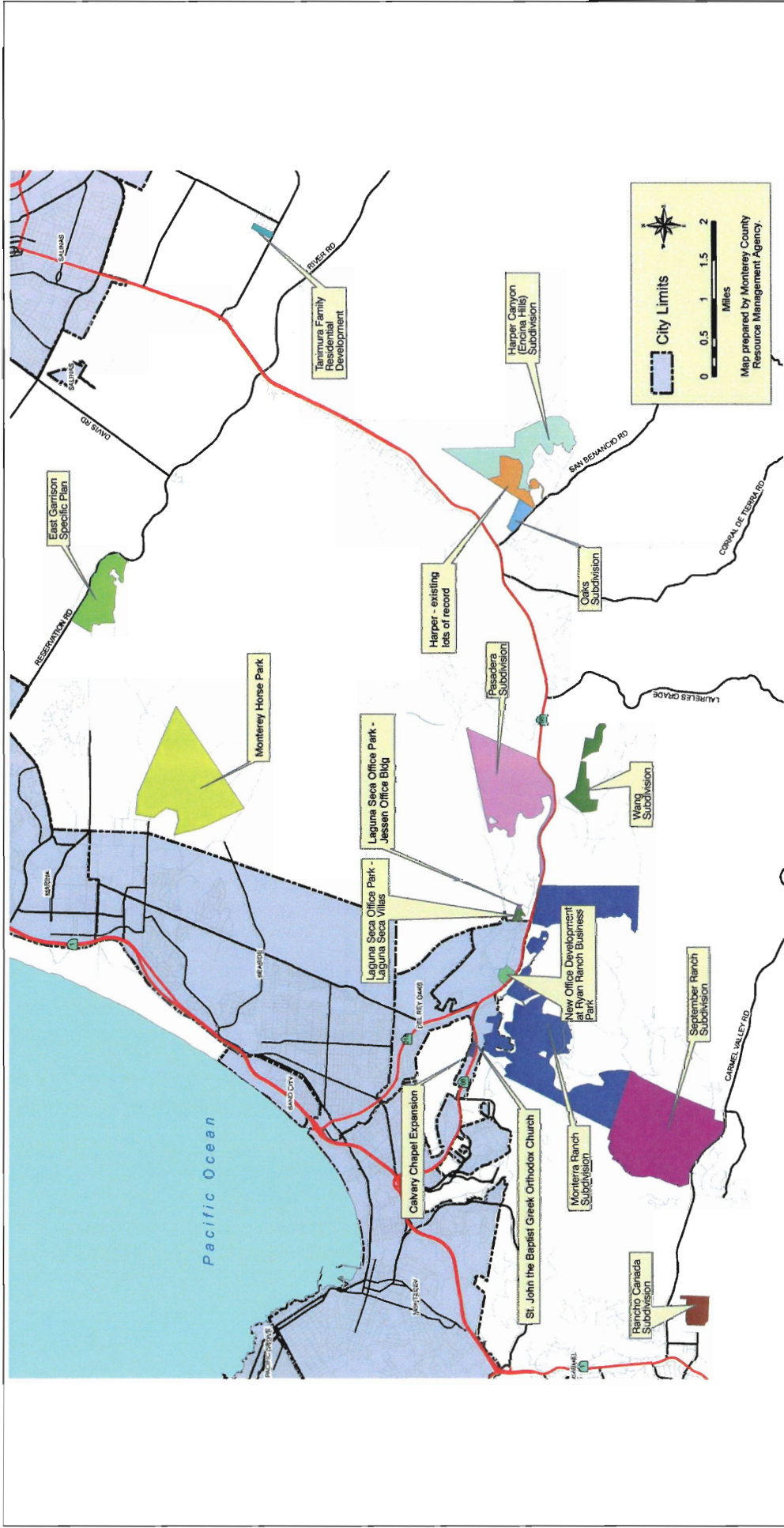


FIGURE 4.1

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Corral de Tierra Neighborhood Retail Village Project
Cumulative Projects

SOURCE: County of Monterey, Resource Management Agency
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4.1 AESTHETIC RESOURCES

This section assesses the effects that development of the Corral de Tierra Neighborhood Retail Village could have on public views of the Site. The analysis considers the visual quality of the Site, the visual quality of the viewshed, and public views of the Site. Public views are defined as views from public locations such as roadways, parks, and public buildings.

4.1.1 Existing Environmental Setting

Regional Setting. The Project is located in the north central area of the County of Monterey known as the Toro Area. The Toro Area lies directly south of the City of Salinas and east of the Monterey Peninsula. Fort Ord property abuts the Toro Area on the northwest, a minor ridgeline defines the south boundary, and the Salinas River forms the northeast boundary. The Toro Area is approximately 74 square miles (sq mi), most of which is dominated by the mountains and rolling hills of the Sierra de Salinas Mountain Range. The terrain of the Toro Area varies greatly; it is composed primarily of rolling grassy hills and valleys. Topography in the area includes steep ravines with slopes exceeding 75 percent, extensive hillsides with slopes exceeding 30 percent, canyon floors and ridgelines with moderate slopes, and the flat floodplains along the Salinas River. Elevations in the Toro Area range from 40 feet (ft) to 3,600 ft above mean sea level (amsl).

The Monterey County General Plan considers the Toro Area to be a scenic viewshed. State Route (SR-68) was designated a State Scenic Highway in 1968 and consists of a 13.6 mile corridor from SR-1 in Monterey to the Salinas River.

Project Setting. The Site is located at the southeast corner of the three-way intersection of SR-68 and Corral de Tierra Road; a potential fourth leg to this intersection has been built on the north side of the intersection at the Cypress Community Church site to improve overall vehicular circulation in the area, which would eventually be connected to make it a four-way intersection. In addition to SR-68 being a State designated Scenic Highway, Corral de Tierra Road is a County designated Scenic Route (County of Monterey 1983). The area surrounding the Site is typically oak savannah with grassland consisting of both native and nonnative grasses. SR-68 passes through the low-point of the valley that extends from the City of Monterey to the Salinas Valley and the City of Salinas. Figure 4.1.1 illustrates the Regional Visual Setting. At the southeast corner of the intersection there is a 0.68 acre parcel that is not a part of the Site (refer to Figure 4.1.2, Local Visual Setting).

The regional landscape establishes the general visual environment of the Site, but the specific visual environment upon which this assessment would focus is determined by defining landscape units and the project viewshed.

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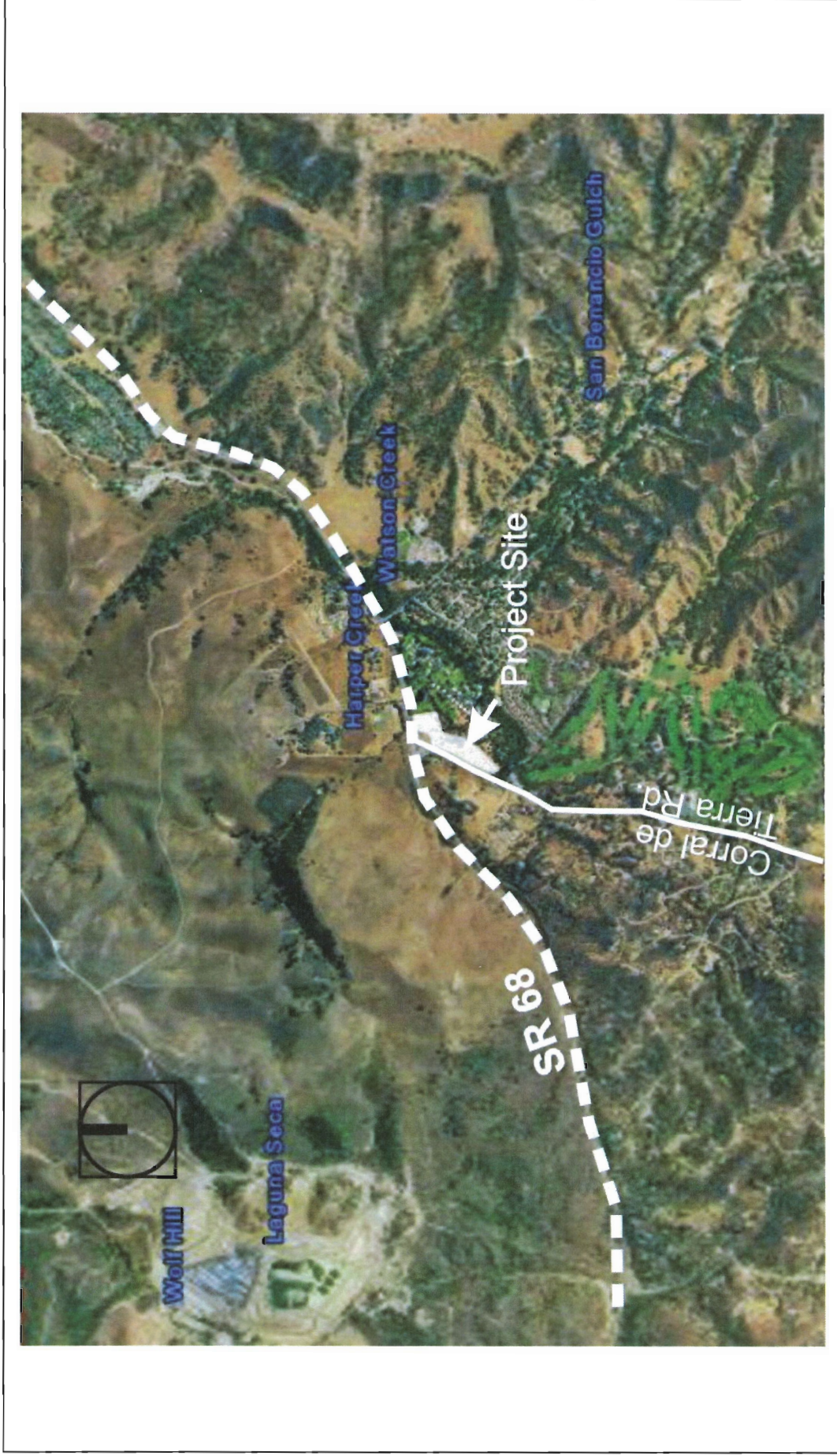


FIGURE 4.1.1

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Corral de Tierra Neighborhood Retail Village Project
 Regional Visual Setting

SOURCE: The Planning Center

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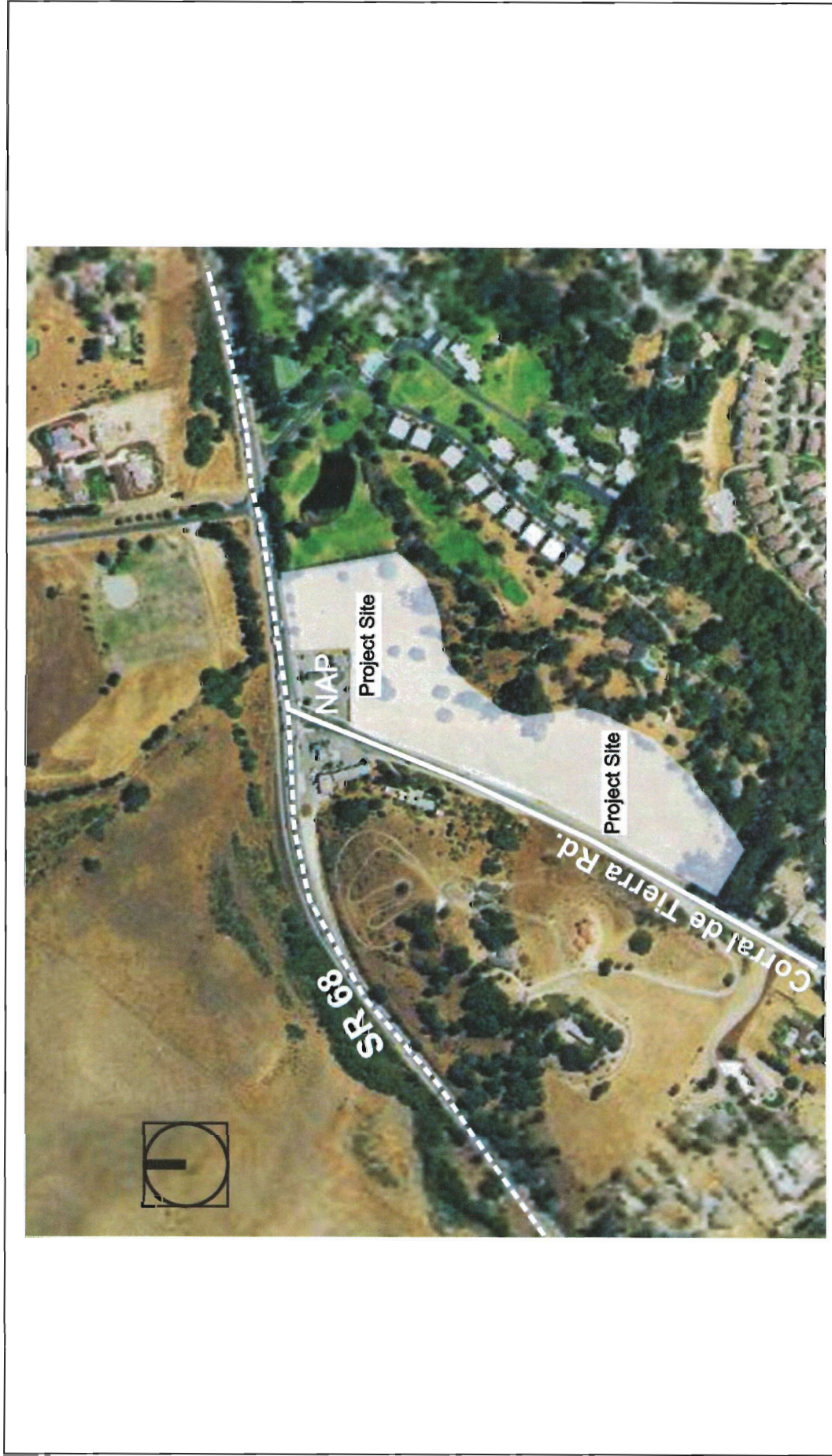
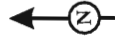


FIGURE 4.1.1.2

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Corral de Tierra Neighborhood Retail Village Project
Local Visual Setting

SOURCE: The Planning Center

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Surrounding Land Uses. Both sides of SR-68 have limited development with some commercial, residential and commercial recreational uses, such as golf, visible from the highway. The Villas residential golf development is located on the south side of SR-68 just east of the Site. The Villas has 63 residential units and a 10-hole golf course. Northeast of the Site at the southeast quadrant of SR-68 an older limited commercial development (Toro Café) exists on the south side of SR-68. There is also limited commercial development consisting of three buildings immediately west of Corral de Tierra Road at the intersection with SR-68. On the north side of SR-68 across from the Site are less than 10 single-family residences as well as the Cypress Church. The church property consists of two parcels on a total of 21.7 acres. Further north of these uses are Ford Ord Military Reservation lands.

4.1.2 Regulatory Setting

Sensitivity regarding aesthetic issues is reflected in County land use plans and guidelines as well as Caltrans Standard Environmental Reference (Chapter 27) for State Scenic Highways. The following regulatory setting includes relevant policies identified in the Monterey County General Plan and the Toro Area Plan. The consistency of the Project with relevant plan policies pertaining to aesthetic resources can be found in Table 4.8.1, and is discussed in Chapter 4.8.5.

Monterey County General Plan. The Monterey County General Plan (1982) lists policies and objectives with the goal of maintaining and enhancing a system of scenic roads and highways through areas of scenic beauty.

***Objective 40.2:** Employ a cooperative planning effort among all public and private interests to implement appropriate land use techniques and controls for maintaining the scenic beauty and atmosphere of the scenic corridor.*

***Policy 40.2.1:** Additional sensitive treatment provisions shall be employed within the scenic corridor, including placement of utilities underground, where feasible; architectural and landscape controls; outdoor advertising restrictions; encouragement of area native plants, especially on public lands and dedicated open spaces; and cooperative landscape programs with adjoining public and private open space lands.*

***Policy 40.2.2:** Land use controls shall be applied or retained to protect the scenic corridor and to encourage sensitive selection of sites and open space preservation. Where land is designated for development at a density which, should maximum permissible development occur, would diminish scenic quality, the landowner shall be encouraged to voluntarily dedicate a scenic easement to protect the scenic corridor.*

Toro Area Plan. The philosophy of the Toro Area Plan (County of Monterey General Plan, amendment 1983) includes, among other things, preservation of the important visual elements that give the Toro Area its identity. The Toro Area Plan identifies native trees, ridgelines, frontal slopes, and scenic road corridors as especially critical.

***Policy 7.2.1 (T):** Landowners and developers shall be encouraged to preserve the integrity of existing terrain and natural vegetation in visually sensitive areas such as hillsides and ridges.*

Policy 7.2.2 (T): *Native and native compatible species, especially drought resistant species, shall be utilized to the extent possible in fulfilling landscaping requirements imposed as conditions of discretionary permits.*

Policy 26.1.6.1 (T): *Within areas of visual sensitivity as indicated on the Toro Visual Sensitivity Map, no development shall be permitted without a finding by the Board of Supervisors or its designee that such development will not adversely affect the natural scenic beauty of the area. Additionally, areas of visual sensitivity shall be reviewed critically for landscaping and building design and sighting which will enhance the scenic value of the area.*

Policy 26.1.20.1 (T): *Lighting of outdoor areas shall be minimized and carefully controlled to preserve the quality of darkness. Street lighting shall be as unobtrusive as practicable and shall be consistent in intensity throughout the Toro Area.*

Policy 40.2.4 (T): *The County shall require a 100-foot building setback on all parcels adjacent to County and State scenic routes. The 100-foot setback will also apply to areas designated on the Toro Visual Sensitivity Map (Toro Area Plan, Figure 9) as critical viewshed. This setback is established without causing existing structures to become nonconforming and without rendering existing lots of record unbuildable. Critical viewshed areas shall also have open space zoning applied to the 100-foot setback area (added 7/31/84) (amended 5/22/90).*

Policy 40.2.5 (T): *The County shall require newly created parcels to have building sites outside of the critical viewshed (added 7/31/84).*

Figure 9 of the Toro Area Plan, Visual Sensitivity and Scenic Highways, referred to in Toro Area Plan Policy 40.2.4, is provided in Figure 4.1.3, and the Critical Viewshed and Area of Visual Sensitivity on the subject property, are provided in Figure 4.1.4.

Monterey County Zoning Ordinance. The County has provided regulations for the protection and preservation of oak and other specific types of trees as required in the *Monterey County General Plan*, area plans and master plans. The Monterey County Zoning Ordinance, Title 21 of the County Code, provides site development standards and other development regulations for zoning categories. The following subsections of the ordinance are applicable to the Project pertaining to aesthetic or visual resource changes.

For development in the “Light Commercial” (LC) Zoning District, the following site development standards, in part, pertain to building height and exterior lighting:

Section 21.18.070: Site Development Standards.

A. Structure Height and Setback Regulations.

1. *The maximum structure height is 35 feet unless superseded by a structure height limit noted on the zoning map (e.g., “LC/(24’)” would limit structure height to 24 feet.*

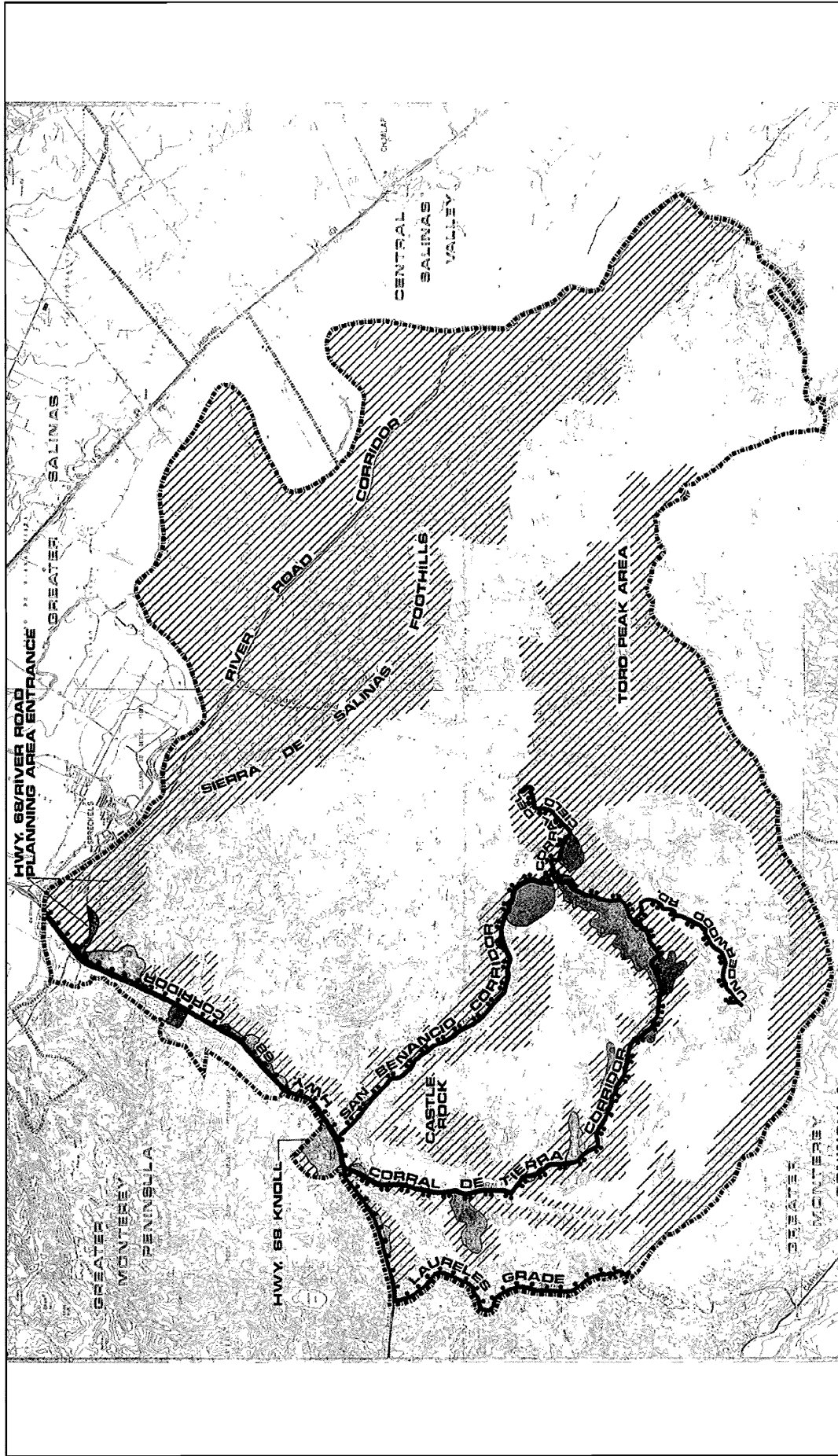


FIGURE 4.1.3

LSA

LEGEND

- 100' SETBACK
- CRITICAL VIEWSHED
- AREAS OF VISUAL SENSITIVITY
- STATE-DESIGNATED SCENIC HIGHWAY/ROUTE
- COUNTY-DESIGNATED SCENIC ROUTE

Corral de Tierra Neighborhood Retail Village Project
 Visual Sensitivity and Scenic Highways

SOURCE: Monterey County Planning Department, 1984; Toro Area Plan Citizens Advisory Committee, 1983

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2. *Setbacks for developments in the LC district are established by the approval of the General Development Plan where such a plan is required.*

E. Lighting Plan Requirements

All exterior lighting shall be unobtrusive, harmonious with the local area and constructed or located so that only the area intended is illuminated and off-site glare is fully controlled. The location, type and wattage of the exterior lighting must be approved by the Director of Planning and Building Inspection (Resource Management Agency-Planning Department) prior to the issuance of building permits or the establishment of the use.

Section 21.64.260: C. Regulations. *Except as provided in Subsection 21.64.260F of this section, the following regulations apply:*

1. No oak or madrone tree six inches in diameter two feet above ground level shall be removed in the North County Area or Toro Area Plan areas without approval of the permit(s) required in Subsection 21.64.260D.

5. No landmark oak tree shall be removed in any area except as may be approved by the Director of Planning and Building Inspection (Resource Management Agency-Planning Department) pursuant to Subsection 21.64.260D. Landmark trees are those trees which are 24 inches or more in diameter when measured two feet above the ground, or trees which are visually significant, historically significant or exemplary of their species.

Subsection 21.64.260D of the Zoning Ordinance specifies the procedures required by an applicant as part of the permit application for either removal of three or less protected trees per lot (per year), or more than three protected trees per lot per year. The ordinance specifies that replacement ratios for oaks shall be relocated or replaced on a one to one (1:1) ratio per tree removed.

Chapter 21.62 –Height and Setback Exceptions - Section 21.62.030 HEIGHT

Section 21.62.030 B: *“Towers, poles, water tanks, and similar structures may be erected to a greater height than the limit established for the district in which they are to be located, subject to securing a Use Permit (ZA) in each case. Local distribution poles for utilities shall be allowed in all districts and to greater heights than allowed for the districts without a Use Permit.”*

State Scenic Highway Program. As discussed in Section 4.1.1, the Site lies adjacent to SR-68, a State-designated Scenic Highway. Caltrans’ Standard Environmental Reference (SER) provides guidance for analysis of a project’s potential visual effects on a designated Scenic Highway corridor (refer to SER, Chapter 27, www.dot.ca.gov/SER/). The Project must be evaluated to determine whether it has the potential to affect the scenic highway. The State’s visual impact evaluation process is consistent with that of the Federal Highway Administration (FHWA). The FHWA guidance for visual impact assessment is described below in Section 4.1.3.

4.1.3. Methodology

Project impacts to visual resources were determined by first defining the existing visual resources of the Site and the surrounding landscape, and then assessing the potential for adverse visual impacts by applying CEQA Guidelines for thresholds of significance and the policies and objectives found in the Monterey County General Plan, the Toro Area Plan and Caltrans Standard Environmental Reference guidelines, Chapter 27. The Planning Center prepared a visual analysis, incorporated herein, that followed the guidelines outlined in the *Visual Impact Assessment for Highway Projects*, published by the FHWA, March 1981. In accordance with those guidelines, the six steps required to assess visual impacts were performed and are as follows:

1. Define the project setting and viewshed.
2. Identify view sheds for view simulations.
3. Analyze existing visual resources and viewer response.
4. Depict the visual appearance of project alternatives.
5. Assess the visual impacts of project alternatives.
6. Propose methods to mitigate adverse visual impacts.

Areas of visual sensitivity and critical viewshed areas in the Toro area are designated in Figure 9 of the Toro Area Plan (refer to Figure 4.1.3). As discussed further in Section 4.1.5 (Threshold 4.1.1), a significant portion of the Site is designated as critical viewshed and a small portion is designated as an area of visual sensitivity off of Corral de Tierra Road (refer to Figure 4.1.4). This analysis considers the Project's visual and aesthetic changes to the visually sensitive area consistent with County practice and policy.

4.1.4. Impact Significance Criteria

Significance criteria for evaluating project impacts on aesthetic resources are based on Appendix G of the CEQA Guidelines. Implementation of the Project would have a significant impact on aesthetic resources if the Project would:

- Threshold 4.1.1** Have a substantial adverse effect on a scenic vista;
- Threshold 4.1.2** Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Threshold 4.1.3** Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Threshold 4.1.4** Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

4.1.5. Project Impacts

Visual Impact Assessment

The following assessment of potential visual impacts was prepared in accordance with Caltrans and FHWA standard guidance. SR-68 is a Caltrans facility and designated State Scenic Highway as discussed previously.

Landscape Unit. A landscape unit is a portion of the regional landscape and can be thought of as an outdoor room that exhibits a distinct visual character. A landscape unit will often correspond to a place or district that is commonly known among local viewers. Where Corral de Tierra Road descends from the south approaching SR-68 and up to the SR-68 edge is the landscape unit considered for the analysis. It is a relatively flat area with several significant oak trees, open grassland and a white rail fence at the western edge of the road adjacent to Corral de Tierra. This “room” is framed on the east by taller trees at the foot of a significant slope behind the Project and on the west by a fairly abrupt slope at the western edge of Corral de Tierra Road and three commercial buildings at the intersection with SR-68.

This landscape unit has two areas of development that are not a part of the Project. The aforementioned adjacent corner lot has a closed gas station and a currently functioning real-estate office and across Corral de Tierra Road to the west are the previously mentioned existing commercial buildings at the southwest corner of Corral de Tierra Road and SR-68. Figure 4.1.5 illustrates the view of the Landscape Unit from Corral de Tierra Road looking northeast.

Project Viewshed. A viewshed is a subset of a landscape unit and is comprised of all the surface areas visible from an observer’s viewpoint. The limits of a viewshed are defined as the visual limits of the views located from the Project. The viewshed also includes locations where visibility of the Site may be affected by development of the project. Three key public view sheds that include the Site were identified for analysis. The view sheds are the basis for the visual (or view) simulations rendered for this EIR to simulate the change in the Site’s aesthetic and visual character with development of the Project. Figure 4.1.6 shows the locations of the three viewsheds.

Method of Visual Resource Analysis

Identify Visual Character – Visual character is descriptive and non-evaluative which means it is based on defined attributes that are neither good nor bad in and of themselves. A change in visual character cannot be described as having good or bad attributes until it is compared with the viewer response to that change. If there is a public preference for the established visual character of a regional landscape and perception that a project would contrast that character, then potential changes in the visual character should be evaluated.

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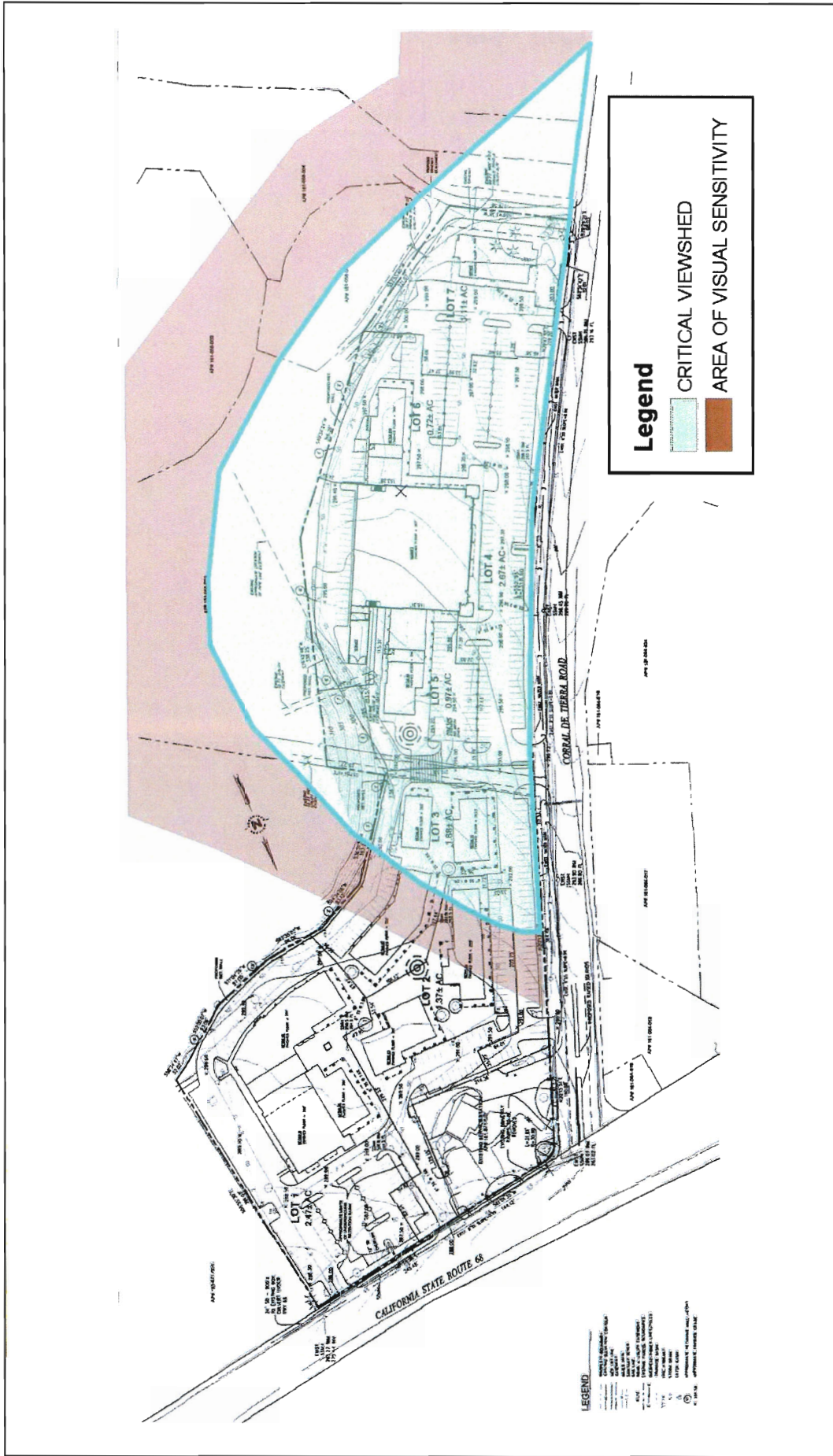
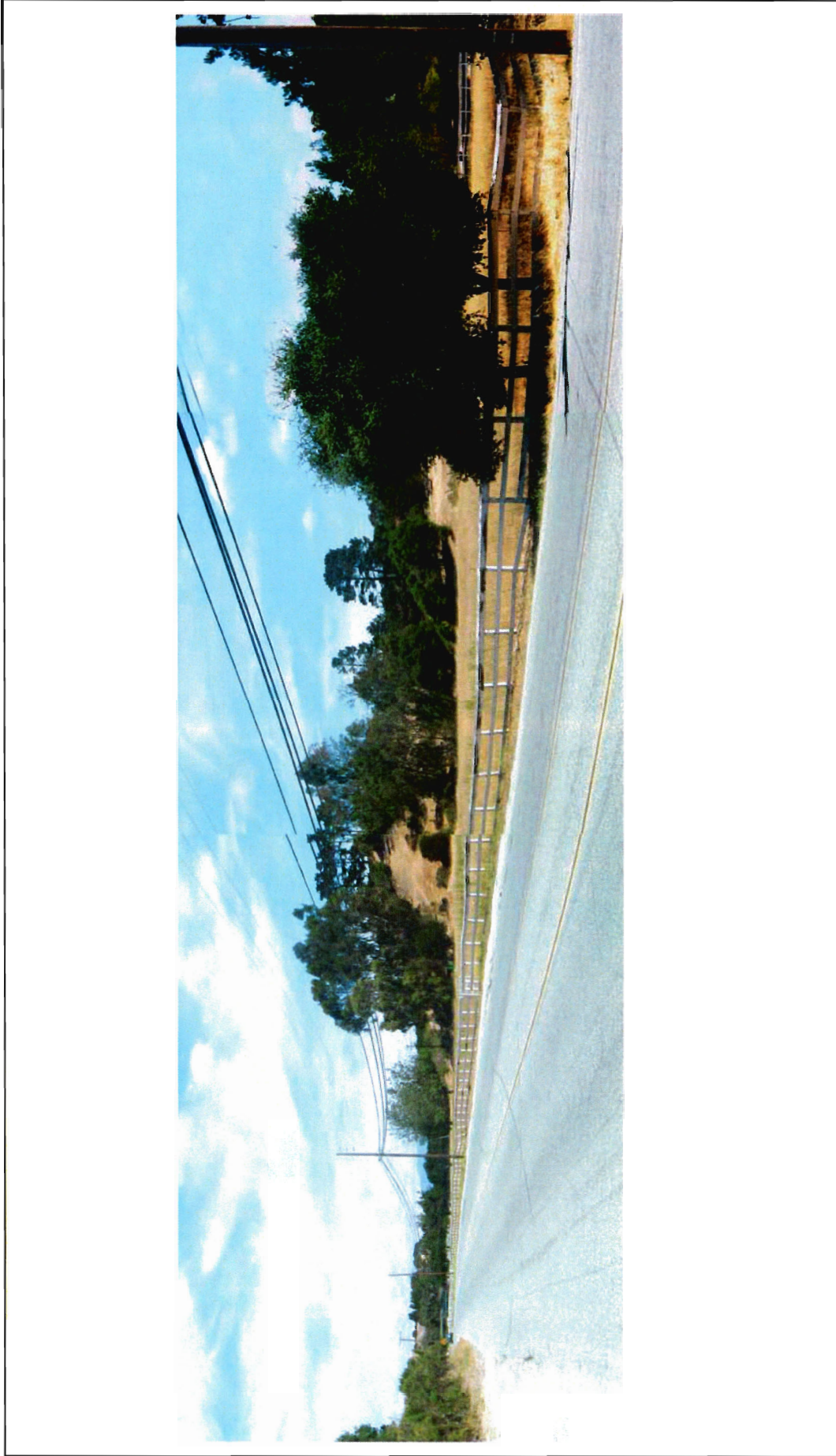


FIGURE 4.1.4

Corral de Tierra Neighborhood Retail Village Project
Critical Viewshed Over Project Site



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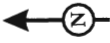


FIGURE 4.1.5

Corral de Tierra Neighborhood Retail Village Project
Landscape Unit

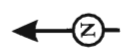
SOURCE: The Planning Center

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LSA

FIGURE 4.1.6



Corral de Tierra Neighborhood Retail Village Project
Viewshed Location Map

SOURCE: The Planning Center

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Assess Visual Quality – Visual quality is evaluated by identifying the vividness, intactness and unity present in the viewshed. The FHWA states that this method should correlate with public judgments of visual quality well enough to predict those judgments. This approach to evaluating visual quality can also help identify specific methods for mitigating each adverse impact that may occur as a result of a project. The three criteria for evaluating visual quality can be defined as follows:

Vividness is the visual power or memorability of landscape components as they combine in distinctive visual patterns.

Intactness is the visual integrity of the natural and man-built landscape and its freedom from encroaching elements. It can be present in well-kept urban and rural landscapes, as well as in natural settings.

Unity is the visual coherence and compositional harmony of the landscape considered as a whole. It frequently attests to the careful design of individual manmade components in the landscape.

Existing Visual Character. The landscape unit created by the surrounding roads, development and slopes is a relatively flat, elongated site of oak savannah type. The character is that of mature oak trees and surrounding open grassland. This grassland is typically brown in the summer and fall turning green in winter and spring. This pattern and palette is typical of the region, both in the rolling hills and flatlands with the exception of riparian corridors, such as the one to the north across SR-68, typified by willows and oaks.

To the north of this landscape unit is SR-68 and its intersection with Corral de Tierra Road. Directly adjacent to the Site, in the area located immediately at the intersection, there is a separate parcel with a temporarily closed service station and a building used as a real estate office. Across Corral de Tierra Road from this parcel, and at the southwest corner of Corral de Tierra and SR-68 are three existing commercial buildings.

This landscape unit is surrounded by a combination of native slopes, mature eucalyptus and a well-screened adjacent development to the east, a dense stand of trees to the south as the valley floor becomes constrained by slopes that gradually increase to the south, and by an adjacent, shrub covered native slope that declines as it reaches the existing commercial buildings at the southwest corner of Corral de Tierra and SR-68.

Existing Visual Quality. The Corral de Tierra landscape unit is both vivid and distinct as the majority of the year the dark green color of the oak tree foliage and trunk contrasts heavily with the blondish, light-brown color of the surrounding grassland seen from the adjacent roadways. Again, this oak savannah type landscape is typical of the region, both in the rolling hills and flatlands.

This landscape unit is intact with the only disruption being at the edges where it abuts the adjacent outparcel and SR-68 on the north, windrow, slopes and eucalyptus which interrupt to the east, and a white rail fence and Corral de Tierra Road interrupting on the west (refer to Figure 4.1.5).

Methods of Predicting Viewer Response. Viewer response is composed of two elements: viewer sensitivity and viewer exposure. These elements combine to form a method of predicting how the public might react to visual changes brought about by a project.

Viewer sensitivity is defined both as the viewers' concern for scenic quality and the viewers' response to change in the visual resources that make up the view. Local values and goals may confer visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis. Even when the existing appearance of a site is uninspiring, a community may still object to projects that fall short of its visual goals.

Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of their view, speed at which the viewer moves, and position of the viewer. High viewer exposure heightens the importance of early consideration of design, art, and architecture and their roles in managing the visual resource effects of a project.

Existing Viewer Sensitivity. As the landscape unit proposed to be developed is typical, distinct and intact, viewer sensitivity to the planned development would be high. Most of the mature, existing oak trees would be retained on-site in their original location while some would be removed and/or relocated (this is covered in greater detail in the Biological Resources section). The loss of open grassland in combination with the loss of the harmonious relationship between the oak trees and the grassland are the contributing factors to the substantial change in the quality of the landscape.

Existing Viewer Groups, Viewer Exposure, and Viewer Awareness. The existing viewer groups listed in order of significance are eastbound and westbound commuters on the SR-68 and predominantly locals traveling Corral de Tierra Road south of SR-68. Additionally, a significant number of tourists travel the SR-68 corridor between Salinas and Monterey.

Viewer exposure, in order of significance, is greatest from Corral de Tierra Road, SR-68 eastbound and SR-68 westbound. Viewer awareness of the landscape is relatively high as the SR-68 corridor opens and closes. In this type of corridor, when the views open following a period of the views being closed by adjacent slopes and/or an adjacent dense landscape, the viewer is highly aware of elements in the open sections of which this is one. Viewer awareness is discussed here from the three different viewpoints as shown in Figure 4.1.6 (addressed in the analysis of view simulations section).

For the eastbound traveler on the SR-68 corridor, the view of the Site is brief as it is impeded by the existing slope and commercial properties along the southern edge of the SR-68 coming to the intersection of Corral de Tierra and SR-68. This view is brief as the viewer is distracted by the signalized intersection, the closed service station and the real estate office building, and the visibility of the Site transitions to the adjacent areas to the east. The brevity of view is also a result of traffic speeds on the SR-68 (during non-peak traffic periods) and the elongated, north-south configuration of the Site.

For the westbound traveler on the SR-68 corridor the view is even briefer due to the relative narrowness of the Site along the Route and its location in an opening between the dense vegetation to the east and the service station buildings which obstruct the view substantially. Following this obstruction, the motorist is arriving upon the intersection of Corral de Tierra and SR-68 and must

look at a 90-degree angle to the south to have an unobstructed view of the Site. As with the eastbound travelers, the brevity of view is also a result of traffic speeds on the SR-68 (during non-peak periods) and the elongated, north south configuration of the Site.

For the northbound and southbound traveler on Corral de Tierra Road viewer awareness is very high due to the unobstructed views of the Site, the elongated, north-south configuration of the Site along the road and the backdrop provided by trees and a small hill on the east side of the Site.

Method of Assessing Project Impacts

In accordance with the FHWA method utilized by Caltrans for visual impact assessment, the visual impacts of a Project are determined by assessing the visual resource change due to the project and predicting viewer response to that change.

Visual resource change is considered to be the sum of the change in visual character and change in visual quality. The first step in determining visual resource change is to assess the compatibility of the Project with the visual character of the existing landscape. The second step is to compare the visual quality of the existing resources with projected visual quality after the project is constructed.

The viewer response to project changes is the sum of viewer exposure and viewer sensitivity to the project. The resulting level of visual impact is determined by combining the severity of resource change with the degree to which people are likely to oppose the change.

Definition of Visual Impact Levels

The following terms define visual impact levels:

Low - Minor adverse change to the existing visual resource, with low viewer response to change in the visual environment. May or may not require mitigation.

Moderate - Moderate adverse change to the visual resource with moderate viewer response. Impact can be mitigated within five years using conventional practices.

Moderately High - Moderate adverse visual resource change with high viewer response or high adverse visual resource change with moderate viewer response. Extraordinary mitigation practices may be required. Landscape treatment required would generally take longer than five years to mitigate.

High - A high level of adverse change to the resource or a high level of viewer response to visual change such that architectural design and landscape treatment cannot mitigate the impacts. Viewer response level is high. An alternative project design may be required to avoid highly adverse impacts.

Analysis of View Simulations

Because it is not feasible to analyze all the views in which the Project would be seen, it is necessary to select several key view simulation points that would most clearly display the visual effects of the project from public vantage points. These simulation locations were chosen to represent the maximum amount of receptors (viewing public) that would potentially be affected by the project. View simulation locations are shown in Figure 4.6, Viewshed Location Map. These are the primary viewsheds as they have the highest number of critical/sensitive receptors of the Site.

For the Project three points were identified from which simulations of the Project were prepared based on the site design plans provided by the applicant:

1. View Simulation 1 depicts the existing and proposed views of the Site for the westbound SR-68 traveler at the Project boundary (refer to Figure 4.1.7).
2. View Simulation 2 depicts the existing and proposed views of the Site for the eastbound SR-68 traveler from the intersection of SR-68 and Corral de Tierra Road (refer to Figure 4.1.8).
3. View Simulation 3 depicts the existing and proposed views of the Site for the northbound Corral de Tierra traveler from the southern Project boundary (refer to Figure 4.1.9).

The simulations with the Project depicted, include trees proposed in the conceptual landscaping plan submitted by the applicant. Tree heights are shown at the approximate size that could be expected in five to seven years from planting the trees proposed in the plan.

View Simulation 1

View simulation 1 is shown in Figure 4.1.7. The view of the Site for the westbound SR-68 traveler does not occur until the dense stand of trees along the south side of the highway ends, at the Site, and the contiguous tree stand located alongside the northeast Project boundary ends at the State route. At that point the existing visual quality and character is comprised of a continuous white rail fence and a few large fruit trees in the foreground, an open grassland ground plane, distant trees background on the left and the existing real estate office building and closed service station on the right. The slope above the existing commercial sites west of Corral de Tierra Road is the background to the existing commercial site at that location.

The Project features at this location include two driveways, a sidewalk, street trees and project identification signage in the foreground, a parking lot on the middle ground and proposed building Nos. 1, 2 and 3 in the background. Approaching the Site from the east, the character on the south side of the road at the Site would be obviously manmade with retail building No. 1 as the most visible feature.



Existing View



View Simulation

LSA

FIGURE 4.1.7

Corral de Tierra Neighborhood Retail Village Project
View Simulation No. 1



Existing View



View Simulation

LSA

FIGURE 4.1.8

Corral de Tierra Neighborhood Retail Village Project
View Simulation No. 2

SOURCE: The Planning Center
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Existing View



View Simulation

LSA

FIGURE 4.1.9

Corral de Tierra Neighborhood Retail Village Project
View Simulation No. 3

The visual character of the existing site is rural and natural, yet, it is not intact as manmade elements encroach from the left (pond and grass covered areas) and right sides (real estate office/service station) of the viewshed at this point. Combined with the existing commercial buildings on the west side of Corral de Tierra Road, the proposed buildings may be the type of retail development proposed which typically takes place at major road intersections where commercial and residential development abut, as is the case here. Even though the portion of the Site visible from this viewpoint is narrow and the time of its visibility for the traveler is short, the changes to the visual quality and character of this portion of the Site would result in a moderately high visual impact due to the addition of non-existing building mass and parking areas and their visibility from the SR-68 scenic corridor.

View Simulation 2

View simulation 2 is shown in Figure 4.1.8. The existing visual quality and character, as generally discussed earlier, consists of a diverse range of visual elements due to the lack of development visible on the north side of SR-68 and the wide range of manmade elements on the south side of the highway. Intersection controls, striping and the existing commercial lots and structures dominate the viewshed with the property, a small hill and trees in the background.

The view of the Project from this viewpoint would be essentially buffered and split by the buildings in the closed service station site. The features of the project visible from this view would primarily be those located in the southwestern edge of the Site, alongside Corral de Tierra Road, to the right of the closed service station. The trees proposed along the eastern side of Corral de Tierra Road, once mature, would be the most prominent of features visible from this viewpoint, with the parking lot in the middle ground behind the trees and the hillside on the Site's southeastern boundary in the background. The entry to the project from Corral de Tierra Road, next to the closed service station site would also be visible in the foreground and few of the project buildings would be clearly visible from this intersection due to the linear nature of the placement of the proposed trees.

This visual quality is not intact with many centrally located manmade elements interrupting the unity and vividness. The visual impact of the project from this viewpoint with the three-way signalized intersection and existing commercial uses dominating the view, would be considered moderate due to the buffered visibility of Retail Building Nos. 1, 2, 3, 6 and 7, in the interior portions of the Site.

View Simulation 3

View Simulation 3 is shown in Figure 4.1.9. The existing visual character is rural with no development occurring on the slope to the west of Corral de Tierra Road (on the left side of the viewshed) or anywhere in the immediate viewshed. The visual quality is quite intact, vivid and a unified whole. The sole interrupting elements outside of Corral de Tierra Road itself are the utility poles and overhead utility lines. While the white rail fence on the Site is manmade, it is continuous, in keeping with the rural character and to some degree defines the outdoor room (landscape unit).

The Project features from this viewpoint are the southerly project entry, landscape edge, walkway and trees (several existing oaks among them) in the foreground with the proposed office building immediately behind them in the southern portion of the Project (immediate right in View Simulation 3). The middle ground and ground plane would be dominated by parking lot with a background of some building elements, including the proposed Market Building, seen through the trees as the traveler moves north on Corral de Tierra towards SR-68.

A viewer moving from the residential areas south of the Site would only be directly exposed to commercial development when reaching the Corral de Tierra/SR-68 intersection. Proposed landscaping and trees would filter the direct visibility of the proposed buildings in this area. Yet, the viewer sensitivity of the Site for northbound travelers on Corral de Tierra Road, would be expected to be moderately high as a result of changes to the existing visual resources and designated critical viewshed, and mostly, as a result of the length and duration of the visibility of the Site at this location. The change to the visual quality and character would be moderately high as the intact, vivid and unified elements of the Site would be interrupted.

Thresholds of Significance Analysis

The following discussion assesses the potential visual and aesthetic changes and/or impacts that the Project may have pursuant to the CEQA and the County's thresholds of significance.

Threshold 4.1.1 Have a substantial adverse effect on a scenic vista

From the three key views of the Site, the existing vista of the Site is of an open, flat grassland area dotted with trees, sloped hills in the immediate background, white fencing, and fruit trees along the border of the Site. The Site is undeveloped and contributes to the rural character and aesthetic quality of the area. A portion of the Site is also within an Area of Visual Sensitivity and a Critical Viewshed as shown in the Toro Area Plan (refer to Figure 4.1.4). The general visibility of the area including the Site is considered a scenic vista due to its undeveloped state. However, existing adjacent commercial uses – including those located across Corral de Tierra Road to the west, the real estate office and service station facilities adjacent to the Site, and residential development on the north side of SR-68 and northeast of the Site along SR-68- break up the its visibility and openness.

The Site is zoned for commercial development; visual impacts must be balanced with the zoning designation. The project has been designed with the intent of being consistent with and fitting to the rural character of the area, however, the development of the Site with 126,523 sf of buildings, surface parking lots and landscape areas would permanently alter the visual setting and scenic nature of the existing undeveloped site as viewed from public vantage points as discussed herein. From the State-designated Scenic Highway, SR-68, views of the Site for both westbound and eastbound viewers would be altered by the Project.

From View No. 1, westbound on SR-68, the visual quality of the existing site is not intact as man-made elements (existing commercial and residential development) encroach from the left and right. There would be a moderately high visual impact due to the addition and visibility of non-existing building mass and parking areas. The visual impacts to this view resulting from the addition and visibility of a parking lot and Retail Building Numbers 1 and 2 adjacent to the Highway's scenic

corridor would be moderately high and considered a potentially significant impact requiring mitigation.

From View No. 2 looking southeast at the Site from the intersection of SR-68/Corral de Tierra Road, the existing view is not intact due to the many centrally located man-made elements interrupting the unity and vividness; the elements include the existing real estate building, parking lot at the intersection corner adjacent to the Site, as well as the existing commercial uses across Corral de Tierra Road north of the Site. Even though already broken by existing buildings, the existing views of the base of the hills behind the Site to the southwest, currently open to viewers along the adjacent roadways, would be somewhat reduced. The Project would cause a moderate impact to the view from this vantage point due to the visibility of the mass of the proposed buildings in the interior of the view.

The visual impacts from the project on View 3, northbound on Corral de Tierra Road would be moderately high as the existing view from this vantage point is of an intact rural landscape, vivid and unified. Viewer sensitivity is high and the existing rural elements would be interrupted by the Project. The visual impact on the scenic vistas of this portion of the Site from Corral de Tierra Road would be moderately high. As defined earlier in this section, moderate to moderately high adverse change to the visual character of the Site can be mitigated through conventional and extraordinary design and landscape practices. These impacts would be considered potentially significant requiring additional mitigations or changes to the Project.

Implementation of Mitigation Measures. 4.1.1 and 4.1.2 requiring additional landscaping areas, buffer landscaping and reduction of the size of parking areas, as well as implementation of County standard conditions of approval in Section 4.1.8 pertaining to building materials and colors, site landscaping, and lighting, would reduce potential aesthetic adverse impacts on the scenic vista of the visually sensitive area and critical viewshed to less than significant levels.

Threshold 4.1.2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway

The Site is adjacent to a State Scenic Highway, SR-68 and a County-designated Scenic Route (Corral de Tierra Road). The Site is not within the scenic highway right of way, but is directly adjacent to the highway corridor. The small hillside and trees located just easterly of the Site are considered a scenic resource visible mostly from Corral de Tierra Road. The buildings proposed at the base of this hillside (Market Building and Retail Building Numbers 9 and 10) would impede the visibility of the base of the hillside from the road. The Project includes removal of 22 (approximately half) of the existing trees in the Site, including two protected oak trees one of which is a landmark tree (over 24" in diameter), two eucalyptus, seven walnut, five olive and three sycamore trees. The Project would not impact any other individual scenic resources; no rock outcroppings or historic buildings are on the Site, and the small hills along the south-southeastern portion of the Site would be minimally graded. Even though the Project would be located at the base of the hillside adjacent to the Site, and the buildings would not protrude in the hillside, the introduction of the project to an otherwise intact site with intact views, and the resulting changes to the viewshed, would be considered a significant potential impact.

The Zoning Ordinance requires that removed oak trees at least six inches in diameter at 2 ft above ground level be replaced at a 1:1 ratio. The proposed landscaping plan includes replacement of the two oaks, one being replaced with a specimen-sized 24-inch boxed oak. The landscaping plan also includes a significant amount of trees along the western boundary of the Site along Corral de Tierra Road. The plan also proposes several specimen-sized trees, accent trees in pots, plaza trees. Landscape and water saving regulations require the use of native and drought tolerant landscape plant species.

Implementation of Mitigation Measure 4.1.1 requiring additional landscaping areas, buffer landscaping and reduction of the size of parking areas, as well as implementation of conditions of approval in Section 4.1.8 pertaining to lighting and under grounding of utilities, would reduce potential aesthetic adverse impacts on the scenic corridor of SR-68 to less than significant levels.

Mitigation measures included in this section for the Project Landscape Plan would require replacement of lost trees. However, significant short-term aesthetic impacts would result from the loss of mature trees on-site until the replaced trees and woody vegetation of the landscape plan matures.

Threshold 4.1.3 Substantially degrade the existing visual character or quality of the site and its surroundings

As discussed above under Threshold 4.1.1, the Project would alter the existing views of the Site at moderately to moderately high levels, with alterations to View No. 3 from northbound Corral de Tierra Road being the most substantial change to the rural undeveloped condition of the Site. The viewer sensitivity from the SR-68 and Corral de Tierra Road vantage points is considered high as these roadways are designated scenic by the State and County, respectively.

The existing visual character has been as is (not previously developed) historically. Although the existing commercial and residential development along SR-68 around the Site could lead viewers from the highway to expect additional development at the Site (which typically occurs at major road intersections where commercial and residential development abut), the visual character and quality of the Site would be substantially impacted adversely, mostly in consideration of the high viewer sensitivity and scenic highway and road designations. However the impacts from the development of the project would be confined to the visual character of the Site.

Implementation of Mitigation Measure 4.1.2 requiring additional landscaping areas, buffer landscaping and site plan modifications, as well as implementation of conditions of approval related to lighting and under grounding of utilities, would reduce potential aesthetic adverse impacts on the vista of the visually sensitive area and critical viewshed to less than significant levels. These measures would reduce potential aesthetic adverse impacts of degrading the visual character or quality of the site and/or surrounding areas.

Threshold 4.1.4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

The Project would add new sources of artificial lighting on the Site for the planned commercial and office development. The Project would add new lighting along the property edges adjacent to SR-68 and Corral de Tierra Road, within the parking lot areas on-site and with light fixtures on the proposed

retail and office buildings. The applicant's renderings of the Project show free standing lighting with lantern-style lights, two per pole, on the Site. Figures 3.3 through 3.6 in Chapter 3.0 Project Description include the applicant's project renderings. The proposed building elevations show additional types of on-building lights. The additional new sources of light, especially lighting of parking areas, would create an adverse change in nighttime views of the Site and could result in a significant source of lighting in a rural area enjoying significant darkness at night time. This would be considered a potentially significant visual impact.

The project buildings, landscape and other infrastructural features would not cause any substantial daytime glare that would affect the views of the Site from the public vantage points. As shown on the proposed building architectural elevations, materials proposed for the building facing, roofs, and architectural treatments include board and batten, painted cement plaster, metal, shake and slate roofing (on different buildings), wood trim, fabric awnings, and horizontal shiplap wood siding. Window glass and metal or otherwise potentially shiny materials would be required to be non-glare in accordance with County standard conditions of approval to be considered during plan and design review steps.

Mitigation measures in the form of design components in the project lighting plan such as downward directional lighting, containment to areas needed for illumination on and off-site, and unobtrusive lighting design would reduce the potentially significant impact on night time views and night time glare to less than significant. These design components of the project lighting plan would ensure that light spill would be contained on-site and not affect night sky visibility or residents on adjacent hillsides.

4.1.6. Cumulative Impacts

The cumulative study area for aesthetic/visual resources includes the highway corridor along SR-68 from approximately one mile east of the Site to a quarter mile west of the Site. The Site becomes visible within this area as viewers approach the intersection of SR-68 and Corral de Tierra Road. The study area encompasses the view corridors of the highway and roadway and adjacent properties and immediate hills. Other pending development projects in the SR-68 corridor are listed in Table 4.1.A of this EIR. The majority of these foreseeable development projects are outside of the visual cumulative study area of the Project and therefore, the cumulative aesthetic environment is not anticipated to change substantially.

The aesthetics cumulative study area includes both developed and undeveloped lands, including oak savannah on open grasslands, with rolling hills and flatlands, and an oak and willow lined ephemeral creek corridor along the north side of SR-68. Interspersed among the natural environment are single-family residences and a church property on the north side of the State highway, and a golf course development and small commercial development on the south side of the highway. Single-family homes dot the hills to the southwest above the Site.

The Project would result in additional man-made development along the south side of SR-68, State Scenic Highway, at the southeast corner of the intersection with Corral de Tierra Road. The proposed retail village would place a 126,523 square foot commercial development on a generally flat site adjacent to low density residential and minor commercial development and hillsides. The Project would expand the commercial uses in the immediate area, generating a more developed look and feel

to the intersection vicinity, and adding to the visibility of mostly low residential density development already existing along the highway corridor. The Project's contribution to the cumulative visual effect in the study area, however, would not be considerable given the relatively narrow visibility corridors, the short time of visibility of the Project for road travelers, road topography and terrain features, the short view depth of the visual study area as defined by the State highway, as well as the existence of commercial development at the SR-68/Corral de Tierra Road Intersection. The Project is not anticipated to substantially change the cumulative aesthetic environment in the immediate project area and the Project's effect on the cumulative aesthetic change to the study area would be less than significant.

4.1.7 Level of Significance Prior to Mitigation

The Project would cause significant modification of existing views of the Site from public vantage points along SR-68 and Corral de Tierra Road, both designated scenic corridors, as the existing site is undeveloped open grassland with a variety of native tree species; the visual character and quality would be substantially modified from a rural undeveloped to a developed man-made condition.

Potential impacts from new lighting on the Site would be potentially significant. The Project buildings and other infrastructural components would not cause significant impacts from glare.

The Project is not anticipated to substantially change the cumulative aesthetic environment in the immediate project area and the Project's effect on the cumulative aesthetic change to the study area would be less than significant.

4.1.8 Mitigation Measures and Standard Conditions of Approval

The following mitigation measures shall be implemented to reduce potential significant adverse impacts of the Project associated with aesthetics.

Mitigation Measure 4.1.1: State Route 68 Scenic Corridor. Prior to issuance of a grading permit, the County of Monterey, Resource Management Agency-Planning Department RMA-Planning Department shall ensure that the Site plan is modified to:

- Eliminate approximately eight parking spaces in the parking area fronting on SR-68 and increase the landscaping area in this part of the Site to a width of approximately 40 feet to provide additional landscaping and mounding to buffer the visibility of the parking areas and buildings from the SR-68 scenic corridor;
- Eliminate the proposed driveway and four parking spaces adjacent to the existing service station site and convert the area of the driveway into additional pedestrian and landscaping areas consistent with applicable Toro Area Plan policies;
- Provision of an improved transit stop (bus turnout lane or bus stop) consistent with Monterey-Salinas Transit standards and as required by

the mitigation measures contained in the Traffic and Transportation Chapter of the EIR;

- Reduce the total square footage of the Project to correspond with the loss of parking spaces in this area and parking spaces that may be lost per Mitigation Measure 4.1.2.

Mitigation Measure 4.1.2: Corral de Tierra Road County Scenic Corridor. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the Site Plan shall is modified to widen the landscaping area directly in front of the Market building to include additional landscaping and land mounding to buffer the visibility of the proposed Market building and Retail Building numbers 9 and 10 from Corral de Tierra Road, as well as the visibility of the parking areas fronting on this road. If the Site plan changes required in Mitigation Measure 4.12.4 include significant changes to parking and vehicle circulation, the relocation of these buildings towards Corral de Tierra Road could be considered provided that appropriate building materials and colors and additional landscaping features such as mounding are used to buffer the visibility of these buildings.

Mitigation Measure 4.1.3: Building Aesthetics/Hardscape Elements. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the building and overall project design including exterior construction materials, colors and style blend and are consistent with the surrounding natural setting and rural ranch properties of the Corral de Tierra area. Specific design components for the project parking lots shall include materials such as light colored asphalt, light colored interlocking pavers, and/or reinforced gravel products to mimic the existing landscape colors; dark green paint for space striping and recycled plastic vehicle stops.

Mitigation Measure 4.1.4: Landscape Plan. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the landscaping plan is modified by a landscape architect to include the Site plan changes required under Mitigation Measures 4.1.1 and 4.1.2. The plan shall include appropriate tree species to provide maximum shading in the parking areas; shall include native drought-tolerant and rapid growth shrub and tree species to buffer the visibility of the Project from the scenic corridors; xeriscape principles; and shall include such techniques and materials as low precipitation sprinkler heads, bubblers, drip irrigation systems and timing devices. The plans shall be in sufficient detail to identify the location, species, and size of the proposed landscaping and shall include an irrigation plan. The landscaping shall be installed and inspected prior to occupancy. All landscaped areas and/or fences shall be continuously maintained by the applicant and all plant material shall be continuously maintained in a litter-free, weed-free, healthy condition.

Mitigation Measure 4.1.5: Lighting Plan Specifications. A Final Lighting Plan for the Project shall be submitted for review to the County of Monterey RMA-Planning Department prior to issuance of any building permits. The plan would be reviewed for adequacy and its ability to reduce lighting impacts. All exterior lighting shall be unobtrusive, down-lit, harmonious with the local area, and constructed or located so that only the intended area is illuminated and off-site glare is fully controlled. Exterior lights shall have recessed lighting elements. Exterior light sources that would be directly visible when viewed from a common public viewing area, as defined in Section 21.06.195, shall be minimized to provide only minimum safety requirements. The lighting shall comply with the requirements of the California Energy Code set forth in California Code of Regulations, Title 24, Part 6. The plan shall include the following components to minimize adverse visual effects during nighttime:

- All exterior project light lamps shall be focused downward within the Site boundaries to avoid light spill upward to the night sky or out on adjacent properties; this includes luminaries with a distance of 2.5 times the mounting height from the property boundary;
- The majority of the lighting on-site shall be limited to business hours only, with minimal lighting left on during off-business hours for security purposes. The lighting plan shall be reviewed by the County Sheriff's Department for consistency with security and safety requirements;
- Project exterior luminaries with more than 1,000 initial lamp lumens shall be shielded to direct lighting downward and within the Site; and exterior luminaries with more than 3,500 initial lamp lumens shall meet the Full Cutoff IESNA (Illuminating Engineering Society of North America) Classification;
- All interior project lighting shall have a maximum candela value such that the light falls within the buildings;
- Lamps shall be rural in style to be consistent with the rural character of the Site and surrounding community.

Standard Condition 4.1.6: Underground Utility Lines. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall verify that plan specifications include notes specifying that all utilities shall be placed underground.

4.1.9 Level of Significance after Mitigation

The above prescribed mitigation measures and those of the Biological Resources section would reduce potentially significant project-related impacts to aesthetic/visual resources, visual character and areas of visual sensitivity and critical viewshed to less than significant. Project impacts to light and glare would be reduced to below significance with implementation of the mitigation measures for the Lighting Plan.

4.2 AIR QUALITY

This section has been prepared using methodologies and assumptions recommended in the CEQA Air Quality Guidelines of the Monterey Bay Unified Air Pollution Control District (MBUAPCD). In keeping with these guidelines, this section describes the existing air quality in the County, impacts of future traffic on local carbon monoxide levels, impacts of land use related vehicular emissions that have regional effects, and other effects of the project related to air quality. Mitigation measures to reduce or eliminate potentially significant air quality impacts are indentified, where appropriate.

4.2.1 Existing Environmental Setting

The following discussion provides an overview of existing air quality conditions in the region and in the County. Climate, air quality conditions, and typical air pollutant types and sources are also described.

Climate and Topography

The project study area is located within the County of Monterey, which is located within the North Central Coast Air Basin (NCCAB), where the MBUAPCD is charged with maintaining air quality. The NCCAB is comprised of 5,159 square miles along the central coast and includes Monterey, Santa Cruz, and San Benito Counties. The northwest sector of the basin is dominated by the Santa Cruz Mountains. The Diablo Range marks the northeastern boundary and, together with the southern extent of the Santa Cruz Mountains, forms the Santa Clara Valley, which extends into the northeastern tip of the basin. Farther south, the Santa Clara Valley evolves into the San Benito Valley, which extends northwest-southeast and has the Gabilan Range as its western boundary. To the west of the Gabilan Range is the Salinas Valley, which extends from Salinas at the northwest end to King City at the southeast end. The western side of the Salinas Valley is formed by the Sierra de Salinas Mountain Range, which also forms the eastern side of the smaller Carmel Valley; the coastal Santa Lucia Range defines the western side of the valley.

The semipermanent high-pressure cell in the eastern Pacific is the basic controlling factor in the climate of the air basin. In the summer, the high-pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. Air descends in the Pacific High forming a stable temperature inversion of hot air over a cool coastal layer of air. The onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal valleys. The warmer air aloft acts as a lid to inhibit vertical air movement. The generally northwest-southeast orientation of mountain ridges tends to restrict and channel the summer onshore air currents. Surface heating in the interior portion of the Salinas and San Benito Valleys creates a weak low pressure, which intensifies the onshore airflow during the afternoon and evening.

In the fall, the surface winds become weak, and the marine layer grows shallow, dissipating altogether on some days. The airflow is occasionally reversed in a weak offshore movement, and the relatively stationary air mass is held in place by the Pacific high-pressure cell, which allows pollutants to build up over a period of a few days. It is most often during this season that the north or east winds develop to transport pollutants from either the San Francisco Bay area or the Central Valley into the NCCAB. During the winter, the Pacific High migrates southward and has less influence on the air basin. Air frequently flows in a southeasterly direction out of the Salinas and San

Benito Valleys, especially during night and morning hours. Northwest winds are nevertheless still dominant in winter, but easterly flow is more frequent. The general absence of deep, persistent inversions and the occasional storm systems usually result in good air quality for the basin as a whole in winter and early spring.

Air Pollutants

The federal and State governments have established ambient air quality standards (AAQS) for several criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter smaller than or equal to 10 microns in diameter (PM₁₀), particulate matter smaller than or equal to 2.5 microns in diameter (PM_{2.5}), and lead. Ozone, PM₁₀, and PM_{2.5} are generally considered to be regional pollutants, as these pollutants or their precursors affect air quality on a regional scale. Pollutants such as CO, NO₂, SO₂, and lead are considered to be local pollutants that tend to accumulate in the air locally. PM₁₀ and PM_{2.5} are also considered to be localized pollutants as well as regional pollutants. In the project study area, CO, PM₁₀, PM_{2.5}, and ozone (and the ozone precursors, nitrogen oxides [NO_x] and reactive organic gases [ROG]) are of particular concern. A complete summary of State and National AAQS is provided in Table 4.2.A, while air pollutants are described below. Health effects of these criteria pollutants are summarized in Table 4.2.B.

Air pollutants impact sensitive receptors in the Site vicinity. For purposes of this analysis, sensitive receptors include land uses such as residences, schools, and hospitals where building occupants are considered to be sensitive to air pollution, such as residents, school children, hospital patients, and the elderly. The closest sensitive receptor (a single-family residence) is located approximately 90 ft of the Project.

Ozone. Ozone is an irritant to the respiratory tract and sensitive tissues in the eyes. As an oxidant, it increases susceptibility to respiratory infections. Ozone also attacks synthetic rubber, textiles, plants, and other materials and can cause substantial damage. Effects on plants, through leaf discoloration and cell damage, can be extensive.

State and federal standards for ozone have been set for a 1-hour averaging time. The State requires that a 1-hour ozone standard of 0.09 part per million (ppm) not be exceeded. The United States Environmental Protection Agency (EPA) recently replaced the 1-hour ozone standard with an 8-hour standard of 0.075 ppm (California Air Resource Board, 2008).

Ozone is not emitted directly into the air but is formed by a photochemical reaction in the atmosphere. Ozone precursors, which include ROG and NO_x, react in the atmosphere in the presence of sunlight to form ozone. Because photochemical reaction rates increase when the intensity of ultraviolet light and air temperature increase, ozone is primarily a summer air pollution problem. ROG and NO_x are emitted by internal combustion engines.

Carbon Monoxide. CO is a public health concern because it combines readily with hemoglobin and thus reduces the amount of oxygen transported in the bloodstream. Effects on humans range from slight headaches to nausea to death.

Table 4.2.A: State and Federal Ambient Air Quality Standards (AAQS)

Pollutant	Averaging Time	California Standards ^a		Federal Standards ^b		
		Concentration ^c	Method ^d	Primary ^{c,e}	Secondary ^{c,f}	Method ^g
Ozone (O ₃)	1-Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	No federal standard	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (137 µg/m ³)		0.075 ppm (147 µg/m ³)		
Respirable Particulate Matter (PM ₁₀)	24-Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		–		
Fine Particulate Matter (PM _{2.5})	24-Hour	No Separate State Standard		35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	15 µg/m ³		
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)	None	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		–		
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	0.03 ppm (56 µg/m ³)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m ³)	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.18 ppm (338 µg/m ³)		–		
Lead	30-day average	1.5 µg/m ³	Atomic Absorption	–	–	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m ³	Same as Primary Standard	
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	–	Ultraviolet Fluorescence	0.030 ppm (80 µg/m ³)	–	Spectropho- tometry (Pararosaniline Method)
	24-Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (365 µg/m ³)	–	
	3-Hour	–		–	0.5 ppm (1300 µg/m ³)	
	1-Hour	0.25 ppm (655 µg/m ³)		–	–	
Visibility- Reducing Particles	8-Hour	Extinction coefficient of 0.23 per kilometer - visibility of 10 miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		No Federal Standards		
Sulfates	24-Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ^h	24-Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

Source: ARB, 2008. Notes continued on next page.

- ^a California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM₁₀, PM_{2.5}, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- ^b National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
- ^c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ^d Any equivalent procedure which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.
- ^e National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- ^f National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- ^g Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.
- ^h The CARB has identified lead and vinyl chloride as ‘toxic air contaminants’ with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Table 4.2.B: Health Effects of Air Pollutants

Pollutant	Health Effects	Examples of Sources
Suspended Particulate Matter (PM _{2.5} and PM ₁₀)	<ul style="list-style-type: none"> • Reduced lung function • Aggravation of the effects of gaseous pollutants • Aggravation of respiratory and cardio respiratory diseases • Increased cough and chest discomfort • Soiling • Reduced visibility 	<ul style="list-style-type: none"> • Stationary combustion of solid fuels • Construction activities • Industrial processes • Atmospheric chemical reactions
Ozone (O ₃)	<ul style="list-style-type: none"> • Breathing difficulties • Lung damage 	<ul style="list-style-type: none"> • Formed by chemical reactions of air pollutants in the presence of sunlight; common sources are motor vehicles, industries, and consumer products
Carbon Monoxide (CO)	<ul style="list-style-type: none"> • Chest pain in heart patients • Headaches, nausea • Reduced mental alertness • Death at very high levels 	<ul style="list-style-type: none"> • Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves
Lead (Pb)	<ul style="list-style-type: none"> • Organ damage • Neurological and reproductive disorders • High blood pressure 	<ul style="list-style-type: none"> • Metals processing • Fuel combustion • Waste disposal
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> • Lung damage 	<ul style="list-style-type: none"> • See carbon monoxide sources
Toxic Air Contaminants	<ul style="list-style-type: none"> • Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders 	<ul style="list-style-type: none"> • Cars and trucks, especially diesels • Industrial sources such as chrome platers • Neighborhood businesses such as dry cleaners and service stations • Building materials and products

Source: ARB and EPA, 2005.

State and federal CO standards have been set for both 1-hour and 8-hour averaging times. The State 1-hour standard is 20 ppm by volume, and the federal 1-hour standard is 35 ppm. Both State and federal standards are 9 ppm for the 8-hour averaging period.

Motor vehicles are the dominant source of CO emissions in most areas, with electric utilities, fires, and other mobile and miscellaneous sources contributing. High CO levels develop primarily during winter, when periods of light winds combine with the formation of ground level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures.

Suspended Particulate Matter. Particulates can damage human health and retard plant growth. Health concerns associated with suspended particulate matter focus on those particles small enough to reach the lungs when inhaled. Particulates also reduce visibility and corrode materials.

The federal and State AAQS for particulate matter apply to two classes of particulates: PM_{2.5} and PM₁₀. The State PM₁₀ standards are 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) as a 24-hour average and 20 $\mu\text{g}/\text{m}^3$ as an annual average. The federal PM₁₀ standard is 150 $\mu\text{g}/\text{m}^3$ as an annual arithmetic mean. The federal PM_{2.5} standards are 15 $\mu\text{g}/\text{m}^3$ for the annual average and 35 $\mu\text{g}/\text{m}^3$ for the 24-hour average. Particulate emissions are generated by a wide variety of sources, including agricultural activities, industrial emissions, dust suspended by vehicle traffic and construction equipment, and secondary aerosols formed by reactions in the atmosphere.

Toxic Air Contaminants. Although AAQS exist for criteria pollutants, no ambient standards exist for toxic air contaminants (TACs). Many pollutants are identified as TACs because of their potential to increase the risk of developing cancer or because of their acute or chronic health risks. For TACs that are known or suspected carcinogens, the Air Resources Board (ARB) has consistently found that there are no levels or thresholds below which exposure is risk-free. Individual TACs vary greatly in the risk they present. At a given level of exposure, one TAC may pose a hazard that is many times greater than another. For certain TACs, a unit risk factor can be developed to evaluate cancer risk. For acute and chronic health risks, a similar factor called a Hazard Index is used to evaluate risk. In the early 1980s, the ARB established a statewide comprehensive air toxics program to reduce exposure to air toxics. The Toxic Air Contaminant Identification and Control Act (Assembly Bill [AB] 1807, Tanner 1983) created California's program to reduce exposure to air toxics. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly 1987) supplements the AB 1807 program by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.

4.2.2 Regulatory Setting

Federal Regulations

The primary legislation that governs federal air quality regulations is the Clean Air Act Amendments (CAAA). The CAAA delegates primary responsibility for clean air to the EPA. The EPA develops rules and regulations to preserve and improve air quality and delegates specific responsibilities to State and local agencies.

The EPA has established national AAQS for criteria pollutants (refer to Table 4.2.A). Criteria pollutants include CO, NO₂, SO₂, ozone, PM₁₀, PM_{2.5}, and lead.

If an area does not meet the federal AAQS shown in Table 4.2.A, federal clean air planning requirements specify that states develop and adopt State Implementation Plans (SIPs), which are air quality plans showing how air quality standards would be attained. In California, the EPA has delegated authority to prepare SIPs to the California ARB, which in turn has delegated that authority to individual air districts.

State Regulations

The ARB, which is part of the California Environmental Protection Agency (CalEPA), develops air quality regulations at the State level. The State regulations mirror federal regulations by establishing industry-specific pollution controls for criteria, toxic, and nuisance pollutants. In 1998, the State legislature adopted the California Clean Air Act (CCAA), which established a statewide air pollution control program in California. The ARB is also responsible for developing emission standards for California vehicles.

Local Regulations

The MUAPCD shares responsibility with the ARB for ensuring that State and national AAQS are achieved and maintained within the NCCAB. State law assigns local air districts the primary responsibility for control of air pollution from stationary sources while reserving to the ARB an oversight function. The MBUAPCD is responsible for developing regulations governing emissions of air pollution, permitting and inspecting stationary sources of air pollution, monitoring of ambient air quality, and air quality planning activities, including implementation of transportation control measures.

As required by the CCAA, the MBUAPCD adopted the 1991 AQMP for the Monterey Bay Region. The AQMP addressed attainment of the State AAQS for ozone. The AQMP recommended adoption of 20 measures to control emissions of volatile organic compound (VOC) from stationary sources, five measures for stationary sources of NO_x, and eight transportation measures to reduce ozone precursor emissions through reduced vehicle miles traveled. Since the 1991 AQMP was adopted, control requirements have been updated, and the plan was revised in 1994, 1997, 2000, 2004 and 2008 to reflect these changes in control measures. The 1997 AQMP showed that the MBUAPCD could achieve the required 20 percent reduction in both VOC and NO_x emissions in the near term without adopting any additional regulations. The 1997 AQMP also included updated Transportation Control Measures. The 2000 AQMP concluded the North Central Coast Air Basin remained on the borderline between attainment and nonattainment for ozone in part due to variable meteorological conditions occurring from year to year, transport of air pollution from the San Francisco Bay Area, and locally generated emissions.

The MBUAPCD has enacted several rules designed to limit emissions from construction activities. They include Rule 400 for Visible Emissions, Rule 403 for Fugitive Dust, Rule 425 for Cutback Asphalt and Rule 426 for Architectural Coatings.

Local land use decisions have the potential to affect air quality within the region. While local governments do not participate directly in developing the AQMP, they help develop the population and growth forecasts used in the AQMP. Local governments also have the option of establishing local air quality policies through amendments to the General Plan or adoption of ordinances.

4.2.3 Attainment Status

Under the Federal Clean Air Act, the NCCAB is designated a maintenance area for the federal 1-hour ozone AAQS. The NCCAB was redesignated from a moderate nonattainment area to a maintenance area in 1997 after meeting the federal 1-hour ozone standard in 1990. The NCCAB is designated as an attainment area for the federal 8-hour ozone AAQS.

Prior to revision of the State AAQS for ozone, the NCCAB was close to attaining the State 1-hour AAQS, which was reflected in the area's nonattainment-transitional designation. However, in November 2006 ARB issued new designations to reflect the introduction of the more stringent 8-hour requirement and the NCCAB, like several other areas in California, was redesignated from nonattainment-transitional to nonattainment for the State AAQS. Further, the NCCAB is designated a nonattainment area for the State PM₁₀ AAQS and an attainment area for the State PM_{2.5} AAQS. Table 4.2.C summarizes the attainment status of the NCCAB. Table 4.2.D summarizes air pollutant monitoring station results in the Site vicinity for the three year period between 2006 and 2008.

Table 4.2.C: Attainment Status of the North Central Cost Air Basin, January 2009

Pollutant	State Standards	National Standards
Ozone (O ₃)	Nonattainment ¹	Attainment ²
Inhalable Particulates (PM ₁₀)	Nonattainment	Attainment
Fine Particulates (PM _{2.5})	Attainment	Unclassified/Attainment ³
Carbon Monoxide (CO)	County of Monterey – Attainment San Benito County – Unclassified Santa Cruz County – Unclassified	Attainment
Nitrogen Dioxide (NO ₂)	Attainment	Attainment
Sulfur Dioxide (SO ₂)	Attainment	Attainment
Lead	Attainment	Unclassified/Attainment ⁴

Source: Monterey Bay Unified Air Pollution Control District, 2009

Notes:

¹ Effective July 26, 2007, the ARB designated the NCCAB a nonattainment area for the State ozone standard, which was revised in 2006 to include an 8-hour standard of 0.070 ppm.

² On March 12, 2008, EPA adopted a new 8-hour ozone standard of 0.075 ppm, while temporarily retaining the existing 8-hour standard of 0.08 ppm. EPA is expected to issue new designations by March 2010.

³ In 2006, the Federal 24-hour standard for PM_{2.5} was revised from 65 to 35 µg/m³. Although final designations have yet to be made, it is expected the NCCAB will remain designated unclassified/attainment.

⁴ On October 15, 2008 EPA substantially strengthen the national ambient air quality standard for lead by lowering the level of the primary standard from 1.5 µg/m³ to 0.15 µg/m³. Initial recommendations for designations are to be made by October 2009 with final designations by January 2012.

⁵ Nonattainment pollutants are highlighted in **Bold**.

Table 4.2.D: Ambient Air Quality at the 867 E Laurel Drive, Salinas Monitoring Station

Pollutant	Standard	2006	2007	2008
Carbon Monoxide (CO)				
Maximum 1 hour concentration (ppm)		2.5	2.0	2.2
Number of days exceeded:	State: > 20 ppm	0	0	0
	Federal: > 35 ppm	0	0	0
Maximum 8 hour concentration (ppm)		1.0	1.2	0.9
Number of days exceeded:	State: > 9 ppm	0	0	0
	Federal: > 9 ppm	0	0	0
Ozone (O₃)				
Maximum 1 hour concentration (ppm)		0.066	0.067	0.078
Number of days exceeded:	State: > 0.09 ppm	0	0	0
Maximum 8 hour concentration (ppm)		0.057	0.058	0.067
Number of days exceeded:	State: > 0.07 ppm	0	0	0
	Federal: > 0.08 ppm	0	0	0
Coarse Particulates (PM₁₀)				
Maximum 24 hour concentration (µg/m ³)		49	37	50
Number of days exceeded:	State: > 50 µg/m ³	1	0	2
	Federal: > 150 µg/m ³	0	0	0
Annual arithmetic average concentration (µg/m ³)		17	18	23
Exceeded for the year:	State: > 20 µg/m ³	No	No	Yes
	Federal: > 50 µg/m ³	No	No	No
Fine Particulates (PM_{2.5})				
Maximum 24 hour concentration (µg/m ³)		14.7	19.2	17.8
Number of days exceeded:	Federal: > 35 µg/m ³	0	0	0
Annual arithmetic average concentration (µg/m ³)		7.07	7.02	7.00
Exceeded for the year:	State: > 12 µg/m ³	No	No	No
	Federal: > 15 µg/m ³	No	No	No
Nitrogen Dioxide (NO₂)				
Maximum 1 hour concentration (ppm)		0.067	0.050	0.049
Number of days exceeded:	State: > 0.25 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.007	0.007	0.006
Exceeded for the year:	Federal: > 0.053 ppm	No	No	No
Sulfur Dioxide (SO₂)^a				
Maximum 1 hour concentration (ppm)		0.018	0.013	0.028
Number of days exceeded:	State: > 0.25 ppm	0	0	0
Maximum 3 hour concentration (ppm)		0.012	0.008	0.021
Number of days exceeded:	Federal: > 0.5 ppm	0	0	0
Maximum 24 hour concentration (ppm)		0.004	0.003	0.005
Number of days exceeded:	State: > 0.04 ppm	0	0	0
	Federal: > 0.14 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.001	0.001	0.001
Exceeded for the year:	Federal: > 0.030 ppm	No	No	No

Source: ARB and EPA 2009.

ppm = parts per million

µg/m³ = micrograms per cubic meter

^a Center Street, Davenport, Santa Cruz County was the closest monitoring station with SO₂ data.

4.2.4 Methodology

The air analysis evaluates project construction activities and operational emissions. The analysis was based on the CAAA, ARB air quality regulations, and the MBUAPCD's 2008 CEQA Air Quality Guidelines. Reasonable worst case assumptions for the Project construction and operation were used in the analysis.

4.2.5 Impact Significance Criteria

Appendix G of the CEQA Guidelines state that a project would normally have a significant effect on the environment if it would:

- Threshold 4.2.1 Conflict with or obstruct implementation of the applicable air quality plan;**
- Threshold 4.2.2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation;**
- Threshold 4.2.3 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state AAQS;**
- Threshold 4.2.4 Expose sensitive receptors to substantial pollutant concentrations; or**
- Threshold 4.2.5 Create objectionable odors affecting a substantial number of people.**

In addition, the CEQA Guidelines further state that the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the determinations above. The MBUAPCD has specified significance thresholds within its CEQA Air Quality Guidelines to determine whether mitigation is needed for project-related air quality impacts. Table 4.2.E summarizes applicable quantitative thresholds that are used in the analysis of significant air quality impacts.

Table 4.2.E: Monterey Bay Unified Air Pollution Control District Thresholds of Significance

Pollutant	Construction Threshold	Operation Threshold ¹
ROG (Ozone precursors)	NA ²	137 pounds per day
NO _x (Ozone precursors)	NA ²	137 pounds per day
CO	NA	LOS at intersection/road segment degrades from D or better to E or F or V/C ratio at intersection/road segment at LOS E or F increases by 10 seconds or more or reserve capacity at unsignalized intersection at LOS E or F decreases by 50 or more. ⁴ 550 pounds per day (direct)
PM ₁₀	82 pounds per day ³	82 pounds per day (on-site)
SO _x	NA	150 pounds per day (on-site)
Diesel Particulate Matter (DPM)	Cancer incidence > 10 in a million	NA

Source: Monterey Bay Unified Air Pollution Control District, 2009.

- ¹ Projects that emit other criteria pollutant emissions would have a significant impact if emissions would cause or substantially contribute to the violation of State or national AAQS. Criteria pollutant emissions could also have a significant impact if they would alter air movement, moisture, temperature, climate, or create objectionable odors in substantial concentrations.
- ² The MBUAPCD does not have significance thresholds for construction-related ozone precursors from typical construction equipment because they are accommodated in the emission inventories of State- and federally-required air plans and would not have a significant impact on the attainment and maintenance of ozone AAQS.
- ³ Based on the construction threshold of 82 pounds per day of PM₁₀, the MBUAPCD has identified levels of construction activity that could result in a significant impact. For construction activities with minimal earthmoving, the MBUAPCD has identified construction sites that disturb more than 8.1 acres per day as having the potential to exceed the MBUAPCD's 82 pounds per day threshold. For construction activities involving grading, excavation, and other earthmoving activities, the MBUAPCD has identified construction sites that disturb more than 2.2 acres per day as having the potential to exceed the MBUAPCD's 82 pounds per day threshold.
- ⁴ Modeling should be undertaken to determine if the project would cause or substantially contribute (550 lb/day) to exceedance of CO AAQS. If not, the project would not have a significant impact.

4.2.6 Project Impacts

Threshold 4.2.1: Conflict with or obstruct implementation of the applicable air quality plan

Consistency with the Monterey County General Plan and MBUAPCD Air Quality Management Plan.

The Project is located in the Toro Planning Area of the Monterey County General Plan (Monterey County, 2004). The Project would be consistent with the policies included in the General Plan (Monterey County General Plan Policies 20.1.1., and 20.2.2 through 20.2.5) and the Monterey County Zoning for Inland Areas (Title 21).

Also, the Project would be consistent with the MBUAPCD 2008 Air Quality Management Plan (MBUAPCD, 2008). As described in subsection 4.2.2, the Air Quality Management Plan provides control measures to demonstrate consistency with the Clean Air Act. The Project is a commercial shopping center development that comprises 126,500 sf of retail/office space and associated parking. The Project would locate new commercial development on a parcel designated for commercial use. The Project would be consistent with General Plan land use-related goals, objectives, and policies that envision development on the Site. In this way, the Project is consistent with growth anticipated under

the County's General Plan and falls within the population projections prepared by the Association of Monterey Bay Governments (AMBAG). As a result, the project would not conflict with the MBUAPCD's 2009 Air Quality Management Plan or create a cumulative air quality impact.

Thresholds 4.2.2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation

Construction Impacts. Construction projects using typical construction equipment such as dump trucks, scrapers, bulldozers, compactors and front-end loaders that temporarily emit precursors of ozone are accommodated in the emissions inventories of State and federally required air plans and would not have a significant impact on the attainment and maintenance of ozone AAQS.

Construction activities represent temporary impacts that are typically short in duration, depending on the size, phasing, and type of the project. Air quality impacts can nevertheless be acute during construction periods, resulting in significant localized impacts to air quality. According to the MBUAPCD, construction activities (e.g., excavation, grading, on-site vehicles) which directly generate 82 pounds per day or more of PM₁₀ would have a significant impact on local air quality, including exposure of sensitive receptors to substantial pollutant concentrations and contribute to air quality standard violation.

The Site consists of approximately 11 acres. The project may be constructed over a one year period which would require the total amount of grading that would occur simultaneously of three or more acres. This is a conservative estimate because the actual construction would likely occur more slowly. Because of the total acreage of disturbance area, grading of the Site may contribute to the violation of PM₁₀ AAQS. The MBUAPCD has established a screening threshold of 2.2 acres per day of disturbed area. Any activity equal to or above that threshold must run the URBEMIS model to ensure that emissions of PM₁₀ do not exceed 82 lbs per day. In other words, the project would contribute substantially to a violation if it would emit 82 pounds per day of PM₁₀ or more. Based on an URBEMIS analysis conducted for the project (refer to Appendix C of Volume II of this EIR), PM₁₀ emissions from dust and exhaust would be 31.57 pounds per day which is below the 82 pounds per day threshold. Consequently, project construction would not have a significant air quality impact on ambient PM₁₀ concentrations. Therefore, construction ozone and PM₁₀ emissions would not violate any air quality standard or contribute substantially to an existing or projected air quality violation and no mitigation measures are required.

Operational Impacts

Regional Emissions. Table 4.2.F shows the project's operational emissions associated with the project. The estimates consist of area and on-road emissions, which were estimated using the URBEMIS2007 model. The project's operational emissions would not exceed the significance thresholds established by the MBUAPCD.

Table 4.2.F: Operational Emissions (Pounds Per Day)

Emission Category	ROG	NOx	PM ₁₀	CO	SO _x
Area Source	0.83	1.19	0.01	1.0	0.0
Operational	33.91	53.14	40.56	388.0	0.21
Total	34.74	54.33	40.57	389.00	0.21
Threshold	137	137	82	550	150
Exceed Threshold?	No	No	No	No	No

Source: LSA Associates, Inc., September 2009

Localized Emissions. As shown in Table 4.2.E, the MBUAPCD also requires an analysis of CO emissions at nearby intersections. Based on the traffic study prepared for this EIR by Hexagon Transportation Consultants, the Project would cause the intersection operations of State Route 68 (SR-68) and Corral de Tierra to degrade from LOS D to LOS E under Project conditions (Project plus existing conditions). The Project would also cause the intersection of SR-68 and San Benancio to degrade from LOS D to E under cumulative conditions (Project plus foreseeable projects plus buildout). Therefore, an intersection CO hot-spots screening analysis was performed for these intersections. Results are shown in Table 4.2.G and indicate that although the Project would cause the intersection to degrade, CO levels at the intersections would not exceed the State or federal standards for CO. The State 1-hour standard is 20 parts per million (ppm) and the federal 1-hour standard is 35 ppm. One hour CO concentrations under cumulative conditions with the Project would be 4.3, well below the standards. Eight hour CO concentrations under cumulative conditions with the Project would be 2.8, also well below the State and federal standards.

Table 4.2.G: CO Intersection Concentrations (Parts Per Million)

Intersection	Existing		Existing Plus Project			Cumulative
	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
SR-68 and Corral de Tierra	3.9	2.4	4.2	2.7	4.3	2.8
SR-68 and San Benancio	3.9	2.4	4.2	2.7	4.3	2.8

Source: LSA Associates, Inc., September 2009

Consequently, the Project's regional and localized long term operational emissions are considered less than significant and would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Mitigation measures are not required.

Threshold 4.2.3 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state AAQS

Construction Impacts. As shown in Table 4.2.E, the MBUAPCD does not have significance thresholds for construction-related ozone precursors from typical construction equipment because they are accommodated in the emission inventories of State and federally required air plans. Thresholds associated with air plans take into account cumulative future projected development.

Therefore, if the Project is consistent with the AQMP, which it is, the Project would also not result in a cumulatively considerable increase in emissions of ozone precursors.

As shown in the Thresholds 4.2.2 discussion, construction of the Project would generate PM₁₀ emissions below the established threshold established by the MBUAPCD. Therefore, since the Project would be within the minimum thresholds established by the MBUAPCD for PM₁₀ concentrations, then the Project would also not contribute significantly to cumulative air quality impacts associated with PM₁₀ concentrations.

Operational Impacts. As shown in the Thresholds 4.2.2 discussion, the Project would not exceed the significance criteria for operational and area source emissions. Additionally as discussed in Thresholds 4.2.1, the Project is consistent with the AQMP and therefore the Project would not have a cumulative air quality impact.

Threshold 4.2.4 Expose sensitive receptors to substantial pollutant concentrations

Construction Impacts

Exposure of Residences to Naturally Occurring Asbestos (NOA) from Construction. The Monterey County General Plan requires that projects be evaluated to determine whether they are within identified areas of serpentine or ultramafic rock formations. Construction in areas within NOA can expose residences to asbestos, which is a health risk (Monterey County, 2004). The General Plan includes two maps showing areas of NOA. Areas with NOA within the County include the South County and Big Sur. The Project is not located in an area of known NOA. Consequently, the Project would not expose sensitive receptors to substantial concentrations of NOA.

Construction Emissions. The Project would require the use of construction equipment that emits diesel particulate matter. However, given the short-term nature of the construction activities, construction of the project is not expected to result in a significant health risk. In any event, construction is not expected to result in significant impacts related to emissions. It is recommended, however, that the Project implement best available control measures (BAMC) as recommended by the MBUAPCD and in accordance with the Monterey County General Plan Policy 20.2.5 and to comply with Standard Conditions 4.2.1 and 4.2.2 during construction activities to minimize potential air quality impacts associated with construction of the Project.

Operational Impacts

Regional and Localized Emissions. Refer to impact discussion under Sections 4.2.2 and 4.2.3.

Threshold 4.2.5 Create objectionable odors affecting a substantial number of people

Heavy-duty equipment in the project area during construction would emit odors. However, the construction activity would be short-term and would cease to occur after individual construction is

completed. No other sources of objectionable odors have been identified for the Project and no mitigation measures are recommended.

4.2.7 Cumulative Impacts

Implementation of the Project would not result in any exceedances of the short-term construction or long-term operational emission thresholds. In addition, the Project would be consistent with the Monterey County General Plan and the MBUAPCD's Air Quality Management Plan. Cumulative emissions are part of the emissions inventory included in the Air Quality Management Plan for the project area. Therefore, the Project would not result in any cumulative air quality impacts.

4.2.8 Level of Significance Prior to Mitigation

As indicated in the impacts analysis, air quality emissions associated with the Project are not expected to exceed the established significance criteria. Therefore, mitigation measures are not required.

4.2.9 Mitigation Measures and Standard Conditions of Approval

The following standard conditions shall be implemented to reduce potential impacts of the Project associated with air quality.

Standard Condition 4.2.1: Particulate Matter. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall verify that the construction plans and specifications include the following measures to reduce particulate matter during construction operations:

- Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure
- Prohibit all grading activities during periods of high wind (over 15 mph)
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days)
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydro seed area
- Haul trucks shall maintain at least 2'0" of freeboard
- Cover all trucks hauling dirt, sand, or loose materials
- Plant vegetative ground cover in disturbed areas as soon as possible
- Cover inactive storage piles
- Install wheel washers at the entrance to construction sites for all exiting trucks

- Sweep streets if visible soil material is carried out from the construction site
- Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of the Monterey Bay Unified Air Pollution Control District shall also be visible to ensure compliance with Rule 402
- Limit the area under construction at any one time

Standard Condition 4.2.2: Diesel Emissions. Prior to issuance of a grading permit, the County of Monterey RMA–Planning Department shall verify that the construction plans and specifications include the following measures to reduce diesel emissions during construction operations:

- Limit use of equipment
- Replace diesel- powered equipment with gasoline-powered, when feasible
- Repower with current standard diesel technology

4.2.10 Level of Significance After Mitigation

As no impacts are expected to exceed the impact significance criteria, there would be no significant impacts caused by the Project during construction or long-term operation. Standard construction measures are prescribed pursuant to requirements of MBUAPCD (Monterey Bay Unified Air Pollution Control District, 2009).

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4.3 BIOLOGICAL RESOURCES

This chapter analyzes the anticipated effects on biological resources from the Project. It describes the biological resources present or potentially present on the Site, and discusses potential impacts to these resources resulting from project implementation. Associated mitigation measures to offset any impacts to biological resources are also addressed in this chapter.

LSA Associates, Inc (LSA) conducted field visits of the Site in 2004 and 2007. Previous biological studies that have been completed on the Site that were reviewed during preparation of this report include:

- Final Biological Assessment Report for Phelps/Corral de Tierra (Denise Duffy & Associates (DD&A) 2007);
- Corral de Tierra, California, Red-legged Frog and California Tiger Salamander Habitat Assessment Report (DD&A 2007); and
- Revised Forest Management Plan, Corral de Tierra (Webster & Associates Professional Foresters 2007).

These biological reports can be found in Appendix D of Volume II of this EIR.

4.3.1 Existing Environmental Setting

Physical Characteristics of the Site and Adjacent Lands

The approximately 11 acre Site (APN 161-581-001 and 161-571-003) is located southeast of the intersection of State Route 68 (SR-68) and Corral de Tierra Road, approximately 10 miles east of Monterey, California. The mountains and rolling hills of the Sierra de Salinas Range surround the Site, even though the Site itself is fairly level. The Site averages 280 ft in elevation.

Biotic Characteristics of the Site and Adjacent Lands

The Site consists of vacant ruderal annual grassland with sparse mature trees (mostly nonnative) in the overstory.

Areas adjacent to the Site are primarily rural residential/commercial development. Ornamental landscaping is equally as prominent as native habitats on properties directly adjacent to the Site. Biotic habitats in the Project vicinity area include annual grassland, coyote bush series, coast live oak series, Eucalyptus series and Arroyo willow series. Seasonal drainages adjacent to the Site typically are dominated by Arroyo willow and are tributaries of El Toro Creek. El Toro Creek is a tributary of the Salinas River. Aquatic habitat associated with a perennial pond occurs at the golf course immediately east of the northeast corner of the Site.

Soils

Soils of the Site consist of alluvial sediments of two series, described in Table 4.3.A. and as shown in Figure 4.3.1.

Table 4.3.A: Soils of the Site

Soil Series	Parent Material	Drainage	Hydric
Gorgonio Sandy Loam, 0 – 5% slopes	Course textured alluvium derived from granite	Somewhat Excessively Drained	No
Santa Ynez Fine Sandy Loam, 15 – 30% slopes	Alluvium from shale, sandstone and granite	Moderately Well Drained	No

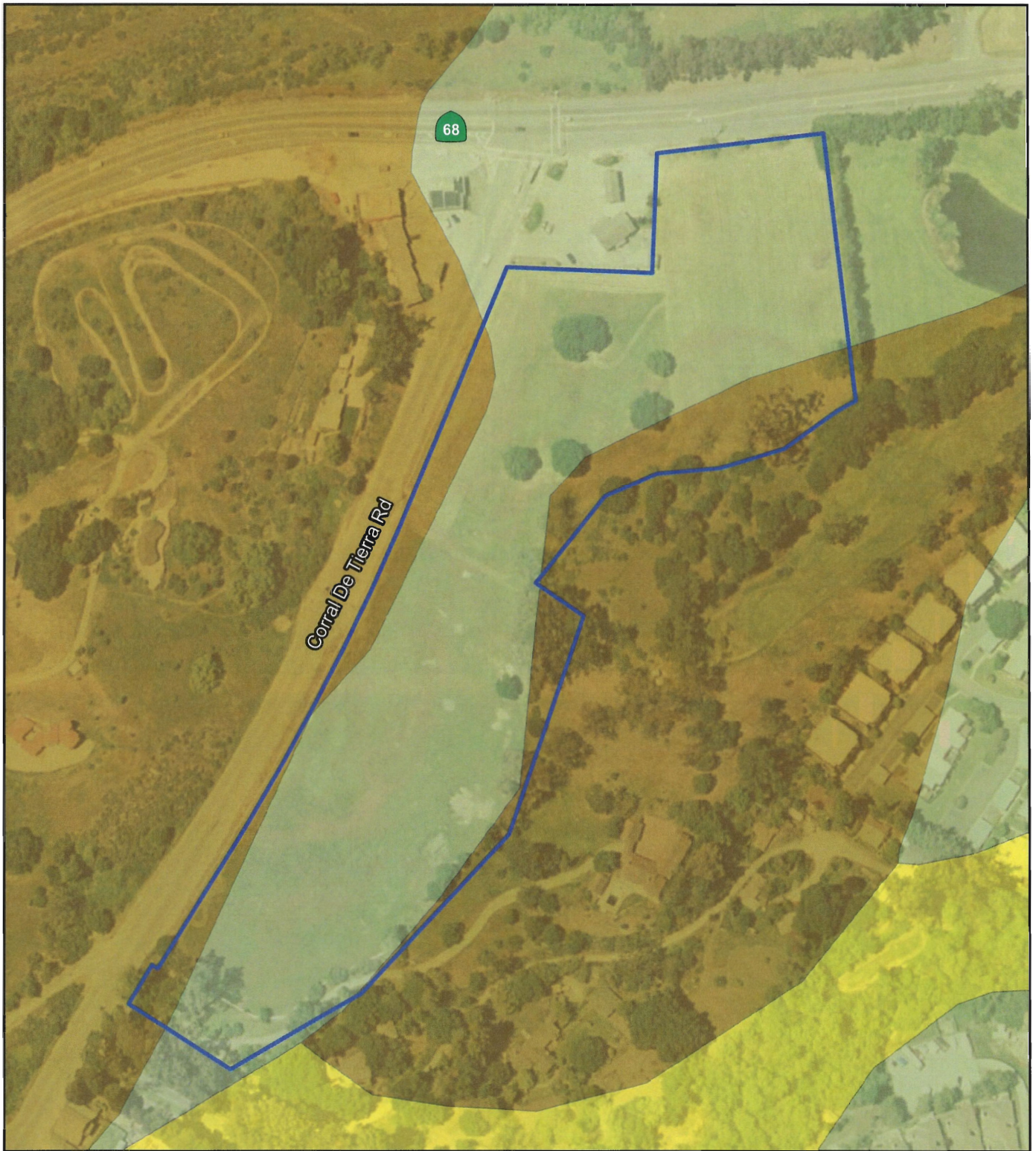
Biotic Habitat (Ruderal California Annual Grassland)

The only plant communities identified on the Site is ruderal (disturbed) California annual grassland (refer to Figure 4.3.2). The term “ruderal” refers to areas commonly disturbed by human activities. One small structure, the pump house, remains near the southeastern boundary. An old stagecoach wagon was observed south of SR-68 near the northeastern boundary. The majority of the grassland has been regularly mowed; however, the portion along the southeastern perimeter is less disturbed and has a mild slope and a tree overstory. Wetlands in the form of swales, drainages, and ponds do not occur on the Site itself.

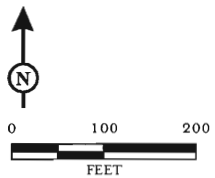
Disturbed annual grassland is found in all open areas and in the understory of mature native and nonnative trees. Trees are more heavily distributed toward the eastern boundary of the Site. Seventeen of the forty-five trees are coast live oaks (*Quercus agrifolia*). The remaining tree species include California sycamore (*Platanus racemosa*), blue-gum eucalyptus (*Eucalyptus globulus*), white stringybark (*Eucalyptus eugenioides*), English walnut (*Juglans regia*), California walnut (*Juglans californica*), Monterey pine (*Pinus radiata*), incense cedar (*Calocedrus decurrens*) and European olive (*Olea europaea*). Native trees that were not planted on the Site are limited to the coast live oaks. Although California sycamore and California walnut are native to the general project vicinity area, the habitat characteristics are not typical of native occurrence and therefore are assumed to be planted. Furthermore, Monterey pine and incense cedar are native to California, but this part of the County is not currently within the distributional range of these trees. A list of the trees identified on the Site can be found in Table 4.3.B.

A few shrubs are sparsely distributed in the understory, particularly in the less disturbed eastern portion of the Site. Native shrubs included poison oak (*Toxicodendron diversilobum*), big saltbush (*Atriplex lentiformis*), California buckeye (*Aesculus californica*), toyon (*Heteromeles arbutifolia*), and California blackberry (*Rubus ursinus*).

The disturbed understory is dominated by nonnative grasses such as red brome (*Bromus madritensis* ssp. *rubens*), ripgut (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), and Italian ryegrass (*Lolium multiflorum*). Non-native forbs occurring regularly in the grassland habitat include telegraph weed (*Heterotheca grandiflora*), yellow star-thistle (*Centaurea solstitialis*), and wild radish (*Raphanus sativa*). Native forbs observed blooming during the November 2007 site visit were limited to California poppy (*Eschscholzia californica*). Other native forbs present on the Site include Rancher’s fireweed (*Amsinckia menziesii*), sky lupine (*Lupinus nanus*), miner’s lettuce (*Claytonia perfoliata*), and vinegarweed (*Trichostema* sp.).



LSA



Legend

- Study Area
- Soil Type
- Gorgonio Sandy Loam, 0 to 5 Percent Slopes
- Psamments and Fluvents, Frequently Flooded
- Santa Ynez Fine Sandy Loam, 15 to 30 Percent Slopes

FIGURE 4.3.1

Corral de Tierra Retail Village EIR
Soils of the Study Area

SOURCE: Soil - USDA, Natural Resources Conservation Service (2006); Aerial - AirPhoto USA (4/2007); Boundary - Whitson Engineers (2007)

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Table 4.3.B: Trees Located on the Site

Tree No.	Common Name	Species	Protected and Retained	Removed and Replaced
1	Coast live oak	<i>Quercus agrifolia</i>	X	
2	Coast live oak	<i>Quercus agrifolia</i>	X	
3	European olive	<i>Olea europaea</i>	X	
4	European olive	<i>Olea europaea</i>	X	
5	European olive	<i>Olea europaea</i>	X	
6	European olive	<i>Olea europaea</i>		X
7	European olive	<i>Olea europaea</i>		X
8	European olive	<i>Olea europaea</i>		X
9	European olive	<i>Olea europaea</i>		X
10	European olive	<i>Olea europaea</i>		X
11	European olive	<i>Olea europaea</i>	X	
12	European olive	<i>Olea europaea</i>	X	
13	European olive	<i>Olea europaea</i>	X	
14	Monterey pine	<i>Pinus radiata</i>		X
15	Monterey pine	<i>Pinus radiata</i>		X
16	Monterey pine	<i>Pinus radiata</i>		X
17	Coast live oak	<i>Quercus agrifolia</i>	X	
18	Coast live oak	<i>Quercus agrifolia</i>	X	
19	Coast live oak	<i>Quercus agrifolia</i>	X	
20	Coast live oak	<i>Quercus agrifolia</i>	X	
21	Incense cedar	<i>Calocedrus decurrens</i>	X	
22	Incense cedar	<i>Calocedrus decurrens</i>	X	
23	Coast live oak	<i>Quercus agrifolia</i>	X	
24	Coast live oak	<i>Quercus agrifolia</i>	X	
25	Eucalyptus	<i>Eucalyptus</i> sp.		X
26	Eucalyptus	<i>Eucalyptus</i> sp.		X
27	Coast live oak	<i>Quercus agrifolia</i>		X
28	Coast live oak	<i>Quercus agrifolia</i>	X	
29	Western sycamore	<i>Platanus racemosa</i>	X	
30	Western sycamore	<i>Platanus racemosa</i>		X
31	Coast live oak	<i>Quercus agrifolia</i>	X	
32	Eucalyptus	<i>Eucalyptus</i> sp.	X	
33	Western sycamore	<i>Platanus racemosa</i>		X
34	Coast live oak	<i>Quercus agrifolia</i>	X	
35	Western sycamore	<i>Platanus racemosa</i>		X
36	Walnut	<i>Juglans</i> spp.		X
37	Walnut	<i>Juglans</i> spp.		X
38	Walnut	<i>Juglans</i> spp.		X
39	Walnut	<i>Juglans</i> spp.		X
40	Walnut	<i>Juglans</i> spp.		X
41	Walnut	<i>Juglans</i> spp.		X
42	Walnut	<i>Juglans</i> spp.		X
43	Coast live oak	<i>Quercus agrifolia</i>	X	
44	Coast live oak	<i>Quercus agrifolia</i>	X	
45	Coast live oak	<i>Quercus agrifolia</i>		X

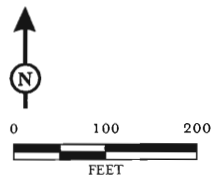
Source: Forest Management Plan, DD&A, 2007.

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FIGURE 4.3.2

LSA



Legend

- Study Area
- Ruderal California Annual Grassland

Corral de Tierra Retail Village EIR
 Biotic Habitat Map

SOURCE: Aerial - AirPhoto USA (4/2007); Boundary - Whitson Engineers (2007)

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Ruderal grasslands such as that occurring on the Site provide suitable aestivation (summering habitat) for a limited number of amphibians or reptiles. Western fence lizard (*Sceloporus occidentalis*) was observed during the Site surveys. As very few burrows were observed on the Site, amphibians and reptiles could be expected to be less common on the Site than on more pristine habitats in the near vicinity. Only those amphibian or reptilian species accustomed to a fair amount of disturbance (mowing) could currently reside there, and may include common species such as gopher snake (*Pituophis melanoleucus*) and common kingsnake (*Lampropeltis getulus*).

A large number of avian species could reside or forage on the Site based on the type of habitat present. Dozens of hummingbirds were observed in a large eucalyptus tree near the western boundary of the Site. Resident birds observed in the ruderal grasslands of the Site included Brewer's blackbird (*Euphagus cyanocephalus*), American robin (*Turdus migratorius*), common raven (*Corvus corax*), killdeer (*Charadrius vociferous*) and European starling (*Sturnus vulgaris*). In the winter, avian species such as American pipit (*Anthus rubescens*) and savannah sparrow (*Passerculus sandwichensis*) could occur within the Site. Raptors nesting or roosting in trees on the Site or nearby could use the grasslands of the Site for foraging. Common raptors including red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*) and red-shouldered hawk (*Buteo lineatus*) could nest in large trees on the Site. Nocturnal species such as barn owl (*Tyto alba*) and great horned owl (*Bubo virginianus*) could also use grasslands of the Site for foraging or the large trees on the Site for nesting.

Small mammals provide a primary source of prey for many predators. California ground squirrels (*Spermophilus beecheyi*) were observed on the Site. Other small mammals including deer mice (*Peromyscus maniculatus*), Western harvest mice (*Reithrodontomys megalotis*), California voles (*Microtus californicus*) and Botta's pocket gophers (*Thomomys bottae*) could all occur on the Site. In turn they could attract carnivorous mammals such as gray fox (*Urocyon cinereoargenteus*) and coyote (*Canis latrans*) to the Site. Common mammals that are likely to use the nonnative grassland for foraging include raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), striped skunk (*Memphitis mephitis*), black-tailed hare (*Lepus californicus*), and desert cottontail (*Sylvilagus audubonii*). A mule deer (*Odocoileus hemionus*) was observed on the Site to the east during the November 2007 site visit.

Special Status Species and Sensitive Habitats

As discussed under Section 4.3.3 below, a search in the California Natural Diversity Data Base (CNDDDB) was conducted for the USGS 7.5' quadrangle on which the Site occurs, as well as the eight surrounding quads. This information was used to generate a list of special status species that occur in the project vicinity area (refer to Appendix D of Volume II of this EIR). The specific habitats required by each species was reviewed, as well as the specific habitats and habitat conditions present on the Site. Previous experience with these species was also taken into consideration. Based on this evaluation, the likelihood of each species to occur on the Site was determined. Special status species that were observed on the Site, or determined to potentially occur on the Site based on availability of suitable habitat or other factors (i.e., at least a "Low" potential for occurrence), are discussed in more detail below. Species determined unlikely to occur or absent from the Site based on these same factors are documented accordingly in the list and are not discussed further in this report. Figure 4.3.3 shows the documented occurrences of special status species within a 3-mile radius of the Site.

Bat Species. Six bats of special concern could occur on the Site. Three of these have low potential for occurrence on the Site, including pallid bat, Townsend's big-eared bat, and spotted bat. There are no rocky habitats for roosting on the Site, limiting roosting habitat for the pallid bat (*Antrozous pallius*). The only structures on the Site are the old wagon and the small pumphouse, both of which provide extremely marginal roosting habitat for the Townsend's big-eared bat. Spotted bat (*Euderma maculatum*) requires cliffs and caves for roosting, neither of which are present on or directly adjacent to the Site.

The remaining three special status bat species that have moderate potential to occur on the Site frequently roost in tree cavities, such as those observed in large coast live oaks of the Site. They include greater western mastiff bat (*Eumops perotix californicus*), red bat (*Lasiurus blossevilli*), and Yuma myotis bat (*Myotis yumanensis*). There is roosting habitat for these special status bat species in all trees proposed for removal on the Site.

Monterey Dusky-footed Woodrat. The Monterey dusky-footed woodrat (*Neotoma macrotis luciana*) is a State species of special concern. This species occurs in chaparral and forest habitats with moderate canopy cover and moderate to dense understory. Woodrats construct nests of grass, leaves, sticks, feathers, and other materials. Habitat suitability may be limited by the availability of nest materials.

Areas beneath trees along the eastern edge of the Site provide marginal habitat for this species. The CNDDDB does not contain any records of Monterey dusky-footed woodrat within 10 miles of the Site and this species, or evidence of, was not observed during surveys of the Site in 2001, 2002, 2004, or 2007. Since marginal nesting and foraging habitat is present, there is low potential for this species to occur on the Site.

Western Burrowing Owl. The western burrowing owl (*Athene cunicularia*) is a State species of special concern, but is not currently protected according to provisions of either the State or Federal Endangered Species Acts. It is protected according to provisions of the Migratory Bird Treaty Act.

The burrowing owl is a small, terrestrial owl of open prairie and grassland habitats. It inhabits relatively flat dry open grasslands where tree and shrub canopies provide less than 30% cover. The burrowing owl is the only owl that routinely lives and nests underground. In the western United States, burrowing owls do not dig their own burrows, but take over burrows dug by animals such as ground squirrels (*Spermophilus* spp.), prairie dogs (*Cynomys* spp.), and badgers (*Taxida taxidus*) (Zarn 1974). Pocket gopher burrows are too small. In California, this species is found in close association with California ground squirrels using the abandoned burrows of ground squirrels for shelter, roosting and nesting. Burrowing owls are colonially nesting raptors, and colony size is indicative of habitat quality. It is not uncommon to find burrowing owls in developed and cultivated areas where California ground squirrels are active.

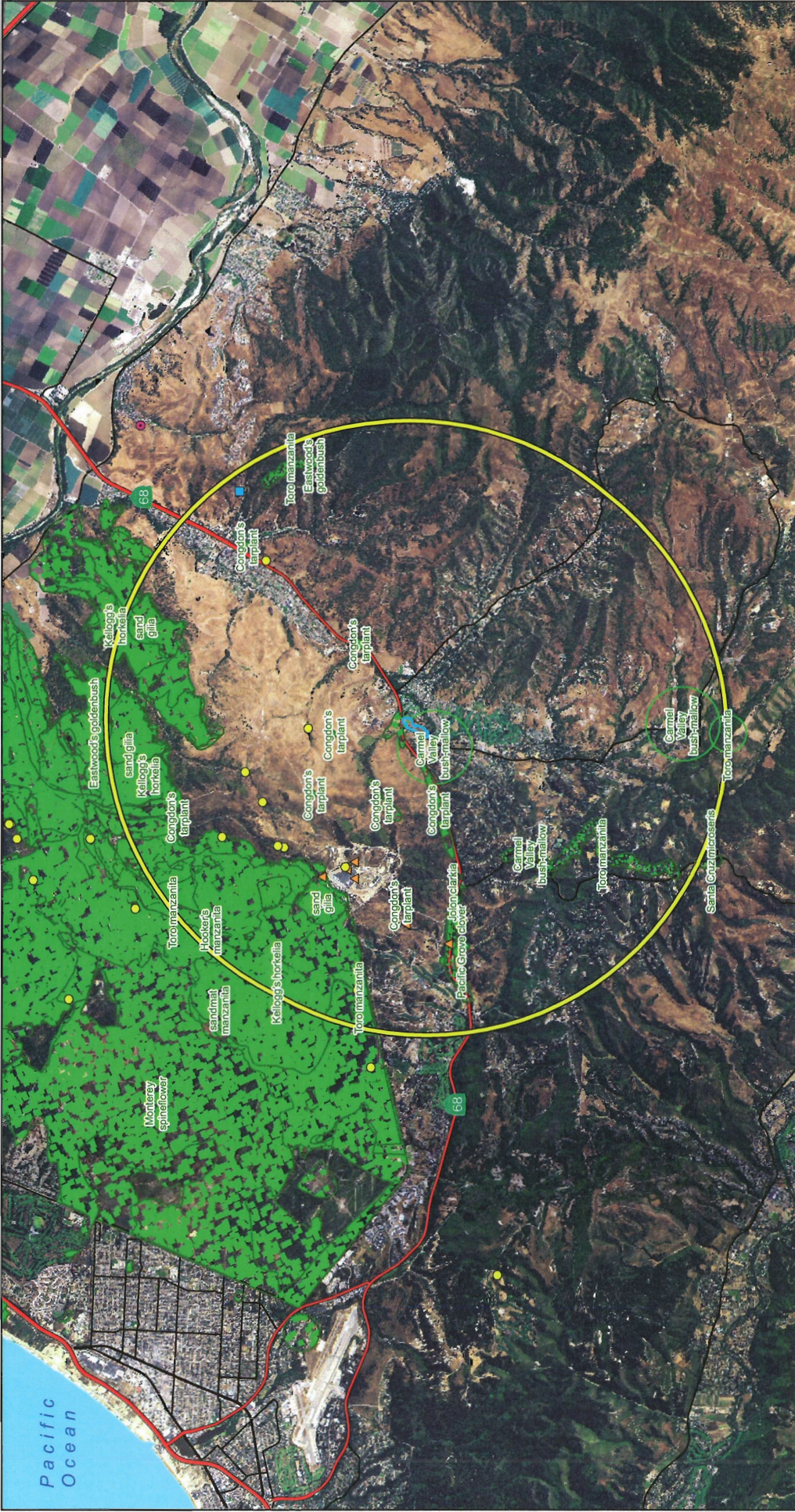


FIGURE 4.3.3

Corral de Tierra Retail Village EIR
Special Status Species within 3-mile of the Study Area

Suitable nesting (i.e., burrows with an opening diameter four inches or greater) and foraging habitat is present in the annual grassland on the Site. The CNDDDB contains two records of burrowing owls within ten miles of the Site but no burrowing owls or sign (e.g., whitewash, prey remains) were observed at or near any of the burrows during site surveys in 2001, 2002, 2004, or 2007. While no burrowing owls or evidence of burrowing owls was observed on the Site, individuals could readily move on to the Site prior to site development. Transients could use ground squirrel burrows for cover outside of the breeding season. Nesting pairs could use burrows of the Site for nesting purposes during the breeding season. Consequently, there is moderate potential for burrowing owls to migrate onto the Site.

Northern Harrier. The Northern harrier (*Circus cyaneus*) is a State species of concern. Northern harriers occur in a variety of habitats, including grasslands, grain fields, sagebrush flats, emergent wetlands, and alpine meadows. This species usually nests in emergent wetlands or along rivers or lakes, but may nest in grasslands, grain fields, or on sagebrush flats. Northern harrier populations have declined dramatically in Central California due to loss of habitat. Impacts to the remaining suitable habitat for this species are of great concern to the resource agencies.

Suitable nesting and foraging habitat for northern harriers occurs in the annual grassland on the Site. An adult male northern harrier was observed foraging in the annual grassland east of the Site near the pond during surveys for the SR-68 improvement project at the Corral de Tierra intersection in May 2007 (LSA, 2007).

White-tailed Kite. The white-tailed kite (*Elanus leucurus*), formerly known as the black-shouldered kite, is a State fully protected species under California Fish and Game Code. California contains the largest number of white-tailed kites in North America. It is known to occur from the Central Valley and the entire California coast. White-tailed kites breed in scattered trees of lowland grasslands, agriculture, wetlands, oak-woodland, oak savannah, and riparian areas associated with open areas. Nesting birds are protected by the Migratory Bird Treaty Act and the California Fish and Game Code.

Scattered trees within the Site provide suitable nesting habitat for white-tailed kites. The annual grassland on the Site provides suitable foraging habitat. Seasonal wetland/riparian habitat occurring north of the Site along the tributary to El Toro Creek might attract white-tailed kites to the Site. Although this species was not observed on the Site, there is a high probability that the white-tailed kite would forage and/or nest on the Site.

California Horned Lark. The California horned lark (*Eremophila alpestris actia*) is a State species of special concern. This species is known from coastal regions and the San Joaquin Valley, and is a common to abundant resident in a variety of open habitats, usually where trees and large shrubs are absent. It occurs from grasslands along the coast and deserts near sea level to alpine dwarf-shrub habitat above timberline. Horned larks walk along the ground in search of food. Their diet consists of insects, spiders, snails, grass and forb seeds, and other plant matter. Horned larks build grass-lined cup-shaped nests in depressions on the ground in open areas.

The annual grassland on the Site provides suitable nesting and foraging habitat for this species. The CNDDDB does not contain any records of California horned lark within 10-miles of the Site, and this

species was not observed during surveys during September 2004 or November 2007. Since suitable habitat is present, there is a moderate potential for California horned lark to occur on the Site.

Prairie Falcon. The prairie falcon (*Falco mexicanus*) is a State species of special concern. This species nests on cliffs in dry, open terrain, and forages in open areas such as grassland, rangeland, savannah, desert scrub, and agricultural fields.

The Site does not contain suitable nesting habitat for prairie falcon but the annual grassland on the Site could provide suitable foraging habitat. The nearest CNDDDB record for this species is approximately 20 miles east of the Site in Pinnacles National Monument. There are no CNDDDB records in the Sierra de Salinas range and this species was not observed during surveys in November 2007. However, since suitable foraging habitat is present, there is low potential for prairie falcon to occur on the Site.

Loggerhead Shrike. The loggerhead shrike (*Lanius ludovicianus*) is a State species of special concern. The species is considered a common resident and winter visitor in lowlands and foothills throughout California. Loggerhead shrikes prefer open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Highest densities occur in more or less open hardwood and mixed canopy habitats. Loggerhead shrikes are rarely found in heavily urbanized areas, but often occur in open croplands.

Loggerhead shrikes frequent open habitats with scattered shrubs and trees where they feed on large insects, small birds, mammals, amphibians, reptiles, fish, carrion, and various other invertebrates. Prey is typically identified from an above ground perch. Captured prey is often skewered on a thorn, sharp twig, or wire barb. Nests are constructed in dense shrubs or trees and are usually well concealed.

The annual grassland and scattered trees on the Site provide suitable nesting and foraging habitat for loggerhead shrike. The CNDDDB does not contain any records of loggerhead shrike within 10 miles of the Site and this species was not observed on the Site during surveys in September 2005 or November 2007. Since suitable foraging and nesting habitat is present, there is moderate potential for loggerhead shrike to occur on the Site.

California Tiger Salamander. The California tiger salamander (CTS) (*Ambystoma californiense*) is a federally threatened species, and as of March 2010, was listed as threatened in the State of California. Critical habitat for CTS was designated on August 23, 2005. The Site is not located in critical habitat for CTS; the closest critical habitat is Unit 3 - Central Coast Region, located approximately nine miles south of the Site. Introduced Tiger Salamanders (*Ambystoma tigrinum*) have been found within this part of the range of the CTS.

California tiger salamanders are large terrestrial salamanders occurring in lowland grasslands and low foothill regions of Central and Northern California. They range from Sonoma, Colusa, and Yolo Counties south through the Central Valley to Tulare County, and through the Coast Range into Santa Barbara County. An isolated population also occurs in Butte County. California tiger salamanders are typically associated with vernal pool habitats or other habitats consisting of seasonal pools or ponds

(including man-made ponds) surrounded by grasslands. Adult CTS spend most of their lives underground in small mammal burrows, which are a required habitat element. Adult salamanders move to larger, longer lasting vernal pools and other seasonal pools to breed following late winter and spring rains. Following metamorphosis, juveniles emigrate at night from drying breeding sites to refuge sites. The USFWS considers the upper dispersal limit of CTS to be 1.4-miles (2.2 kilometers) from the nearest breeding habitat. Any burrows within that 1.4 miles (2.2 kilometers) could potentially provide aestivation habitat for CTS. Research based on adult capture data suggests that 50%, 90% and 95% of adults were within 164, 536, and 678 yd (150, 490, and 620 m respectively) of the pond, respectively. For subadults, 95% were within 689 yd (630 m) of the pond, but that 85% of this life stage was concentrated between 219 and 656 yd (200 and 600 m) from the pond (Trenham and Shaffer 2005). Furthermore, CTS are known to disperse between ponds in a complex during their lifetime (Trenham et al 2001).

CTS are threatened by loss of suitable pools for breeding and, specifically, the degradation of complexes of long-lasting pools. Introduction of exotic and transplanted predatory fishes, including mosquitofish, can eliminate developing embryos or larvae from a pool. CTS are very rarely found in any pond with fish. Bullfrogs and crayfish are also known CTS predators. Loss of refuge habitat adjacent to breeding sites and poisoning of burrowing mammals are significant threats to CTS. Artificial barriers that prevent or seriously impede migration can also be threats to certain populations.

An amphibian site assessment was completed for the Site in January 2007 by DD&A and a habitat assessment for California red-legged frog (CRLF) and CTS was completed for the Site by LSA in 2007. The assessment followed the USFWS interim guidance from 2003 (*Interim Guidance on-site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander*). The assessment for CTS and CRLF were done concurrently on November 2, 2005. DD&A assessed dominant habitats within 3.1 miles of the Site and determined that annual grassland, native grassland, oak savannah, and oak woodland were dominant. Other habitats included coyote bush scrub, coastal scrub, coastal prairie, freshwater marsh, maritime chaparral, mixed conifer, riparian, wetland, sparsely vegetated/bare soil, urban non-vegetated, and valley needlegrass. This report was submitted to the USFWS requesting a determination regarding the necessity of additional studies to establish presence/absence. An LSA biologist spoke with Chris Diel, USFWS biologist, regarding the project on April 15, 2010. Mr. Diel stated that given the length of time since the original habitat assessment was conducted, an additional habitat assessment following the USFWS 2003 *Interim Guidance on-site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander* would be required. This requirement is described under Mitigation Measure 4.3.4.

The Site is within the historic range of CTS. There are no documented occurrences from the Site. However, there are 12 known occurrences within 3.1 miles of the Site, all north of SR-68 within lands of Ford Ord and Laguna Seca (refer to Figure 4.3.3). The closest documented occurrence lies approximately 1/3 mile to the north. Suitable breeding habitat occurs approximately 492-yards (450-meters) north of the Site in an un-surveyed ephemeral pond. Should known occurrences be the only occurrences in the Project vicinity area, SR-68 could serve as a barrier for dispersal. SR-68 represents a potential barrier for dispersal (>30 cars per hour at any given time). In addition, no roadkill records of CTS have been documented on SR-68 (CDFG, 2007).

According to the Spreckels USGS 7.5 quadrangle, there are at least three ponds within the 1.4 miles (2.2 km) distance south of the Site, all within heavily managed lands associated with the golf course. None of these ponds were surveyed because of inaccessibility. The pond located approximately 150 ft east of the northeastern corner of the Site was inundated during all of LSA's visits and appears to be perennial. There are two others that have not been surveyed within the 1.4 miles (2.2 km) distance to the south. If any of the three ponds are ephemeral (seasonal) in nature, they would be suitable breeding (aquatic) habitat for CTS. Densely vegetated areas would not be considered barriers to dispersal between the ponds and the Site, although CTS tend to favor grassland for dispersal. Should CTS breed in any of these ponds, it is possible they could disperse onto the Site and aestivate in burrows located on the Site. Annual grassland on the Site is suitable to marginal upland aestivation habitat due to the presence of a few ground squirrel burrows and gopher burrow complexes which could be used as refugia during aestivation. Therefore, there is low-moderate potential for CTS to occur on the Site.

California Red-legged Frog. The California red-legged frog (CRLF) (*Rana aurora draytonii*) is a federally threatened species and a State species of concern. Critical habitat for CRLF was initially designated in March 2001, but was subsequently vacated (with the exception of one-unit in the Sierra Nevada) pursuant to a November 6, 2002, court order by the U.S. District Court for the District of Columbia. A revised critical habitat designation was finalized on April 13, 2006. Per the revised critical habitat designations, the Site is not located in critical habitat. The nearest critical habitat is Unit MNT-2, located approximately 3.8 miles southwest of the Site in the Carmel Valley. There are no documented occurrences of the CRLF within 5 miles (8 km) of the Site (CNDDDB, 2007).

The CRLF inhabits lowlands and foothills in or near permanent sources of deep water. This frog prefers ponds or creeks with extensive shoreline vegetation but would disperse 1.0 mile or more during and after rain events. Ruderal grasslands of the Site provide suitable upland habitat. The Site does not contain any suitable breeding habitat (creeks, ponds, pool, or wetlands) for the CRLF.

A site assessment was completed for the Project in 2007 in accordance with *Revised Guidance On-Site Assessment and Field Surveys for California Red-legged Frog* (USFWS, 2005) (DD&A, 2007). Suitable breeding habitat occurs within close proximity of the Site. Potential aquatic habitat for CRLF within a one-mile radius of the Site includes a pond on private property to the northeast and at least three ponds on the Rancho El Toro golf course to the east and south. The ephemeral tributary to El Toro Creek that lies north of SR-68 has minimal riparian vegetation and does not frequently pond, providing only marginal habitat for CRLF. Northeast of the Site, El Toro Creek supports dense willow riparian vegetation that would be suitable for CRLF foraging or dispersal if they are present in the area. Dominant habitats present within .6 mi (1 km) of the Site include annual grassland, oak savannah, and oak woodland (DD&A, 2007). Several protocol-level and other surveys for CRLF have been conducted in or near the Site between 2003 and 2007 with negative findings. A habitat assessment for CRLF and CTS was completed by LSA for the Corral de Tierra and SR-68 intersection improvement project (LSA, 2007), with negative findings.

Considering the lack of documented presence in the vicinity and the absence of suitable breeding habitat on the Site, there is a low probability that CRLF occur on the Site.

Western Spadefoot Toad. The western spadefoot toad (*Spea hammondi*) is a California species of special concern. Historically, the western spadefoot toad ranged from Redding to northwest Baja California. In California this species was found throughout the Central Valley and in the Coast Ranges from San Francisco to Mexico. Breeding habitat for this species includes temporary pools or ephemeral drainages; breeding occurs from January to May. Water temperatures within these pools must stay between 48° and 86° degrees Fahrenheit in order to serve as suitable breeding habitat. Eggs are deposited on emergent vegetation or detritus. Once pools begin to dry, western spadefoot toads use “spades” on their hind feet to burrow into the ground. Once fully concealed, these toads enter a period of subterranean hibernation until the following wet season, often eight to nine months.

The ephemeral drainage approximately 500 ft east-northeast of the Site provides suitable breeding (aquatic) habitat for western spadefoot toad. The ponds adjacent to the Site on golf course lands may provide suitable breeding habitat, if they are ephemeral in nature. California annual grassland on the Site provides suitable upland habitat. The CNDDDB contains one record for this species within 10 miles of the Site. Consequently, there is low potential for western spadefoot to occur on the Site.

Potential Jurisdictional Waters. Jurisdictional waters include rivers, creeks, and drainages with a defined bed and bank that may carry at most ephemeral flows. Jurisdictional waters include lakes, ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the U. S. Army Corps of Engineers (Corps), the California Department of Fish and Game (CDFG) and the California Regional Water Quality Control Board (RWQCB). Potential jurisdictional waters on the Site are absent. There is no evidence of hydrophytic vegetation, hydric soils, or wetland hydrology on any portion of the Site.

Natural Communities of Special Concern. Natural communities of special concern are those that are of limited distribution, distinguished by significant biological diversity, home to special status plant and animal species, or are of importance in maintaining water quality or sustaining flows. Examples of natural communities of special concern in the vicinity of Toro Planning Area could include, among others, vernal pools, various types of riparian forest, and oak woodland (Sawyer and Keeler-Wolf, 1995). Due to its abundance in the direct and regional Project vicinity, California annual grasslands would not be considered a natural community of special concern. The low concentration of native oak trees on the Site (limited to 15 trees) would not qualify this mixed savannah to be considered oak woodland habitat.

4.3.2 Regulatory Setting

Special-Status Species

Special-status plants and wildlife are those species that are: 1) listed as rare, threatened, or endangered by USFWS or CDFG under State or federal endangered species acts; 2) are on formal lists as candidates for listing as threatened or endangered; 3) are on formal lists as species of concern; or 4) are otherwise recognized at the federal, State, or local level as sensitive.

Federal Endangered Species Act. Under the Federal Endangered Species Act (FESA), it is unlawful to “take” any species listed as threatened or endangered. “Take” is defined as to “harass, harm,

pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” An activity is defined as “take” even if it is unintentional or accidental. Take provisions under FESA apply only to listed fish and wildlife species under the jurisdiction of the USFWS and/or the National Oceanic & Atmospheric Administration, National Marine Fisheries Service (NMFS). Consultation with USFWS or NMFS is required if a project “may affect”, or result in “take” of, a listed species.

When a species is listed, the USFWS and/or NMFS, in most cases, must officially designate specific areas as critical habitat for the species. Consultation with USFWS and/or NMFS is required for projects that include a federal action or federal funding if the project would modify designated critical habitat.

Magnuson-Stevens Fishery Conservation and Management Act. Under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), essential fish habitat (EFH) must be designated in every fishery management plan. EFH includes “...those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” The MSA requires consultation with NMFS for projects that include a federal action or federal funding and may adversely modify EFH.

Bald Eagle and Golden Eagle Protection Act. It is unlawful to import, export, take, sell, purchase, or barter any eagle, their parts, products, nests or eggs according to the federal Bald Eagle and Golden Eagle Protection Act (16 USC Sec. 668 *et seq.*)

Migratory Bird Treaty Act and California Department of Fish and Game Code. The Migratory Bird Treaty Act (MBTA) prohibits actions that would result in “take” of migratory birds, their eggs, feathers, or nests. “Take” is defined in the MBTA to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing or transporting any migratory bird, nest, egg, or part thereof. More than 800 species of birds are protected under the MBTA.

Migratory birds are also protected, as defined in the MBTA, under Section 3513 of the California Fish and Game Code. In addition, Section 3503 of the California Fish and Game Code prohibits the take, possession, or needless destruction of the nest or eggs of any bird, except as otherwise provided by the California Fish and Game Code or other regulation.

California Endangered Species Act. Under the California Endangered Species Act (CESA), it is unlawful to “take” any species listed as rare, threatened, or endangered. “Take” means to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” CESA take provisions apply to fish, wildlife, and plant species. Take may result whenever activities occur in areas that support a listed species. Consultation with CDFG is required if a project would result in “take” of a listed species.

California Native Plant Protection Act. The California Native Plant Protection Act (CNPPA) preserves, protects and enhances endangered and rare plants in California. Specifically, it prohibits import, take, possession or sale of any native plant designated by the CDFG Commission as rare or endangered, except under certain circumstances designated by the Act.

Jurisdictional Waters. Jurisdictional waters include most drainage features (rivers, streams), open water features (lakes, ponds), and wetlands (marshes, seeps). Jurisdictional waters are often regulated by one or more government agencies, as described below.

Army Corps of Engineers. Under Section 404 of the Clean Water Act (CWA), Corps regulates the discharge of dredged or fill material into waters of the U.S. Waters of the U.S. are those waters that have a connection to interstate commerce, either direct via a tributary system or indirect through a nexus identified in the Corps regulations. In non-tidal waters, the lateral limit of jurisdiction under Section 404 extends to the ordinary high water mark (OHWM) of a waterbody or, where adjacent wetlands are present, beyond the OHWM to the limit of the wetlands. The OHWM is defined as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area” (33 CFR 328.3). In tidal waters, the lateral limit of jurisdiction extends to the high tidal line (HTL) or, where adjacent wetlands are present, beyond the HTL to the limit of the wetlands.

Wetlands are defined as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for a life in saturated soil conditions.” Nonwetland waters essentially include any body of water, not otherwise exempted, that displays an OHWM.

Regional Water Quality Control Board. Under Section 401 of the CWA, the State Water Resources Control Board must certify all activities requiring a 404 permit. The RWQCB regulates these activities and issues water quality certification for those activities requiring a 404 permit. In addition, the RWQCB has authority to regulate the discharge of “waste” into waters of the State pursuant to the Porter-Cologne Water Quality Control Act (PCWQCA).

California Department of Fish and Game. The CDFG, through provisions of Sections 1600-1616 of the State of California Code of Regulations, is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be substantially adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and the conveyance of at least ephemeral flows. CDFG regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by CDFG.

CDFG has jurisdiction over streams and lakes and any riparian habitat present within those areas. Riparian habitat includes willows, cottonwoods, and other vegetation typically associated with the banks of a stream or lake shoreline. In most situations, wetlands associated with a stream or lake would fall within the limits of riparian habitat. Thus, defining the limits of CDFG jurisdiction based on riparian habitat would automatically include any wetland areas. CDFG has not defined wetlands for jurisdictional purposes. Wetlands not associated with a lake, stream, or other regulated area are generally not subject to CDFG jurisdiction.

Local Plans and Regulations

Local jurisdictions are required to include in their general plans discussion of elements that relate to biological resources, often within the categories land use, conservation, and open space. The Site falls within the jurisdiction of the Toro Area Plan, a part of the Monterey County General Plan. Both the Monterey County General Plan and the Toro Area Plan were referenced in this analysis for guidance related to biological resources. Policies in the General Plan seek to protect natural areas and to preserve the diversity of habitats in the County.

Monterey County Tree Ordinance

The County has provided regulations for the protection and preservation of oak and other specific types of trees as required in the *Monterey County General Plan*, area plans and master plans. The area located within the Toro Area Plan is subject to the provisions of the Monterey County Zoning Ordinance – Title 21, Section 21.64.260. This section of the Ordinance requires the acquisition of a permit prior to the removal of oak trees and other protected trees with a diameter of six inches or more when measured 2 ft above the ground level; removal of landmark oak tree requires a discretionary permit pursuant to Subsection 21.64.260D of the Ordinance. Landmark oak trees are those trees that are 24 inches or more in diameter when measured 2 ft above the ground, or trees that are visually significant, historically significant, or exemplary of their species.

CDFG Protection of Oak Woodlands

Oak protection legislation (SB 1334) signed by Governor Schwarzenegger in January of 2005 establishes that the conversion of oak woodlands within County jurisdictions of the State be subject to CEQA review, and that significant impact to oak woodlands be mitigated. The legislation defines “oak woodland” as a tree habitat with five or more oak trees per acre. “Conversion” has been defined as the cutting or removing of 30 percent or more of the canopy from oak woodland, and changing the land use such that the converted acreage could no longer sustain oak woodland in the future. The legislation also identifies a number of mitigation options, which individually or in combination could reduce a project’s impact to oak woodlands to a less than significant level.

As a public trust and commenting agency under CEQA, Region 4 of the California Department of Fish and Game has now established guidelines for identifying appropriate mitigation measures for potentially significant project effects to individual oaks, as well as oak woodlands. These guidelines implicitly provide for a tree survey that identifies likely impacts to oaks from a given project. They also provide for the planting of replacement oaks at various ratios tied to the size class of the affected oaks.

4.3.3 Methodology

Literature Search

Prior to performing any fieldwork, database searches were conducted of the California Natural Diversity Database (CNDDDB 2007), and California Native Plant Society (CNPS) Online Inventory (CNPS 2007), referencing the Spreckels, Chualar, Salinas, Natividad, Mt. Carmel, Seaside, Carmel

Valley, and Rana Creek 7.5-minute USGS quadrangles. A species list from the USFWS, Ventura Field Office, was also requested and utilized in preparation of this chapter.

The special status species lists obtained from the CNDDDB, CNPS, and USFWS were reviewed to determine which species that occur in the vicinity could potentially occur on the Site (refer to Appendix D of Volume II of this EIR). In addition, special status species that were not included on the lists and/or have not been recorded in the area but could potentially occur on the Site based on habitat suitability are also included in the table. Furthermore, the information gathered through the literature search and the field surveys was used to assess potentially significant impacts to biological resources associated with the Project.

Three biological resources reports have been previously prepared for the Project: *Biological Assessment Report for Phelps/Corral de Tierra* (Denise Duffy and Associates, Inc, November 2007); *Forest Management Plan, Corral de Tierra* (Webster & Associates Professional Foresters 2005); and *Corral de Tierra California Red-legged Frog and California Tiger Salamander Habitat Assessment Report* (Denise Duffy and Associates, Inc. January 2007). Prior to conducting any fieldwork, the previous biological reports prepared for the Project were reviewed. In addition, a habitat assessment for CRLF and CTS for the SR-68/Corral de Tierra Intersection improvement project was conducted in April of 2007 (LSA 2007). The project area associated with the intersection project is located directly north of the proposed retail village. As appropriate, the findings from these reports were utilized during preparation of this analysis.

Field Surveys

A field survey was conducted on September 3, 2004 by Senior Biologist Micaele Maddison with the purpose of conducting a peer review of Denise Duffy and Associates, Inc. (DD&A) biological studies. An additional survey was conducted on November 8, 2007, and included general biological surveys, plant communities mapping, and special status species habitat assessment.

Surveys were conducted on foot throughout the Site. Vegetation was characterized and mapped in accordance with *A Manual of California Vegetation* (Sawyer and Keeler-Wolfe, 1995), as appropriate, and all habitats on the Site were inspected to determine if they were suitable to support special status species. An inventory was taken of all wildlife and plant species observed. Lists of flora and fauna observed on the Site during site surveys can be found in Appendix D of Volume II of this EIR.

4.3.4 Impact Significance Criteria

This section provides an analysis of the Project impacts that may occur with development of the Site. The evaluation of impacts is based on the resources present, or reasonably likely to be present, on the Site and the Project as described herein.

Potential significant impacts associated with biological resources have been evaluated using the following criteria:

Threshold 4.3.1 **Have a substantial effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or**

special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

Threshold 4.3.2 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

Threshold 4.3.3 Have a substantial adverse effect of federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

Threshold 4.3.4 Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

Threshold 4.3.5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

Threshold 4.3.6 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The significance criteria identified above are based on CEQA Guidelines Appendix G and Section 15065. A number of other agencies have promulgated criteria and definitions relevant to the implementation of CEQA significance criteria, as described below.

CEQA Section 15206 states that a project is of statewide, regional, or area wide significance if it has the potential to substantially affect sensitive wildlife habitats including, but not limited to, riparian lands, wetlands, bays, estuaries, marshes, and habitats for rare and endangered species, as defined by Fish and Game Code Section 903. CEQA Section 15380 further provides that a plant or animal species may be treated as rare or endangered even if not on one of the official lists if, for example, it is likely to become endangered in the foreseeable future.

A project could be considered to have a significant adverse impact on biological resources if it would result in substantial disruption to, or destruction of, any special status species, its habitat, or breeding grounds. A project would also be considered to have a significant impact if it would result in a substantial loss of important plant or animal species; would cause a change in species composition, abundance, or diversity beyond that of normal variability; would result in the direct or indirect measurable degradation of sensitive habitats (e.g., wetlands, riparian corridors, vernal pools, oak woodlands); or would result in loss of a significant plant community.

A project would normally have a significant impact on the environment if it would physically affect communities or species protected by adopted environmental plans and goals of the community(ies) where it is located. Any action that would conflict with these policies might be considered a significant impact.

4.3.5 Project Impacts

4.3.5.1 Impacts Considered Less Than Significant

The following impacts were determined to be less than significant and, as a result, no mitigation is warranted.

Threshold 4.3.1 **Have a substantial effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service**

Special Status Wildlife. Impacts would be considered less than significant to special status species that could forage on the Site due to the presence of suitable foraging habitat, but would not breed there due to the absence of suitable breeding habitat. The Project would result in the conversion of approximately 11 acres of annual grassland habitat to commercial uses that would be permanently unusable for most native flora and fauna. After a thorough analysis of cumulative projects in the vicinity, suitable foraging habitat for these species is, and would continue to be, relatively common in the vicinity. The Project would not, by itself, substantially affect regional populations. Therefore, Project impacts to the special status wildlife species below do not meet the CEQA threshold for significance.

Special Status Bats. Three special status bats including pallid bat, Townsend's big-eared bat, and spotted bat, have low potential to forage on the Site, but would not roost there as suitable habitat is absent. Should any of these bats be foraging on the Site during construction, they would most likely avoid the Site during construction and operation. Therefore, no temporary or permanent impacts are anticipated to these three bat species.

Monterey Dusky-footed Woodrat. Marginal habitat occurs beneath a few trees located along the eastern boundary of the Site for the Monterey dusky-footed woodrat. Since no woodrat nests were observed on the Site during preliminary site surveys in 2001, 2002, 2004, and 2007, it is highly unlikely that this species would take residence on the Site prior to construction or during operation. There is a low potential for this species to occur on the Site. Therefore, no temporary or permanent impacts are anticipated to this species as a result of the Project.

Prairie Falcon. Prairie falcon could forage on the Site but would not nest there since suitable habitat in the form of rock cliffs is not present. Prairie falcon would most likely avoid foraging on the Site during construction or operation, and therefore, no temporary or permanent impacts are anticipated to this species.

Special Status Plants. Suitable habitat for several special status plants occurs in California annual grassland habitat on the Site, including Hickmans's onion, Congdon's tarplant, Monterey spineflower, robust spineflower, Hutchinson's larkspur, Santa Cruz tarplant, marsh microseris, hooked popcorn-flower, Santa Cruz microseris, and Santa Cruz clover. However, since surveys conducted in 2001, 2002, 2004 and 2007 on the Site resulted in negative findings, these species are considered absent from the Site. No temporary or permanent impacts would occur to these special status plants.

Threshold 4.3.2 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service

The Project would result in the conversion of approximately 11 acres of annual grassland habitat to commercial uses that would be permanently unusable for most native flora and fauna. No riparian habitat or other sensitive natural community occurs on the Site. Of the 15 oak trees that occur within the nonnative grassland habitat, two cannot be avoided, as discussed further below. Due to the relatively small amount of annual grassland (and few oaks) that would be removed by the Project, the loss of this community is considered a less than significant impact.

Threshold 4.3.3 Have a substantial adverse effect of federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means

No evidence of wetlands or other waters were observed on the Site during site surveys in 2001, 2002, 2004, and 2007. Roadside drainage ditches were absent from the perimeter of the Site. The relatively flat nature of the Site allows precipitation to percolate into soils or evaporate prior to draining off-site. Wetlands within proximity of the Site include the pond on the golf course (approximately 150 ft east of the sites northeastern boundary) and a seasonal drainage (approximately 100 ft north of the Site across SR-68). These nearby wetland areas are not located on the Site, but are near enough such that misdirected runoff could indirectly impact these adjacent wetlands. At the time that this EIR section was being prepared, no erosion control plan had yet been prepared. Preparation of an erosion control plan as outlined in Chapter 4.5 Geology and Soils shall dictate a drainage scenario that shall ensure that on-site runoff is directed away from these nearby wetland areas. This erosion control plan is required per Policy 3.1.1 of the County Building Code and is described under Mitigation Measure 4.5.3. Therefore, no temporary or permanent impacts would occur to wetlands or other waters.

Threshold 4.3.4 Substantial interference with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites

Many terrestrial animals need more than one biotic habitat in order to complete all of their biological activities. With increasing encroachment of humans on wildlife habitats, it has become important to establish and maintain linkages for animals to be able to access locations containing different biotic

resources that are essential to maintaining their life cycles. Terrestrial animals use ridges, canyons, riparian areas, and open spaces for movement between their required habitats. Formal studies of wildlife movement on the Site were not necessary, since no portion of the Site lies within an identified wildlife corridor, although some wildlife species may pass through the Site occasionally.

Migratory corridors adjacent to the Site might include the tributary to El Toro Creek that lies approximately 100 ft north of the Site on the other side of SR-68. The annual grassland of the Site may facilitate the movement of wildlife. However, given the relatively steep topography surrounding the Site, it is more likely that migrating species would follow the riparian corridor. Furthermore, the tributary to El Toro Creek is outside of the Site and would not be blocked or constricted by the Project. SR-68 lies between the Site and the tributary, which suggests that any wildlife using the tributary as a corridor is already accustomed to any human related impacts (i.e. noise, traffic, etc.) that the Project may incur. Since the applicant does not propose to block or constrict the channel of the tributary to El Toro Creek, it is unlikely that the Project would have significant adverse impacts on the movements of wildlife.

Implementation of the Project could impede the use of native wildlife nursery sites (e.g., roosting habitat for bat species), as discussed further below under potentially significant impacts.

Threshold 4.3.5 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

No Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or State habitat conservation plans have been approved within the Toro Area of the County of Monterey. Therefore, the Project would not conflict with any approved plan and there would be no impacts.

4.3.5.2 Potentially Significant Impacts

The following impacts were determined to be potentially significant, and as a result, feasible mitigation measures would be required.

Threshold 4.3.1 Have a substantial effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service

Special Status Wildlife. Impacts would be considered significant to 11 special-status wildlife species that could breed on the Site due to the presence of suitable breeding habitat.

Special Status Bats. Three special-status species of bat have moderate potential to roost in mature trees on the Site, including greater western mastiff bat, red bat, and Yuma myotis bat. Although no bats, or evidence of, were observed on the Site during surveys, absence of bats

cannot be verified from reconnaissance level surveys. Trees with large cavities can support fairly large numbers of bats (100-300), while other smaller trees may provide habitat for one male, or one female and her pups. Should bats be roosting in trees during removal activities, the Project could result in impacts to any of these species. Should large numbers of bats be present, the Project could have an effect on regional populations of any of the three bat species potentially roosting in trees of the Site from time to time. Disturbance of active maternal roost sites could lead to bat mortality, which would be a violation of California Fish and Game Code. Implementation of the Project would constitute a significant impact to these species pursuant to CEQA, should any of these special status bats be harmed during tree removal.

Western Burrowing Owl. Although no evidence of burrowing owl was observed during preliminary site surveys, suitable breeding habitat occurs in the form of ground squirrel burrows throughout the Site. The Project would remove potential nesting (i.e., burrows) and foraging habitat (i.e., annual grassland) for burrowing owls. If burrowing owls migrate onto the Site prior to construction, the Project could directly impact any owls present. This would be considered a significant impact pursuant to CEQA.

Northern Harrier. Although none were seen during the site surveys, annual grassland on the Site provides suitable foraging and breeding habitat for Northern harrier. The Project would remove potential nesting and foraging habitat (i.e., annual grassland) for Northern harrier. If harriers migrate onto the Site prior to construction, the Project could directly impact Northern harrier, if present. This would be considered a significant impact pursuant to CEQA.

White-tailed Kite. Annual grassland on the Site provides suitable foraging habitat occurs in the form of annual grassland for white-tailed kite. Although none were seen during site surveys, this species could nest in trees on the Site. Implementation of the Project would constitute a significant impact to these species pursuant to CEQA, should white-tailed kite be harmed during tree removal.

California Horned Lark. Annual grassland on the Site provides suitable foraging and nesting habitat for California horned lark. The Project would remove potential nesting and foraging habitat (i.e., annual grassland) for California horned lark. If horned lark migrates onto the Site prior to construction, the Project could directly impact horned lark, if present. This would be considered a significant impact pursuant to CEQA.

Loggerhead Shrike. Suitable foraging and nesting habitat occur on the Site. The Project would remove potential nesting and foraging habitat (i.e., annual grassland) for loggerhead shrike. If shrikes migrate onto the Site prior to construction, the Project could directly impact loggerhead shrike, if present. This would be considered a significant impact pursuant to CEQA.

California Tiger Salamander. Twelve occurrences of CTS have been documented within 3.1 miles of the Site (refer to Figure 4.3.3), the nearest of which is approximately 1/3 mile north of the Site. The Project would not affect aquatic habitat for CTS, since none is present within the Site. The Project would impact 11 acres of California annual grassland which contains a few ground squirrel burrows and gopher burrows providing marginal to suitable aestivation habitat for CTS. If CTS disperses onto the Site prior to construction, the Project could directly impact CTS, if present. Potential impacts would be limited to burying or

collapsing burrows or burrow entrances during grading and other construction activities. Any impact to this species would be considered a significant impact pursuant to CEQA.

Based on the biological studies completed for the Project, there is a remote possibility that CTS are present on the Site and could potentially be affected by Project construction. Should CTS be present, acquisition of a 2081 permit from CDFG and an HCP from USFWS would be required. A similar scenario has recently occurred at the nearby SR-68/Corral de Tierra intersection improvement project (LSA, 2009). Similar grassland habitat of much smaller amount would be impacted from the SR-68 interchange improvement project, which is located directly north of the Site, across SR-68. For the SR-68 intersection project, the CDFG considered CTS potentially present and therefore the County of Monterey, the lead agency for the project, assumed presence of CTS without conducting protocol level surveys and moved forward with the project accordingly. Therefore, Mitigation Measure 4.3.4 is warranted to ensure that a current assessment is undertaken to determine the presence/absence of CTS on the Site and to ensure CTS are not harmed from project implementation.

California Red-legged Frog. No CRLF occurrences have been documented within five miles of the Site. There is low potential for the CRLF to aestivate in ground squirrel or gopher burrows on the Site. However, if CRLF disperses onto the Site prior to construction, the Project could directly impact CRLF, if present. Potential impacts would be limited to burying or collapsing burrows or burrow entrances during grading and other construction activities. This would be considered a significant impact pursuant to CEQA.

Western Spadefoot Toad. There is low potential for the Western spadefoot toad to breed in ground squirrel burrows on the Site. The Project would remove potential aestivation habitat for Western spadefoot. If spadefoot disperses onto the Site prior to construction, the Project could directly impact Western spadefoot, if present. Potential impacts would be limited to burying or collapsing burrows or burrow entrances during grading and other construction activities. This would be considered a significant impact pursuant to CEQA.

Threshold 4.3.4 **Have a substantial interference with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites**

As discussed above under Section 4.3.5.1, Less Than Significant Impacts, the Project would not result in a significant impact to movement of resident or migratory wildlife species. However, the Project would result in the removal of trees, and other vegetation (e.g., annual grassland) that could provide suitable nesting habitat for raptors and/other birds. Disturbance during the nesting season could result in nest abandonment or failure, and the use of the Site for native wildlife nursery sites would be impeded. This would be considered a significant impact pursuant to CEQA.

Threshold 4.3.5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

As outlined in the Forest Management Plan (Webster & Associates, 2007), implementation of the Project would remove 22 trees (refer to Appendix D of Volume II of this EIR), including two coast live oaks, five olive trees, two eucalyptus, seven walnuts, three Monterey pines, and three western sycamores. Nine trees would be removed for construction of the access road, nine would be removed for construction of the parking lot, and four would be removed for construction of retail/office buildings. The remaining 23 trees on Site would be retained.

Chapter 21.64.260 (Preservation of Oak and Other Protected Trees) of the County's Zoning Ordinance contains provisions for the removal of protected trees. Protected trees in the area of the Toro Area Plan include madrone and oak trees six-inches in diameter when measured 2 ft above ground. The Site contains a total of 45 trees, 17 of which are oak trees. The Project includes removal of two oak trees 56- and eight-inches in diameter respectively which qualify as protected; the 56-inch diameter tree also qualifies as a "landmark" tree as defined in the Ordinance (Chapter 21.64.260 C 5). The predominant plant community on the Site is ruderal (disturbed) annual grassland which has been regularly mowed. Existing trees are sparse and comprised of large diameters oaks, sycamores and non native planted trees. The Site does not contain more than five or more oak trees per acre and therefore the oak trees are not subject to the provisions of California State Senate Bill 1334 which provides for additional protective measures for oak trees in California.

Chapter 21.64.260 D 5 of the Ordinance requires that the following findings be made to approve removal of protected trees: 1) the tree removal is the minimum required under the circumstances of the case, and 2) that the removal would not involve the risk of adverse environmental impacts such as soil erosion, water quality, ecological impacts, noise pollution, air movement and wildlife habitat. Only two of the 17 existing oak trees would be removed; given the condition of the Site as ruderal (disturbed) annual grassland and the arrangement of the buildings within the constraints of the Site to create a village environment, this would be the minimum oak tree removal required for development of the Project. The oak trees in the Site do not constitute oak woodlands as defined in SB 1334 and the dominating plant community is non protected annual (ruderal) grassland. The Forest Management Plan completed for the Project concludes that the oak tree removal would not result in environmental impacts on the Site as addressed in the Ordinance. Therefore the findings for approval of the oak tree removal can be made and the removal would be consistent with the Ordinance. A condition of approval would be applied to the Project requiring tree replacement per provisions of the Ordinance and also requiring protection of raptor and migratory bird nesting.

Table 4.3.C: Trees Proposed to be Removed From the Site

Tree Number	Species	Common Name	Diameter at 2-ft above ground level	Approximate Height	Health and Impact
8	<i>Olea europaea</i>	European olive	6"	12'	Healthy: Remove for access road
9	<i>Olea europaea</i>	European olive	10"	15'	Healthy: Remove for access road
10	<i>Olea europaea</i>	European olive	10"	12'	Healthy: Remove for access road
11	<i>Olea europaea</i>	European olive	3"	15'	Healthy: Remove for access road
12	<i>Olea europaea</i>	European olive	10"	10'	Healthy: Remove for access road
13	<i>Olea europaea</i>	European olive	6"	15'	Healthy: Remove for access road
14	<i>Pinus radiata</i>	Monterey Pine	36"	75'	Healthy: Remove for office building
15	<i>Pinus radiata</i>	Monterey Pine	40"	80'	Healthy: Remove for office building
16	<i>Pinus radiata</i>	Monterey Pine	40"	80'	Healthy: Remove for office building
25	<i>Eucalyptus</i> sp.	Eucalyptus	60"	60'	Healthy: Remove for access road
26	<i>Eucalyptus</i> sp.	Eucalyptus	12"	25'	Healthy: Remove for access road
27	<i>Quercus agrifolia</i>	Coast live oak	8"	20'	Healthy: Remove for access road
30	<i>Platanus racemosa</i>	Western sycamore	36"	35'	Healthy: Remove for access road
33	<i>Platanus racemosa</i>	Western sycamore	14"&18"	30'	Healthy: Remove for parking
35	<i>Platanus racemosa</i>	Western sycamore	26"	40'	Healthy: Remove for parking
36	<i>Juglans</i> sp.	Walnut	34"	40'	Healthy: Remove for parking
37	<i>Juglans</i> sp.	Walnut	12"	15'	Poor, sparse foliage, heart rot: Remove for parking
38	<i>Juglans</i> sp.	Walnut	12"	18'	Healthy foliage, heart rot: Remove for parking
39	<i>Juglans</i> sp.	Walnut	12"	15'	Healthy foliage, heart rot: Remove for parking
40	<i>Juglans</i> sp.	Walnut	12"	18'	Healthy foliage, heart rot: Remove for parking
41	<i>Juglans</i> sp.	Walnut	12"	15'	Healthy foliage, heart rot: Remove for parking
42	<i>Juglans</i> sp.	Walnut	12"	15'	Poor, sparse foliage, heart rot: Remove for parking
45	<i>Quercus agrifolia</i>	Coast live oak	56"(DBH)	25'	Healthy, heavily pruned crown: Remove for retail building #7

Source: Forest Management Plan, Denise Duffy & Associates, 2007

4.3.6 Cumulative Impacts

Cumulative impacts are defined in the California Environmental Quality Act (1999), as ‘two or more individual effects which, when considered together, are considerable or...compound or increase other environmental impacts’ (CEQA Guidelines, § 15355.). Stated another way, “a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts” (CEQA Guidelines, § 15130, subd. (a)(1).)

Seventeen Development projects within the Toro Area were reviewed to evaluate potential cumulative impacts resulting from the Project (refer to Table 4.A and Figure 4.1). A majority of the projects are located along the SR-68 corridor, where the Project would be developed, and could result in impacts to annual grassland (and associated wildlife species) similar to the Project. As a result, when considered within the context of Project along the SR-68 corridor, the Project could potentially contribute to the cumulative loss of annual grassland. However, considering the small amount of annual grassland that would be impacted by the Project relative to the amount of these resources occurring in the regional vicinity, and because the existing habitat is considered marginal for most species of native plants and animals due to the past and present land use practices, the Project would not substantially contribute to cumulative effects for annual grassland (and associated wildlife).

4.3.7 Level of Significance Prior to Mitigation

The Project would cause potentially significant adverse impacts related to 11 special-status animal species (three species of bat, Western burrowing owl, Northern harrier, white-tailed kite, California horned lark, loggerhead shrike, California tiger salamander, California red-legged frog and western spadefoot), and nesting birds. Mitigation measures are prescribed below.

4.3.8 Mitigation Measures and Standard Conditions of Approval

The following mitigation measures shall be implemented to reduce potentially significant adverse impacts of the Project associated with biological resources.

Mitigation Measure 4.3.1: Special Status Bat Species. Prior to issuance of grading permit, the applicant shall contract with a qualified biologist to conduct preconstruction surveys for bats; such surveys shall be conducted at least 30 days before any construction or grading regardless of the time of year. Tree removal and construction shall occur in late fall to minimize the likelihood of impacting individuals within one or more species of bats. To be in compliance with Fish and Game Code 1801, the applicant shall have a qualified biologist examine the trees within 100 feet of the development area on the Site for use by bats. If no bats, or evidence of, are found during preconstruction surveys, a survey report shall be prepared that documents the findings of the surveys, and requirements for avoidance, minimization, mitigation, and monitoring. The contract between the biologist and the applicant must be submitted for review and approval by the County of Monterey RMA-Planning Department prior to issuance of any permits.

If bats are found to be using the trees as night roosts, construction can proceed during daylight hours with no impact, so long as trees used by roosting bats are not directly impacted. In the event that trees to be removed are being used as day roosts, a plan shall be developed under the consultation of a qualified biologist to exclude bats from these areas before construction can proceed. Construction related activities shall be prohibited within the exclusion zone until the bats have abandoned the roost site. Passive exclusion measures that allow bats to leave but not

return to the roost would be allowed unless the roost site supports a maternity colony. Exclusion measures would only be allowed at maternity roost sites when the young have fledged. A qualified biologist shall monitor each roost one per week in order to track the status of each roost and inform the project applicant when a roost site has been cleared for construction. Once all bats have been evicted, tree removal can resume. Weekly monitoring reports shall be prepared by the bat biologist and submitted to the County of Monterey RMA-Planning Department.

Mitigation Measure 4.3.2: Nesting Birds. The following measures shall be implemented to mitigate for potential impacts to nesting birds (including but not limited to Northern Harrier, white-tailed kite, California horned lark, and loggerhead shrike):

- 4) Should construction occur during the nesting season (February 21 through August 22), the applicant shall contract with a qualified biologist to conduct preconstruction surveys for nesting raptors. The biologist shall submit a report documenting the results of the preconstruction surveys, avoidance, minimization, mitigation and monitoring requirements. The contract between the biologist and the applicant must be submitted for review and approval by the County of Monterey RMA-Planning Department prior to the issuance of any building and grading permits.
- 5) If possible, all trees, brush and other potential nesting habitat that would be impacted by project construction shall be removed during the non-nesting season (August 22 through February 21). These specific dates and survey distances have been established by the County of Monterey RMA-Planning Department, per the August 7, 2009 Tree Assessment Workshop.
- 6) If suitable nesting habitat cannot be removed during the non-nesting season and project construction is to begin during the nesting season (February 22 through August 21), prior to initiating construction-related activities, all suitable nesting habitat within the limits of work and a 500-foot buffer shall be surveyed by a qualified biologist. Surveys shall be conducted no more than 14 days prior to the start of work. The qualified biologist shall locate active nests within 300 feet of the footprint of development. If no nesting is discovered, construction can begin as planned. If an active nest is discovered, a buffer shall be established on the Site around the nest and delineated using orange construction fence or equivalent. Buffers for raptor nests shall be 300 feet; buffers for non-raptor nests shall be 100 feet. The buffer shall be maintained in place until the end of the breeding season or until the young have fledged, as determined by a qualified biologist. The active nest sites within the exclusion zone shall be monitored by the qualified biologist on a weekly basis throughout the nesting season to identify any signs of disturbance. These protection measures shall remain in effect until the young have left

the nest and are foraging independently or the nest is no longer active. A report shall be prepared at the end of the construction season detailing the results of the preconstruction surveys. The report shall be submitted the California Department of Fish and Game (CDFG) by November 30 of each year.

Construction beginning during the non-nesting season and continuing into the nesting season shall not be subject to these measures.

Alternatively, CDFG may be consulted to determine if it is appropriate to decrease the specified buffers with or without implementation of other avoidance and minimization measures (e.g., having a qualified biologist on-site during construction activities during the nesting season to monitor nesting activity).

Mitigation Measure 4.3.3: Burrowing Owl. Prior to issuance of a grading permit, the following measures shall be implemented to mitigate for potential impacts to burrowing owl:

- 7) Prior to issuance of a grading permit, the applicant shall contract with a qualified biologist to conduct burrowing owl presence and absence surveys. Preconstruction surveys shall be completed and if necessary, avoidance and minimization measures shall be implemented. The biologist shall submit a report documenting the results of the preconstruction surveys, avoidance, minimization, mitigation and monitoring requirements. The contract between the biologist and the applicant must be submitted for review and approval by the County of Monterey RMA-Planning Department prior to the issuance of any building and grading permits.
- 8) Burrowing Owl presence and/or absence surveys shall be conducted in accordance with the California Department of Fish and Game (CDFG) Staff Report on Burrowing Owls (CDFG, 1995). The protocol requires four surveys during the nesting season (April 15 through July 15) and four surveys during the winter season (December 1 through January 31). If the survey results are negative, measures 3 and 4 are not required.
- 9) If burrowing owls are found to be occupying burrows within the Site in either season, and if occupied burrows are to be removed or lost as part of the Project, compensation for loss of foraging habitat shall be required in accordance with the CDFG Staff Report on Burrowing Owls (CDFG, 1995). Compensation shall consist of preservation of 6.5 acres of suitable foraging habitat for each breeding pair or unpaired winter resident. Preservation of this habitat shall be accomplished through:
 - a) Acquisition of suitable habitat and recording a conservation easement over the property. Preparation of a management plan and establishment of an endowment in an amount to be determined by the County and CDFG for maintenance and

- management of the mitigation site in perpetuity shall also be established;
- b) purchasing sufficient credits at an approved conservation bank;
 - c) a combination of the above methods, or
 - d) another method acceptable to CDFG.
- 10) Prior to issuance of a grading permit or other project-related disturbance of the Site, the Project proponent shall provide evidence that adequate mitigation has been provided for the loss of burrowing owl foraging habitat, as described above.
- 11) No more than 30 days prior to any ground disturbing activities, a qualified biologist shall conduct a preconstruction survey for burrowing owls. A preconstruction survey is not necessary if the last presence and/or absence survey was conducted within 30 days of the start of ground disturbing activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the initial preconstruction surveys, the Site shall be resurveyed. All surveys shall be conducted in accordance with the CDFG Staff Report on Burrowing Owls (CDFG, 1995). If no burrowing owls are present, construction can begin as planned. Construction beginning during the non-nesting season and continuing into the nesting season shall not be subject to these measures.
- 12) If the preconstruction surveys identify burrowing owls on the Site during the non-breeding season (September 1 through January 31), burrowing owls occupying the Site shall be evicted from the Site by passive relocation as described in the CDFG Staff Report on Burrowing Owls (CDFG 1995).
- 13) If the preconstruction surveys identify burrowing owls nesting on the Site during the breeding season (February 1 through August 31), a 250-foot buffer shall be established on the Site around the nest burrow and delineated using orange construction fence or equivalent. The buffer shall be maintained in place until the end of the breeding season or until a qualified biologist determines through non-invasive methods that 1) the birds have not begun egg laying, or 2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once the fledglings are capable of independent survival, the burrow(s) can be destroyed.

Mitigation Measure 4.3.4: California Tiger Salamander. Prior to issuance of any grading or building permit for the project, the applicant shall retain a qualified biologist to conduct a Site Assessment following the Fish and Wildlife Service (USFWS) 2003 *Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander*. Written documentation of the Site

Assessment results shall be provided to the USFWS and California Department of Fish and Game (CDFG) within two weeks of completion of the Site Assessment. Additional California tiger salamander (CTS) site assessment/survey requirements may be required by USFWS and CDFG pending the results of the Site Assessment.

If the USFWS and CDFG determine that no further CTS surveys are warranted, construction may proceed at any time with implementation of the prescribed CTS avoidance and minimization measures described below.

Avoidance and Minimization Measures:

- 3) Exclusion fencing shall be installed along the limits of work associated with construction of the retail village to prevent encroachment into adjacent California tiger salamander upland habitat to be preserved. Fencing shall consist of silt fence or equivalent material, and shall be installed such that no openings are present. Additionally, the bottom three inches of fence shall be buried. The exclusion fencing shall be maintained in good condition until project construction is complete.
- 4) Following completion of work, areas of potential California tiger salamander upland habitat in the project area that are denuded during project construction shall be revegetated with locally occurring native species as described in the Landscape Plan.

Mitigation Measure 4.3.5: California Red-legged Frog and Western Spadefoot Toad. Prior to issuance of a grading permit, the project applicant shall retain a qualified biologist to ensure implementation of the following avoidance and minimization measures pertaining to California red-legged frog (CRLF) and western spadefoot. The contract must be submitted for review and approval by the County of Monterey RMA-Planning Department prior to issuance of any permits.

- 4) Exclusion fencing shall be installed along the limits of work associated with construction of the retail village to prevent encroachment into adjacent upland habitat to be preserved. Fencing shall consist of silt fence or equivalent material, and shall be installed such that no openings are present. Additionally, the bottom three inches of fence shall be buried. The exclusion fencing shall be maintained in good condition until project construction is complete.
- 5) Following completion of work, areas of potential upland habitat on the Site that are denuded during Project construction shall be revegetated with locally occurring native species as described in the Landscape Plan.

- 6) All burrows in the area to be disturbed shall be surveyed during the dry season for presence of aestivating CRLF or spadefoot. Surveys shall be conducted at each burrow either by hand excavation or surveying with a fiber optic camera. Written documentation of the survey results shall be provided to the United States Fish and Wildlife Service (USFWS) within two weeks of completion of the surveys.

4.3.9 Level of Significance After Mitigation

Potential significant adverse impacts to biological resources from the Project would be mitigated to levels less than significant with implementation of the above mitigation measures.

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4.4 CULTURAL RESOURCES

This section evaluates the Project's potential impacts to cultural resources. Cultural resources are sites, buildings, structures, objects, and districts over 50 years old that may have traditional or cultural value for the historical significance they possess. The California Environmental Quality Act (CEQA) requires that effects to cultural resources by discretionary projects be considered in the planning process. The findings and information in this section summarize the results of a technical study prepared for the Project by Archaeological Consulting, Salinas (Doane, Breschini, and Haversat 2001). The Archaeological Consulting report is contained in Appendix E of Volume II of this EIR. Additional information and findings were also obtained from cultural resources studies prepared by LSA for the State Route 68 (SR-68)/Corral de Tierra Road Intersection Improvement Project (Goetter 2007), which is immediately adjacent and to the north and west of the Corral de Tierra Neighborhood Retail Village Site.

4.4.1 Cultural Setting

This section describes the baseline conditions and cultural setting for the Site, as determined and developed by records searches at the Northwest Information Center and the Native American Heritage, a literature review, and a field survey.

Records Searches

Northwest Information Center. A records search was completed by the Northwest Information Center (NWIC) of the California Historical Resources Information System, Sonoma State University, Rohnert Park, of the Site and adjacent areas. The NWIC, an affiliate of the State of California Office of Historic Preservation, is the official State repository of cultural resources records and reports for the County of Monterey.

The records search at the NWIC did not indicate any recorded cultural resources within the Site. Five prehistoric archaeological sites are recorded within one kilometer of the Project. These sites are located along the intermittent creeks of the El Toro Creek drainage. CA-MNT-9 is located southwest of the Site and west of the creek on a small rise. CA-MNT-3, CA-MNT-4/267, CA-MNT-10 are found northeast of the Site on or at the confluences of the creeks on the south side of SR-68. Native American burials have been reported from CA-MNT-3 and CA-MNT-4/267.

No previous cultural resources surveys have been conducted of the Site.

Native American Heritage Commission. On February 13, 2007, LSA submitted a project description and location map for the SR-68/Corral de Tierra Road Intersection Improvement Project to the Native American Heritage Commission (NAHC) in Sacramento requesting a review of their sacred lands file for any Native American cultural resources that might be affected by the proposed intersection improvement. The SR-68/Corral de Tierra Road Intersection Improvement project is immediately adjacent to the current Site.

Debbie Pilas-Treadway, NAHC Environmental Specialist III, responded in a faxed letter on February 22, 2007, that a review of the sacred lands file did not “indicate any Native American cultural resources in the immediate project vicinity.”

Literature Review

Archaeological Consulting reviewed publications and maps for archaeological, ethnographic, historical information about the Site and its vicinity. The 1947 U.S. Geological Survey map depicts an area of orchard on the northern end of the Site; the remainder is undeveloped land.

The California Inventory of Historic Resources (1976), California Historical Landmarks, and the National Register of Historic Places were checked for listed cultural resources which might be present in the Site; none were discovered.

Field Survey

Archaeological Consulting conducted an archaeological field survey of the Site on May 16, 2001. The survey consisted of a “general surface reconnaissance” of all areas which could reasonably be expected to contain visible cultural resources, and which could be viewed without major vegetation removal or excavation. Standard transects at regular intervals to maximize soil visibility were walked across the entire Site and trowel scrapings were made to facilitate soil visibility where it was deemed necessary due to vegetation coverage.

None of the materials frequently associated with prehistoric cultural resources in the area (dark midden soil, shell fragments, broken or fire-altered rocks, bones or bone fragments, flaked or ground stone, etc.) were noted during the survey.

There was no evidence of historic-period resources observed on or adjacent to the Site.

Prehistoric Setting

The first well-documented settlement along the central coast took place during the Early Holocene (ca. 9000-5000 B.C.) (e.g., Jones et al. 2002), and early sites clustered around estuaries (Erlandson 1994). The finds obtained from early sites attest to an economy focused on the procurement of shellfish and seeds. Milling equipment, such as manos and metates, are abundant, as are shellfish remains. These Early Holocene settlers are variously thought to be quite mobile (e.g., Dietz and Jackson 1981; Glassow 1991), or predisposed toward year-round occupation (Jones et al. 2002).

Along the central coast, resource procurement intensified during the Middle Holocene (ca. 5000-2000 B.C.). The use of mortars and pestles became common (Glassow, Wilcoxon, and Erlandson 1988; Glassow 1991; Jones 1996; Jones and Waugh 1995), and new types of fishing gear, such as shell fishhooks, probably appeared. The scale of exchange also increased; obsidian artifacts became much more common during the Middle Holocene (Jones 1996; Jones and Waugh 1995). Such exchange may have maintained relationships among neighboring groups. The groups that used these sites were still apparently quite mobile (Breschini and Haversat 1997; Dietz and Jackson 1981) but returned to the same general areas repeatedly over time.

The intensification that began during the Middle Holocene increased during the Late Holocene (ca. 2000 B.C.-historic), influencing both settlement and subsistence patterns. Near Monterey Bay, sites dating to the first half of the Late Holocene period are typically large and contain deep, dense midden deposits (Breschini and Haversat 1997). Variability during the second half of the Late Holocene period, however, disrupted this intensive adaptation. Drought (and perhaps other) environmental changes afflicted groups living throughout western North America (Jones et al. 1999). Many settlements were abandoned during this period (Jones and Kennett 1999), and exchange declined precipitously (Jones et al. 1999). A variety of site types appeared in disparate locations during this period (Breschini and Haversat 1997).

CA-MNT-4/267, approximately 1/8-mile east of the Site, was occupied primarily during the Early Period (3500-1000 B.C.), with a Late Period (A.D. 1200-1769) component present above 100 centimeters below surface (Pulcheon 2007a). CA-MNT-4/267 was one of the settlements that may have been abandoned for a period of time due to prolonged and severe droughts (Jones 1999; Jones and Kennett 1999).

Ethnographic Setting

During the Late Holocene, either the Rumsen or Ensen occupied the region surrounding the Site (Milliken 1981). The Rumsen and Ensen spoke a Costanoan language. The Costanoan occupied the San Francisco and Monterey Bay areas, between Carquinez Strait and Point Sur, and their descendants prefer to be called Ohlone (Margolin 1978), although they are often referred to by the name of their linguistic group, Costanoan. The inland boundary of Ohlone territory has not been precisely determined, but was approximately 50 miles from the coast (Kroeber 1925:462).

The family household was the basic social unit and numbered between five and 15 individuals (Broadbent 1972), with households grouping together to form villages. Villages were aggregated into tribelets, “a politically independent land-holding group...with less than a hundred to perhaps four hundred and occasionally five hundred people” (Kroeber 1962:30). Tribelets exchanged trade goods such as obsidian, shell beads, and baskets; participated in ceremonial and religious activities together; intermarried; and could have extensive reciprocal obligations to one another involving resource collection.

Ethnohistoric accounts attest to the wide variety of resources exploited by groups of this region, including both coastal and inland resources (Broadbent 1972; Fages 1911; Menzies 1924). For the Ohlone, as with other California Native American groups, the acorn was an important food resource. The Ohlone used a range of other plant resources including hazelnuts, buckeye, tarweed, chia, manzanita berries, gooseberries, toyon berries, and thistle. Animals consumed by various Ohlone groups included black-tailed deer, antelope, mountain lion, raccoon, rabbit, squirrel, wood rat, mouse, geese, ducks, doves, quail, steelhead, salmon, reptiles, and grasshoppers.

Intensive Hispanic exploration of the Monterey Bay area began in the late eighteenth century. Ohlone culture was radically transformed when European settlers moved into northern California. These settlers set up the mission system and exposed the Ohlone to diseases from which they had no immunity. After the secularization of the missions in 1834, many native people moved to ranchos, where they worked as manual laborers (Levy 1978).

Historic Setting

The Site is located on a portion of the 5,688-acre Rancho El Toro, granted to Jose Ramon Estrada in 1835 by Governor Castro. Estrada had attended school in Monterey and was administrator of Santa Clara for two years. In 1852 Charles Walters filed claim to the grant, but did not receive title to the land until 1862. The grant, located on the south side of the Salinas River, along El Toro Creek, was one of 32 private land grants in the Salinas Valley (California State Archives 2005; Hoover, et al. 1990:222).

SR-68, which borders the Site to the north, was once a stagecoach route between Monterey and Salinas (California Department of Parks and Recreation 1976:116). Situated midway between the two towns, the lands surrounding the Site were used for agricultural purposes for many years. The Peter Guidotti Ranch, north of the Site, and the Ferrini Ranch, to the east, were settled by early-day Monterey ranching families who were related. The lands are no longer under family ownership and have been subdivided over the ensuing years (Haney 1995:17, 19).

The land north of SR-68 was once part of Fort Ord, a cavalry post founded in 1917 that became a U.S. Army training post during World War II. Fort Ord was deactivated as a military installation in 1994 (Global Security 2007; Waite 1995:24), and today is the home of California State University, Monterey Bay with extensive lands owned by other federal, State and County agencies.

Today the land in the immediate vicinity contains residences, a gasoline service station, a church, and a deserted motel. Though the area is being increasingly developed, the area continues to maintain a rural environment.

4.4.2 Regulatory Setting

This section describes the cultural resource requirements of CEQA, the California Health and Safety Code, Public Resources Code, and the 1982 Monterey County General Plan.

CEQA Requirements

CEQA defines a “historical resource” as a resource which meets one or more of the following criteria: 1) listed in, or determined eligible for listing, in the California Register of Historical Resources (California Register); 2) listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k); 3) identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or 4) determined to be a historical resource by a project’s lead agency (Public Resources Code Section 21084.1 and *CEQA Guidelines* Section 15064.5(a)). A historical resource consists of:

“Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.... Generally, a resource shall be considered by the lead agency to be ‘historically significant’ if the resource meets the criteria for listing on the California Register of Historical Resources” *CEQA Guidelines* Section 15064.5(a)(3).

In accordance with *CEQA Guidelines* Section 15064.5(b), a substantial adverse change in the significance of a historical resource is a significant effect on the environment.

CEQA requires a Lead Agency to determine if an archaeological cultural resource meets the definition of a historical resource, a unique archaeological resource, or neither (*CEQA Guidelines* Section 15064.5(c)). Prior to considering potential impacts, the Lead Agency must determine whether an archaeological cultural resource meets the definition of a historical resource in *CEQA Guidelines* Section 15064.5(c)(1). If the archaeological cultural resource meets the definition of a historical resource, then it is treated like any other type of historical resource in accordance with *CEQA Guidelines* Section 15126.4. If the archaeological cultural resource does not meet the definition of a historical resource, then the lead agency determines if it meets the definition of a unique archaeological resource as defined at CEQA Section 21083.2(g). In practice, however, most archaeological sites that meet the definition of a unique archaeological resource would also meet the definition of a historical resource (Bass, Herson, and Bogdan 1999:105). Should the archaeological cultural resource meet the definition of a unique archaeological resource, then it must be treated in accordance with CEQA Section 21083.2. If the archaeological cultural resource does not meet the definition of a historical resource or an archaeological resource, then effects to the resource are not considered significant effects on the environment (*CEQA Guidelines* Section 15064.5(c)(4)).

California Health and Safety Code Section 7050.5

California Health and Safety Code (HSC) Section 7050.5 states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the Site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the County in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission would identify a Native American Most Likely Descendant (MLD) to inspect the Site and provide recommendations for the proper treatment of the remains and associated grave goods.

Public Resources Code Section 5097.5

Public Resources Code (PRC) Section 5097.5 provides for the protection of cultural and paleontological resources. This PRC section prohibits the removal, destruction, injury, or defacement of archaeological and paleontological features on any lands under the jurisdiction of State or local authorities.

County of Monterey

The Natural Resources chapter of the 1982 Monterey County General Plan (General Plan) includes Goal 12, which is intended "to encourage the conservation and identification of the County's archaeological resources" (p. 33). The General Plan incorporates policies to implement this goal. The County's policies that shall be used to implement Goal 12 and that are potentially applicable to the current project include the following:

- Policy 12.1.1: The County shall take such action as necessary to compile information on the location and significance of its archaeological resources so this information may be incorporated into the environmental or developmental review process.
- Policy 12.1.3: All projects, including land division, within high sensitivity zones shall require an archaeological field inspection prior to project approval.
- Policy 12.1.4: All major projects (i.e., 2.5 acres or more) that are proposed for moderate sensitivity zones, including land division, shall require an archaeological field inspection prior to project approval.
- Policy 12.1.6: Where development could adversely affect archaeological resources, reasonable mitigation procedures shall be required prior to project approval.
- Policy 12.1.7: All available measures, including purchase of archaeological easements, dedication to the County, tax relief, purchase of development rights, consideration of reasonable project alternatives, etc., shall be explored to avoid development on sensitive archaeological sites.

4.4.3 Methodology

The existing conditions for cultural resources on the Site were determined through background research and field survey, as described in Section 4.4.1. Background research was conducted to: (1) identify previously recorded or otherwise known cultural resources and cultural resource studies in or adjacent to the Site; and (2) obtain information about the archaeology, ethnography, and history of the Site. Background research consisted of records searches conducted at the NWIC of the California Historical Resources Information System and the NAHC, Sacramento and a review of archaeological, ethnographic, and historical literature of the Site and vicinity. A general surface reconnaissance field survey was conducted of the Site to identify unrecorded cultural resources.

4.4.4 Impact Significance Criteria

The criteria of significance are thresholds for determining whether an impact is significant under CEQA. Implementation of the Project would have a significant impact on cultural resources if it would:

Threshold 4.4.1: Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5. Specifically, substantial adverse changes include physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired;

Threshold 4.4.2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5; or

Threshold 4.4.3: Disturb any human remains, including those interred outside of formal cemeteries.

4.4.5 Project Impacts

Threshold 4.4.1: Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5

The background research and field survey did not identify historical resources within or immediately adjacent to the Site. Therefore, the proposed construction of the retail village and installation of appurtenant wastewater and potable water lines are not anticipated to impact any known historical resources. However, archaeological sites that qualify as historical resources under CEQA have been identified near the Site, and the possibility of buried archaeological deposits within the Site cannot be discounted. Such buried deposits may qualify as historical resources under CEQA (Section 15064.5(a)). Significant impacts associated with the potential for discovering unknown buried archaeological deposits within the Site would be avoided by implementation of Standard Conditions 4.4.1 and 4.4.3.

Potential impacts to significant archaeological deposits could occur during project ground-disturbing activities associated with the initial development of the Site, e.g., site grading and utilities trenching. Under CEQA archaeological sites are valued for scientific information, although sites can also have traditional or sacred values to Native Americans. Should significant archaeological deposits be encountered, these shall be treated in accordance with Standard Condition 4.4.3.

Threshold 4.4.2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5

The background research and field survey did not identify archaeological resources within or immediately adjacent to the Site. Therefore, the proposed construction of the retail village and installation of appurtenant wastewater and potable water lines are not anticipated to impact any known archaeological resources. The possibility of buried archaeological deposits within the Site, however, cannot be discounted because of the archaeological sites identified within the Site's vicinity. Such buried deposits may qualify as unique archaeological resources under CEQA (Section 21083.2(g)). Significant impacts to archaeological resources would be avoided by implementation of Standard Condition 4.4.1.

Potential impacts to significant archaeological deposits could occur during project ground-disturbing activities associated with the initial development of the Site, e.g., site grading and utilities trenching. Under CEQA archaeological sites are valued for scientific information, although sites can also have traditional or sacred values to Native Americans. Should significant archaeological deposits be encountered, these shall be treated in accordance with Standard Condition 4.4.3.

Threshold 4.4.3: Disturb any human remains, including those interred outside of formal cemeteries

The background research and field survey did not identify human remains within or immediately adjacent to the Site. Therefore, the proposed construction of the retail village and installation of appurtenant wastewater and potable water lines are not anticipated to impact any known human remains. Archaeological sites containing human remains have been identified along El Toro Creek,

however, and the possibility of buried human remains within the Site cannot be discounted. Should human remains be encountered, these shall be treated in accordance with Standard Condition 4.4.2.

4.4.6 Cumulative Impacts

Seventeen pending development projects within the Toro Area were reviewed to evaluate potential cumulative impacts resulting from the Project (refer to Table 4.A and Figure 4.1).

Historical and Archaeological Resources

No significant architectural historical resources are within or immediately adjacent to the Site. Therefore, the Project would not cause any significant contribution to cumulative impacts upon such resources.

No archaeological sites have been identified within or immediately adjacent to the Site. There is a potential, however, that subsurface archaeological sites that may qualify as either historical or unique archaeological resources could be impacted by project activities. Should historical or unique archaeological resources be discovered during project ground-disturbing activities, potential cumulative impacts could occur.

Human Remains

No human remains have been identified within or immediately adjacent to the Site. There is a potential, however, that human remains could be impacted by project activities. Should human remains be discovered during project ground-disturbing activities, potential cumulative impacts could occur.

4.4.7 Level of Significance Prior to Mitigation

The Project would not have a significant impact on known historical resources, archaeological resources, or human remains on or near the Site. Should historical or archaeological resources or human remains be encountered during ground-disturbing activities, impacts would potentially be significant without implementing the required standard conditions. Implementation of the following County of Monterey standard conditions would reduce any potential significant impacts on historical or archaeological sites or on human remains to a less than significant level.

4.4.8 Mitigation Measures and Standard Conditions of Approval

The following standard conditions shall be implemented to reduce potential impacts of the Project associated with cultural resources.

Standard Condition 4.4.1: Historical or Archeological Materials. Ground-disturbance associated with project activities shall be monitored by a qualified archaeologist. Archaeological monitors must be empowered to halt construction activities at the location of the discovery to review possible archaeological materials and to protect the resource while

the finds are being evaluated. Archaeological monitors must be empowered to halt construction activities at the location of the discovery to review possible archaeological material and to protect the resource while the finds are being evaluated. Monitoring would continue until, in the archaeologist's judgment, cultural resources are not likely to be encountered. If archaeological materials are discovered while an archaeological monitor is not on-site, these shall be treated in accordance with the County of Monterey's standard condition for the accidental discovery of archaeological materials, as described in Standard Condition 4.4.2 below.

If deposits of prehistoric and/or historical archaeological materials are discovered during project activities, all work within 25 feet of the discovery should be redirected until the archaeological monitor assesses the situation, consults with agencies as appropriate, and provides recommendations for the treatment of the discovery. It is recommended that adverse effects to such deposits be avoided by project activities. If such deposits cannot be avoided, they shall be evaluated for their eligibility for listing in the National and California registers. If the resources are not eligible, avoidance is not necessary. If the resources are eligible, they would need to be avoided by adverse effects or such effects must be mitigated.

Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the archaeological materials discovered. This report shall be submitted to the County of Monterey RMA-Planning Department, the project proponent, and the Northwest Information Center.

Standard Condition 4.4.2: Human Remains. Ground disturbing activities associated with project activities shall be monitored by a qualified archeologist. If human remains are encountered, these remains shall be treated in accordance with California Health and Safety Code Section 7050.5.

If human remains are encountered by project activities, construction activities shall be halted and the construction supervisor shall notify the County of Monterey Coroner immediately. If the remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of this identification, and a qualified archaeologist shall be contacted to assess the situation. The NAHC shall identify a Native American Most Likely Descendent (MLD) to inspect the Site and provide recommendations for the proper treatment of the remains and associated grave goods. The County of Monterey shall ensure that the treatment recommendations of the consulting archaeologist and MLD are implemented prior to project construction or actions that could adversely affect the remains in question.

Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations regarding the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. This report shall be submitted to the County of Monterey RMA-Planning Department, the project proponent, and the Northwest Information Center.

Standard Condition 4.4.3: Archeological Sites. The County of Monterey's standard condition for the accidental discovery of archaeological sites shall be a condition for issuance of the Development Permit and would be implemented in the event an archaeological monitor is not on-site. The standard condition does not identify specific mitigation measures that shall be employed in the event that an archaeological deposit is discovered during ground-disturbing project activities. Mitigation options, however, are presented below and shall be included as a condition for issuance of the Development Permit. The standard condition states:

“If, during the course of construction, cultural, archaeological, historical or paleontological resources are uncovered at the site (surface or subsurface resources) work shall be halted immediately within 50 meters (165 feet) of the find until a qualified professional archaeologist can evaluate it. The Monterey County Resource Management Agency (RMA)-Planning Department and a qualified archaeologist (i.e., an archaeologist registered with the Register of Professional Archaeologists) shall be immediately contacted by the responsible individual present on-site. When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery.”

The preferred mitigation measure shall be avoidance of the resource. If the resource cannot be avoided, it shall be evaluated for its California Register of Historical Resources eligibility. If the resource is not eligible, avoidance is not necessary, and work may proceed without further study or protection of the resource. If the resource is eligible, adverse effects on the deposit must be avoided or such effects must be mitigated. Mitigation can include archaeological excavation of the deposit, laboratory analysis of materials, and preparation of a report of findings for distribution to the County of Monterey RMA-Planning Department and the Northwest Information Center; curation of materials to allow for future scientific research; presentation of findings at a professional conference; and an interpretive display of recovered archaeological materials at a local library, museum, or school.

4.4.9 Level of Significance After Mitigation

Implementation of the standard conditions described above would reduce potential impacts to historical resources, archaeological resources, and human remains to a less than significant level.

4.5 GEOLOGY AND SOILS

This section of the EIR addresses the findings of the geotechnical investigation prepared for the Project and examines the potential impacts related to geology and soils resulting from implementation of the Project. This section also addresses the potential for the Site to experience impacts based on the existing geologic site conditions, including slope stability, ground settlement, soil conditions, and local and regional seismic conditions. Documents reviewed and incorporated as part of this analysis include: *Geotechnical Report Corral De Tierra Development, Monterey County, California* (Fugro West, Inc. 2007), included as Appendix G to this EIR, *Geotechnical Feasibility Study, Proposed Shopping Center, Highway 68 and Corral de Tierra Road, Monterey County, California* (Twining Laboratories, Inc. 2000), *Assessment of the Potential Impact of the Proposed On-site Stormwater Disposal System on Liquefaction and Seismic Settlement Corral de Tierra Commercial Project Highway 68 and Corral de Tierra Road Monterey County, California* (Moore Twining 2009) the 1982 Monterey County General Plan, the Toro Area Plan, and the Monterey County Soil Survey Report (1978).

4.5.1 Existing Environmental Setting

Regional Setting. The Project lies within the Sierra de Salinas mountain belt within the northern portion of the Santa Lucia Range of the Coast Ranges province of California. The Coast Ranges geologic/geomorphic province is characterized by north-northwest trending mountain belts extending from approximately Santa Maria northward to the California-Oregon border (Fugro West, 2007). The Coast Ranges contain Mesozoic-age to recent sedimentary, metavolcanic, metamorphic, volcanic, and granitic rocks. The Sierra de Salinas mountain belt consists of pre-Cretaceous (Mesozoic-age) granitic basement rocks of the Salinian block that are uncomfortably overlain by Tertiary to recent sedimentary bedrock units and sediments estimated to be over 3,000 ft thick (United States Geological Survey, 2000).

Local Setting. The Site is located in the northern portion of the Corral de Tierra Valley at the confluence with the northeast-draining El Toro Valley (Fugro West, 2007). In the vicinity of the Site, the Corral de Tierra alluvial valley is about 300 to 500 ft wide and bordered by low-lying rolling hills with slopes ranging from about 20 percent to 50 percent. The hillsides along the southeast portion of the Site are 70 ft at the highest point. Geologic mapping suggests that the low-lying hills in the Project vicinity are comprised of Pleistocene to Pliocene undifferentiated continental deposits that are equivalent to the Paso Robles Formation (refer to description of Paso Robles Formation below). The Corral de Tierra Valley is underlain by alluvial sediments that consist of Holocene to recent, unconsolidated, sediment (Fugro West, 2007).

Subsurface Conditions. The subsurface conditions encountered on the Site generally consisted of alluvial soils overlying Paso Robles Formation. Descriptions of the subsurface conditions are as follows:

Alluvium: The alluvium encountered consisted primarily of interbedded layers of firm to very stiff silt and clay as well as loose to medium dense sand, silty sand, and clayey sand (Fugro West, 2007). The alluvium found was consistent in its material type, thickness, and consistency. The typical thickness of the alluvium at the base of the slope that borders the

easterly boundary of the Site was approximately 5 to 10 ft. Near the base of the slope the alluvium appears to pinch out and is in surface contact with the Paso Robles Formation. The alluvium was encountered at a maximum depth of 50 ft near Corral de Tierra Road and SR-68.

Paso Robles Formation: The Paso Robles Formation can be differentiated from the alluvium by layers of stiff fine-grained material and very dense sand. The Paso Robles Formation is visible along the hillsides that border the easterly side of the Site, but within the project limits it is concealed by alluvium. The surface of the Paso Robles Formation beneath the alluvium appears to slope downward, deepening to the north and west away from the hillside (Fugro West, 2007). The Paso Robles formation was encountered at depths of 5 to 10 ft near the base of the hill and at 40 to 45 ft closer to Corral de Tierra Road and SR-68.

Seismicity. Monterey County is traversed by a number of active and potentially active faults. A fault is described as the area where two tectonic or continental plates meet. Based on criteria established by the California Geologic Society (CGS), earthquake faults may be characterized as active, potentially active, or inactive. Active faults are those having the greatest potential for disturbance and show evidence of displacement within the last 11,000 years. Potentially active faults are those that show evidence of displacement within the last 11,000 to 3 million years ago. Faults showing no evidence of displacement within these time frames are considered inactive. Some of the significant faults considered active or potentially active by the California Geologic Survey within about a 20 mile radius of the Site are listed in Table 4.5.A. In addition, Table 4.5.A presents the approximate distances from the Site to the faults and the estimated maximum earthquake magnitude.

The nearest known active fault is the Rinconada Fault, located approximately 3.8 miles northeast of the Site. Other active faults within the Project vicinity include the Monterey Bay-Tularcitos Fault, San Gregorio Fault, Zayante-Vergeles Fault, and the San Andreas Fault. A brief discussion of the fault systems is presented below.

- **Rinconada Fault:** The Rinconada Fault is a right lateral strike-slip fault and is approximately 120 km in length. The Rinconada Fault is the nearest known active fault in the vicinity of the Project. It is located approximately 3.8 miles northeast of the Site and has a maximum earthquake magnitude of 7.5 maximum earthquake magnitude (Mw).
- **Monterey Bay-Tularcitos Fault Zone:** The offshore Monterey Bay Fault Zone is an approximately six miles (10 km) wide series of generally parallel, northwest-southeast trending fault strands, ranging from less than three to over nine miles long. The fault zone bisects the Monterey Bay continental shelf and may merge with the San Gregorio fault in northern Monterey Bay. The Monterey Bay Fault Zone is approximately 5.3 miles from the Site and has a maximum earthquake magnitude of 7.3 Mw.
- **San Gregorio Fault Zone:** A major active fault zone within Monterey County, it is a right-lateral strike slip fault zone, approximately one to two miles wide. The San Gregorio Fault Zone, located approximately 14 miles from the Site, has a maximum earthquake magnitude ranging from 6.9 to 7.4 Mw.
- **Zayante-Vergeles Fault:** The Zayante-Vergeles fault lies west of the San Andreas Fault and trends about 50 miles northwest from the Watsonville lowlands into the Santa Cruz Mountains.

The Zayante-Vergeles fault is approximately 18 miles from the Site and has a maximum earthquake magnitude of 7.0 Mw.

- **San Andreas Fault Zone:** Extending more than 700 miles, the San Andreas Fault is the longest and most significant system in California. The San Andreas Fault System, located approximately 21 miles from the Site, has a Mw ranging from 6.2 to 7.8 depending on the various segments of the fault system.

Seismic Mapping. Beginning in 1997, the California Division of Mines and Geology (CDMG) has produced “Seismic Hazard Evaluation Reports” for the areas shown on selected USGS topographic maps (7.5-minute series) within the State of California. The stated purpose of these reports/maps is to identify potential seismic hazards for use by city and county planning agencies in their permitting and land use planning process. The Alquist-Priolo Fault Zone is based on information from the Seismic Hazard Evaluation Reports. The Site does not lie within an Alquist-Priolo fault rupture hazard zone, however, as discussed above, the Site is proximal to a number of faults (refer to Table 4.5.A) that are considered active or potentially active (Fugro West, 2007).

Potential Seismic Hazards. Earthquakes can cause two types of hazards: primary and secondary. Primary seismic hazards include ground-shaking and ground displacement. Primary hazards can in turn induce secondary hazards, which include ground failure (ground lurching, lateral spreading, and slope failure), liquefaction, seismic-induced water waves (tsunamis and seiches), and dam failure.

Table 4.5.A: Faults Considered Significant by State of California Geological Survey

Fault	Distance (miles)	Maximum Earthquake Magnitude (Mw)
Rinconada	3.8	7.5
Monterey Bay – Tularcitos	5.3	7.3
San Gregorio - various segments	14	6.9 to 7.4
Zayante-Vergeles	18	7.0
San Andreas – various segments	21	6.2 to 7.8

Source: (Fugro West, 2007)

Primary Seismic Effects

Ground-shaking and Ground Displacement. Seismic hazards may result from seismic shaking (ground-shaking) or ground displacement (surface rupture). Structural damage due to ground-shaking is caused by the transmission of earthquake vibrations from the ground to a structure. Variables that determine the extent of damage are: the characteristics of underlying earth materials, design of the structure, quality of materials and workmanship used in construction, location and magnitude of the earthquake, and duration and intensity of the shaking. The most destructive effects of an earthquake are usually seen where the ground is unstable, and structures are poorly designed and constructed.

Surface rupture occurs when the ground surface is displaced due to movement along a fault plane during an earthquake. A fault rupture hazard can occur when structures or facilities are located directly on an active fault. The State of California precludes building on active faults under the Alquist-Priolo Earthquake Fault Zoning Act.

Secondary Seismic Effects. Secondary earthquake hazards such as liquefaction, lateral spreading, dynamic settlement, and landsliding are generally associated with relatively high intensities of ground-shaking. Liquefaction, lateral spreading, and dynamic settlement are associated with shallow groundwater conditions and loose, sandy soils or alluvium.

Seismically-Induced Ground Settlement. This type of secondary seismic effect can result in damage to property when an area settles to different degrees over a relatively short distance. The sinking or settlement of a structure, fill prism, or other imposed load is usually the result of compaction or consolidation of the underlying soil.

Ground Lurching. Ground lurching occurs as the ground is accelerated during a seismic event. Ground lurching occurs due to detachment of underlying strathigraphic units, allowing near-surface soil to move differentially from underlying soil. The effects of ground lurching can damage facilities and buried pipelines.

Lateral Spreading. Lateral spreading is slope instability that results from liquefaction of the subsurface soils. Lateral spreading typically develops on sloping ground or a steep slope, such as along a drainage or a river bank that has been weakened by saturation.

Liquefaction. Soil liquefaction is the process in which loose, saturated, sandy soil loses internal strength as a result of increased pore water pressure caused by seismic shaking. These soils transform from a solid to a liquid state as a result of reduced, effective stresses within the soil mass. This phenomenon is typically induced by strong ground-shaking associated with earthquakes.

Tsunamis and Seiches. Tsunamis and seiches are inundations (i.e., flooding) by oceanic or freshwater waves generated by a sudden disturbance in a body of water. Typically, oceanic tsunamis are the result of sudden vertical movement along a fault rupture in the ocean floor, submarine landslides or subsidence, or volcanic eruption. The sudden displacement of water sets off large waves called tsunamis. Seiches are seismically induced waves that surge back and forth

in an enclosed body of water. Inundation of water onto land can occur as a result of both seiches and tsunamis.

Non-Seismic Geologic Effects

Subsidence and Collapse. Subsidence and collapse refers to broad-scale changes in the elevation of the land. Common causes of land subsidence are pumping water, oil, and gas from underground reservoirs; peat oxidation; dissolution of limestone aquifers (sinkholes); collapse of underground mines; drainage of organic soils; and initial wetting of dry soils (hydrocompaction). Subsidence is also caused by heavy loads generated by large earthmoving equipment.

Landslides. Landslides are generally gravity-driven, mass movements of loose soil and rock. Steep, saturated slopes are particularly susceptible to landslides.

Expansive Soils. Expansive soils contain types of clay minerals that occupy considerably more volume when they are wet or hydrated than when they are dry or dehydrated. Volume changes associated with changes in the moisture content of near-surface expansion soils can cause uplift or heave of the ground when they become wet or, less commonly, cause settlement when they dry out. Repeated cycles of wetting and drying in the vicinity of slopes composed of expansive soils can produce incremental lateral and downslope movements known as “slope creep.”

Erosion. Erosion is the gradual wearing away of land surface materials such as rocks, sediments and soils. Erosion occurs by the action of water, wind, or construction activities. Sheet and rill erosion is the removal of layers of soil from the surface by rainfall and runoff. Graded cut and fill slopes associated with site development are particularly susceptible to sheet and rill erosion.

Hydrocollapse Potential. Hydrocollapse describes soils that are prone to settling when subjected to wetting or saturation. Hydrocollapse can result in differential settlement that can impact buildings, flatwork or pavement, particularly if the wetting or infiltration of water does not occur in a uniform manner.

Flooding, Tsunamis and Inundation. Flooding occurs when a very large amount of water from a source such as a river or a broken pipe overflows onto a previously dry area. A tsunami is a series of waves usually caused by earthquakes. Inundation of water onto land can occur as a result of both flooding and tsunamis.

4.5.2 Regulatory Setting

State.

The Alquist-Priolo Special Studies Zones Act of 1972. The criteria most commonly used to estimate fault activity in California are described in this Act, which addresses only surface fault-rupture hazards. This Act was passed in 1972 to mitigate the hazards associated with surface rupture to structures for human occupancy. Surface rupture is the most easily avoided seismic hazard. Earthquake fault zones are regulatory zones around active faults. The legislative guidelines to determine fault activity status are based on the age of the youngest geologic unit

offset by the fault. An active fault is described by the CDMG as a fault that has had surface displacement within Holocene time (about the last 11,000 years). A potentially active fault is defined as any fault that showed evidence of surface displacement during Quaternary time (last 1.6 million years). Offshore faults, such as those located in the Monterey Bay, are not classified under this Act. The Site does not lie within an Alquist-Priolo fault rupture hazard zone.

The Seismic Hazards Mapping Act. These regulations were promulgated for the purpose of protecting the public from the effects of strong ground-shaking, liquefaction, landslides, or other ground failures or hazards caused by earthquakes. Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards in California* (CDMG 1997), constitutes the guidelines for evaluating seismic hazards other than surface fault-rupture and for recommending mitigation measures.

County. Prior to the issuance of building permits, the County ensures that structural design shall comply with the current edition of the Uniform Building Code (UBC) Seismic Zone IV and County Building Codes applicable to structure design and construction. Compliance with these codes minimizes the potentially damaging effect of severe ground-shaking originating from earthquakes in the region.

The following General Plan policy generally applies to geology and soil issues associated with the Project:

Policy 3.1.1 Erosion control procedures shall be established and enforced for all private and public construction and grading projects.

4.5.3 Methodology

This section of the EIR addresses the potential for structural damage to occur due to the local geology underlying the Site, as well as slope instability, ground settlement, unstable soil conditions, and regional seismic conditions. Geologic conditions affecting the Site are summarized from compiled information and analyses, particularly the geotechnical report prepared specifically for the Project EIR titled *Geotechnical Report Corral De Tierra Development, Monterey County, California*, by Fugro West, 2007, Appendix G of Volume II of this EIR.

4.5.4 Impact Significance Criteria

Based on Appendix G in the CEQA Guidelines, a project would have a significant impact related to geology and soils including the risk of loss, injury, or death if the project exposes people or structures to the following conditions:

Threshold 4.5.1 Expose people or structures to potential, substantial adverse effects, including the risk of loss, injury, or death involving;

- Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42);

- Strong seismic ground-shaking;
- Seismic-related ground failure, including liquefaction; and
- Landslides;

Threshold 4.5.2 Result in substantial soil erosion or the loss of topsoil;

Threshold 4.5.3 Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse; or

Threshold 4.5.4 Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property.

4.5.5 Project Impacts

The following impacts of the Project have been identified based on project characteristics, statutory requirements, and the significance thresholds defined above.

Threshold 4.5.1 Expose people or structures to potential, substantial adverse effects, including the risk of loss, injury, or death involving

- **Fault Rupture.** Fault Rupture is the displacement of the ground surface created by movement along a fault plane during an earthquake. A fault rupture hazard can exist when structures or facilities are located directly on an active fault, and rupture of that fault could displace the ground surface upon which the building or facility is located. The State of California precludes building on active faults in accordance with the Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist.

The Site is not located in a currently designated Alquist-Priolo Earthquake Fault Hazard Zone and no known active or potentially active faults have been mapped through the Site (Fugro West, 2007). Consequently, there would be no significant impacts exposing people or structures to potential, substantial adverse effects, including the risk of loss, injury, or death as a result of fault rupture on-site.

- **Strong seismic ground-shaking.** The Site is located within a seismically active area (Uniform Building Code Seismic Zone IV). No known faults transverse the Site. However, the Site is proximal to a number of faults that are considered active or potentially active. Geologic and seismic evidence indicates the potential for strong seismic shaking and ground lurching due to the close proximity of the Site to fault zones. Therefore, the potential exists for strong ground motion to affect the Project during the design lifetime. Ground-shaking and/or ground lurching generated by Project fault movement has the potential to damage building foundations and structures, a potentially significant impact. Therefore, in order to inform the design and construction of the Project, additional geotechnical reports shall be required. The reports shall address the site preparation and grading, foundation design, estimated differential settlement due to foundation and seismic loading, and the design of the site retaining walls supporting the adjacent slope. Because the effects of ground motion can be mitigated through design and construction procedures, potential seismic ground-shaking impacts would be reduced to less than significant levels with implementation of Mitigation Measures 4.5.1, 4.5.2, and 4.5.4.

- **Seismic-related ground failure, including liquefaction.** The Paso Robles Formation that underlies the alluvium and is exposed on the easterly border of the Site is comprised of soil that is generally not susceptible to liquefaction or seismic settlement. Therefore, there would be no significant impacts related to liquefaction within the Paso Robles Formation. However, the alluvial soils at the Site have a variable potential for seismically induced settlement and liquefaction. The potential for liquefaction is primarily within layers of loose to medium dense sand encountered between the groundwater table (at 15 ft) and at depths of approximately 20 ft below the ground surface. Liquefaction and seismic settlement could result in an estimated two to four inches of differential settlement at the Site from a design basis earthquake (DBE)¹. Therefore, there is a potential for significant impacts associated with liquefaction and seismic settlement within the alluvial soils to occur at the Site.
- Mitigation for liquefaction and seismic settlement typically consists of removing the soil that is prone to liquefaction and seismic settlement and replacing it with properly compacted (engineered) fill, deeply compacting the soils in-place, or supporting structures on deep foundations bearing below the settlement-prone soil. Because the impacts associated with liquefaction and seismic settlement can be mitigated through design construction procedures, potential project-related impacts would be reduced to less than significant with implementation of Mitigation Measures 4.5.4 and 4.5.5.
- Liquefaction is a concern that also must be addressed with respect to the proposed retention/detention system, to determine if the additional water that would be retained would result in increased risk of ground settlement. Moore Twining (2009) provided an assessment of this increased risk and determined that the proposed retention system would not require significantly different mitigation measures than what had been proposed in the Twining (2000) Report and that the potential impact from liquefaction is considered low.
- **Landslides.** The Site is relatively flat, and is not in an area of high susceptibility to landslides. However, landsliding is common in the Paso Robles Formation and several landslides are located near the Project vicinity. Landsliding is not expected to impact the foundation support or structures associated with development of the Site. However, the hills in the Project vicinity on the easterly edge of the Site are located in areas of high susceptibility to landslide and erosion hazards. The retaining walls proposed along the easterly border of the Site would support an existing slope that shows evidence of surficial slope instability. A final geotechnical report shall be prepared for the Project that provides specifications for the design of the retaining walls, taking into consideration the adjacent slope conditions. Because the Project has the potential to expose people or structures on the Site to landslides, the project-related impact associated with landslides is potentially significant. The impact of substantial adverse effects from landslides would be reduced to a less than significant level with the implementation of Mitigation Measure 4.5.4.

Threshold 4.5.2 Result in substantial soil erosion or the loss of topsoil

Graded cut and fill slopes associated with the site development would be prone to sheet and rill erosion (Fugro West, 2007). Erosion potential during construction in most of the Site is minimal due

¹ A design basis earthquake is the earthquake of maximum intensity at the Site which may occur on the Site or within 200km of the Site. The design basis earthquake is assessed using historic earthquake data and includes data such as calculated maximum accelerations and duration.

to limited topographical variation and drainage courses. Nevertheless, standard construction practices such as site drainage and landscape improvements should be applied as required by the County. These practices would reduce any potential for erosion during construction. The impact of substantial soil erosion or the loss of topsoil would be reduced to less than significant levels with implementation of Mitigation Measure 4.5.3.

Threshold 4.5.3 Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse

- **Landslides.** Refer to discussion regarding landslides under Threshold 4.5.1 above.
- **Lateral Spreading.** The existing ground surface at the Site is relatively flat. The Site is not bordered by slopes that would allow for lateral spreading conditions. The likelihood of impact on the Site by lateral spreading is less than significant and no mitigation is required.
- **Subsidence.** The Site is not in an area where extraction of fluids is known to have resulted in subsidence or collapse. If the groundwater levels remain as they are currently, the impact of subsidence or collapse at the Site is less than significant. If dewatering or lowering of the groundwater is expected, there could be a significant impact to the Site. A final geotechnical report shall be required to assess significant impacts associated with subsidence at the Site of the Project. Significant impacts associated with dewatering or lowering of the groundwater would be reduced to less than significant with the implementation of Mitigation Measure 4.5.4.
- **Liquefaction.** Refer to previous discussion under Threshold 4.5.1.
- **Collapse.** The near surface soils encountered at the Site are comprised of silty sand and may be subject to hydrocollapse. Hydrocollapse could result in differential settlement that can impact buildings, flatwork or pavement. Studies of the on-site soil suggest that the soil prone to hydrocollapse is typically less than 5 ft thick. The soil could be removed by grading to remove the loose soil and replace it as compacted fill. Impacts associated with hydrocollapse would be reduced to less than significant with implementation of Mitigation Measures 4.5.1 and 4.5.4.
- **Ground lurching.** The Site is within a seismically active region of Central California. Ground lurching can damage facilities and buried pipelines. The area is prone to moderate to large earthquakes and therefore there is potential for ground lurching to impact the Site. Ground lurching is generally not a geologic hazard that can be prevented, and therefore is mitigated by implementing preparedness measures. The potential impact of ground lurching would be reduced to less than significant with the implementation of Mitigation Measures 4.5.1, 4.5.2, and 4.5.4.

Threshold 4.5.4 Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property

Soils near the surface of the Site consist predominantly of silty sand having a very low potential for expansion. The impacts associated with expansive soils are considered to be less than significant.

4.5.6 Cumulative Impacts

The area analyzed for potential cumulative impact associated with geology and soils includes: (1) the area that could be affected by the Project and associated activities; and 2) the areas affected by other projects whose activities could directly or indirectly affect the geology and soils of the Site. Projects listed on Table 4.A, Cumulative Projects List, and shown on Figure 4.1, Cumulative Project Locations that occur adjacent to, or very close to, the Site were considered as part of the cumulative study area for geology and soils.

The impacts of the Project associated with seismic-related ground-shaking, liquefaction and seismic settlement, landslides, erosion, subsidence, collapse, and ground lurching are project-specific and can be mitigated to less than significant levels on a project-by-project basis as required by standard County procedures and proposed mitigation measures (Mitigation Measures 4.5.1 through 4.5.5). Therefore, the Project would not significantly contribute to cumulative impacts associated with geologic and soils hazards.

The Project has no known impacts associated with rupture of a known earthquake fault on or adjacent to the Site, lateral spreading, or, soil expansion. Therefore, the Project would not have a significant contribution to cumulative impacts resulting from geologic and soils hazards within the cumulative impact study area.

4.5.7 Level of Significance Prior to Mitigation

Seismic-related ground-shaking, liquefaction and seismic settlement, landslides, subsidence, collapse, and ground lurching from earthquakes produced by local faults could impact buildings and foundations constructed as part of the Project. Grading during site development could cause erosion or loss of topsoil on the Site. No other project-related impacts are expected to exceed the CEQA impact significance criteria for geologic and soils constraints.

4.5.8 Mitigation Measures and Standard Conditions of Approval

The following mitigation measures and standard conditions shall be implemented to reduce potentially significant adverse impacts of the Project associated with seismic ground-shaking, ground lurching, and erosion.

Mitigation Measure 4.5.1 **Uniform Building Code for Seismic Zone IV.** Prior to the issuance of a building permit, the project engineer shall prepare and submit project design specifications to the County of Monterey RMA-Planning Department for review and approval. The project design specifications shall be in accordance with the requirements of the Uniform Building Code's current edition for Seismic Zone IV. The requirements state that all buildings are to be founded on undisturbed native soils and/or accepted engineering fill to prevent resonance amplification between soils and the structure.

Mitigation Measure 4.5.2 **Ground Lurching.** Prior to issuance of a building permit, the applicant shall submit operation and emergency response plans to the County of Monterey, Health Department, Environmental Health

Division for review and approval. The plans shall consider the potential for ground lurching to occur in response to seismic events, and the potential for lurching to damage lifelines, utilities, and structures. The operation and emergency response plans shall include an employee-training plan; an evacuation plan; a checklist for emergency response including responsible parties; a facility site plan; a storage map for hazardous materials; and a records management plan.

Mitigation Measure 4.5.3

Erosion Control Plan. Prior to issuance of a grading permit, the contractor shall prepare and submit an erosion control plan to the County of Monterey RMA-Planning Department for review and approval. The erosion control plan shall include the following measures:

- Graded cut and fill slopes shall be vegetated or landscaped in a manner that would reduce the potential for soil erosion following construction.
- Site drainage shall be provided to control surface water, direct water away from slopes, and control surface water discharge.

Mitigation Measure 4.5.4

Design Level Geotechnical Report. Prior to issuance of a grading permit, the applicant shall submit a design-level Geotechnical Report to the County of Monterey RMA-Planning Department for review and approval. The Geotechnical Report should specifically address the site preparation and grading, foundation design, estimated differential settlement due to liquefaction, foundation and seismic loading, and the design of the Site's retaining walls that would support the adjacent slope.

Mitigation Measure 4.5.5

Building Construction Plans. Prior to the issuance of a building permit, the project engineer shall prepare and submit project building construction plans including design specifications consistent with the design level geotechnical engineering investigation to the County of Monterey RMA-Planning Department for review and approval. The project design specifications shall detail the design and construction of the buildings and the method to be used (e.g., removing the alluvial soil that is prone to liquefaction and seismic settlement and replacing it with properly compacted (engineered) fill, deeply compacting the soils in-place, or supporting structures on deep foundations bearing below the settlement-prone soil to address impacts associated with potential liquefaction and seismic settlement associated with alluvial soils on-site.

4.5.9 Level of Significance after Mitigation

Implementation of Mitigation Measure 4.5.1 through Mitigation Measure 4.5.5 would reduce potentially significant impacts of geology and soils constraints to levels below significance.

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4.6 HAZARDS AND HAZARDOUS MATERIALS

This section considers potential impacts associated with hazards and hazardous materials resulting from development of the Project. In addition, the analysis considers potential risks to tenants and visitors of the proposed Corral De Tierra Neighborhood Retail Village from on- and off-site sources of hazards and hazardous materials.

Hazardous materials can threaten human health and/or the environment through routine emissions and/or accidental releases. Hazardous materials include materials that are toxic, corrosive, flammable, reactive, irritating, and/or strongly sensitizing. According to the State of California (<http://www.dtsc.ca.gov/LawsRegsPolicies/index.cfm>), a hazardous material is defined as:

"a substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either: 1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating irreversible illness; or 2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed of or otherwise managed."

A detailed analysis of environmental hazards associated with geology and flooding is located in Chapter 4.5 Geology and Soils.

4.6.1 Existing Environmental Setting

The Site consists of two lots totaling approximately 11 acres, which are owned by Omni Resources, LTD. Most of the Site is relatively level and occupied by an open, fenced undeveloped pasture of ruderal (disturbed) California annual grassland series interspersed with mature Coast live oak, and other native and nonnative tree species (refer to Figure 4.3.2). Based on a review of aerial photography (1956, 1971, 1998), the area was used for agriculture (livestock grazing) from 1956 through at least 1971, when construction of the Corral de Tierra Country Club and Golf Course occurred on nearby pasture land. Gasoline service stations were constructed northwest of the Site at about the same time (LSA, 2007).

Currently, the Site is designated as Commercial by both the County Toro Area Land Use Plan, and is designated as "Light Commercial" in the County Zoning Ordinance. Developments near the Project include the Cypress Community Church at the northeast quadrant of SR-68 and Corral de Tierra Road; the Corral de Tierra Country Club and single-family residences to the south and east; and an existing gasoline service station currently being utilized as a real estate office immediately to the west of the Site. An active gasoline station (Corral de Tierra Services) and vacant buildings occur west of the Site on the other side of Corral de Tierra Road (LSA, 2007). A non-operational gasoline service station was located adjacent to the northwest corner of the Site and was the subject of a leaking underground storage tank investigation in the early 1990s. The tank was removed and the site was closed in 1993 (this issue is addressed in more detail in Section 4.6.5 Project Impacts). North of the Site, across SR-68, are public lands of the former Fort Ord military base now owned by the Bureau of Land Management. The closest commercial airport is located approximately five miles from the Site in Monterey (Monterey Peninsula Airport).

A power line parallels SR-68, along the Site's northern property line, but does not cross the Site.

The irregular southeast property line runs along the base of a natural ridge roughly parallel to El Toro Creek, which is to the east of the Site. El Toro Creek is tributary to the Salinas River, which ultimately flows west to Monterey Bay and the Pacific Ocean. In an Initial Site Assessment for SR-68 and Corral de Tierra Road intersection, groundwater was reported at depths ranging between 16.8 and 87 ft below ground surface, based on water levels in a well located approximately 0.25 mile southeast of the Site. Groundwater was described as flowing from southwest to northeast (LSA, 2007).

4.6.2 Regulatory Setting

Federal Regulations

Comprehensive Environmental Response, Compensation, and Liability Act. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund, was passed to facilitate the cleanup of the nation's toxic waste sites. In 1986, CERCLA was amended by the Superfund Amendment and Reauthorization Act Title III (community right-to-know laws).

Superfund Amendments and Reauthorization Act. In 1986, Congress established the "innocent landowner defense" in the 1986 amendments to CERCLA known as the Superfund Amendments and Reauthorization Act (SARA). To establish innocent landowner status, the landowner "must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial and customary practice in an effort to minimize liability." In an effort to clarify what constitutes "all appropriate inquiry," the American Society for Testing and Materials (ASTM) has developed a standard that provides specific definition of the steps one should take when conducting a "due diligence" environmental site assessment for commercial real estate.

In relation to the discussion in this section, SARA pertains primarily to emergency management of accidental releases. It requires formation of State and local emergency planning committees, which are responsible for collecting material handling and transportation data for use as a basis for planning. Chemical inventory data is made available to the community at large under the "right-to-know" provision of the law. In addition, SARA also requires annual reporting of continuous emissions and accidental releases of specified compounds. These annual submissions are compiled into a nationwide Toxics Release Inventory (TRI).

Hazardous Materials Transportation Act. The Hazardous Materials Transportation Act is the statutory basis for the extensive body of regulations aimed at ensuring the safe transport of hazardous materials on water, rail, highways, in the sky, or in pipelines. It includes provisions for material classification, packaging, marking, labeling, placarding, and shipping documentation.

Resource Conservation and Recovery Act. The Resource Conservation and Recovery Act (RCRA) enables the EPA to administer a regulatory program that extends from the manufacturing of hazardous materials to their disposal, thus regulating the generation, transport, treatment, storage, and disposal of hazardous waste at all facilities and sites in the nation. RCRA was amended in 1984 by the Hazardous and Solid Waste Act.

Hazardous and Solid Waste Act. The Hazardous and Solid Waste Act (HSWA) specifically prohibits the use of certain techniques for disposal of some hazardous wastes. Individual States may implement hazardous waste programs under RCRA with EPA approval. The California Hazardous Waste Control Law is administered by the California EPA to regulate hazardous wastes.

Toxic Substances Control Act. The Toxic Substances Control Act (TSCA) provides the EPA the ability to track industrial chemicals that are produced or imported into the U.S. The EPA has subsequently developed a comprehensive list of such chemicals. As such, these chemicals may be screened and reporting or testing may be required of any that are deemed to pose a risk to the environment.

Clean Water Act. The Federal Water Pollution Control Act (later referred to as the Clean Water Act [CWA]) established the structure for regulating discharges of pollutants into waters of the U.S. and provided the EPA with the authority to implement pollution control programs for industry. The Act was amended to require that the discharge of pollutants into waters of the U.S. from any point source be effectively prohibited unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit.

State Regulations

The California Hazardous Waste Control Law. The Hazardous Waste Control Law (HWCL) is the primary hazardous waste statute in the State of California. The HWCL lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packing, and labeling hazardous wastes; prescribes management controls, establishes permit requirements for treatment, storage, disposal, and transportation, and identifies some wastes that cannot be disposed in landfills. The HWCL exceeds federal requirements by mandating source reduction planning and a much broader requirement for permitting facilities that treat hazardous waste. It also regulates a number of types of wastes and waste management activities that are not covered by federal law with RCRA.

The California Hazardous Material Management Act. The Hazardous Materials Management Act (HMMA) requires that businesses handling or storing amounts of hazardous materials above certain thresholds prepare a Hazardous Materials Business Plan (HMBP), which includes an inventory of hazardous materials stored on-site (above specified quantities), an emergency response plan, and an employee-training program. Businesses that use, store, or handle 55 gallons of liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas at standard temperature and pressure require HMBPs. Plans must be prepared prior to facility operation and are reviewed/updated biennially (or within 30 days of a change).

California Code of Regulations. Most State and federal regulations and requirements that apply to generators of hazardous waste are spelled out in the California Code of Regulations

(CCR), Title 22, Division 4.5. Title 22 contains the detailed compliance requirements for hazardous waste generators; transporters; and treatment, storage, and disposal facilities. Because California is a fully authorized State according to RCRA, most RCRA regulations (those contained in 40 Code of Federal Regulations [CFR] 260 et seq.) have been duplicated and integrated into Title 22. However, because the Department of Toxic Substance Control (DTSC) regulates hazardous waste more stringently than the U.S. Environmental Protection Agency, the integration of California and federal hazardous waste regulations that make up Title 22 do not contain as many exemptions or exclusions as does 40 CFR 260. As with the California Health and Safety Code, Title 22 also regulates a wider range of waste types and waste management activities than does the RCRA regulations in 40 CFR 260. To aid the regulated community, California compiled the hazardous materials, waste and toxics-related regulations contained in CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24, and 27 into one consolidated “Toxics” section in CCR Title 26. However, the California hazardous waste regulations are still commonly referred to as Title 22.

California Emergency Services Act. Government Code 8550-8692 provides for the assignment of functions to be performed by various agencies during an emergency to the end that the most effective use may be made of all manpower, resources, and facilities for dealing with any emergency that may occur. The coordination of all emergency services is recognized by the State to mitigate the effects of natural, man-made, or war-caused emergencies which result in conditions of disaster or extreme peril to life, property, and the resources of the State, and generally to protect the health and safety and preserve the lives and property of the people of the State.

Local Regulations

County of Monterey Health Department, Hazardous Materials Management Services. The Hazardous Materials Management Services of the County of Monterey Health Department is responsible for conducting compliance inspections for regulated facilities in the County of Monterey. These facilities handle hazardous materials, generate or treat hazardous waste, and/or operate underground storage tanks. The Certified Unified Program Agency (CUPA), of which the Hazardous Materials Management Services is a part, strives to prevent environmental hazards from occurring and to protect the public and resources from environmental hazards when they occur. This balanced approach utilizes education and effective enforcement procedures to minimize the potential risk to human health and the environment.

4.6.3 Methodology

Potential hazards and hazardous materials at the Site were evaluated through document review and a database search. The information obtained through the document review and database search were applied to the impact significance criteria below to assess potential project-related impacts.

Document Review

Reports, letters, and other documents pertaining to the Project provided by the applicant, the County of Monterey RMA-Planning Department, or otherwise available, were reviewed in order to determine

the potential hazards and hazardous materials at the Site (these documents are available from the County of Monterey upon request). Based upon review of these documents, the following were the only documents with substantial information regarding hazards and hazardous materials as they relate to the Site:

- Background information compiled in a letter from Brian Finegan to the County of Monterey RMA-Planning Department (dated November 20, 2007); and,
- A report titled, “Hazardous Waste Initial Site Assessment”, prepared by LSA in August 2007 for the SR-68/Corral de Tierra Road intersection project.

The findings of the documents reviewed as they impact the Site are discussed in Section 4.6.5 Project Impacts.

Regulatory Database Search

The regulatory databases that were reviewed for this evaluation included the following:

- State Water Resources Control Board (SWRCB), Geotracker Database at <http://www.geotracker.swrcb.ca.gov/search>;
- California Department of Toxic Substances Control (DTSC), EnviroStor Database at <http://www.envirostor.dtsc.ca.gov/public>; and
- California Environmental Protection Agency (EPA), Cortese List Data Resources at <http://www.calepa.ca.gov/SiteCleanup/CorteseList/default.htm>.

The findings of the regulatory database search are discussed in Section 4.6.5 Project Impacts.

4.6.4 Impact Significance Criteria

Significance criteria for evaluating potential project impacts related to hazards and hazardous materials are derived from the CEQA Guidelines Appendix G. For the purposes of this EIR, the Project would represent a significant environmental impact if it would do one or more of the following:

- Threshold 4.6.1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;**
- Threshold 4.6.2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;**
- Threshold 4.6.3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;**

- Threshold 4.6.4** Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- Threshold 4.6.5** For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- Threshold 4.6.6** For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;
- Threshold 4.6.7** Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Threshold 4.6.8** Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

4.6.5 Project Impacts

- Threshold 4.6.1** Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials

According to information compiled in a letter from Brian Finegan to the County of Monterey, RMA-Planning Department (Finegan, 2007), the Project consists of a commercial/retail center and would not involve the transport, use, and/or disposal of significant amounts of hazardous material. Hazardous substances may be sold in consumer containers or used in de minimis quantities in cleaning and maintenance operations at the Site. The amounts of hazardous materials proposed to be handled are anticipated to be well below reportable quantities and threshold planning quantities under federal and State regulations, as listed in 40 CFR Ch.1 Section 117.3 (http://www.access.gpo.gov/nara/cfr/waisidx_05/40cfr117_05.html), and do not pose a significant risk of hazardous materials impacts to the Site as long as they are handled consistently with their labeling. However, in the event that future commercial tenants at the Site use hazardous materials in excess of reportable quantities or threshold planning quantities (such as dry cleaners conducting on-site cleaning or automotive shops with waste oil collection services), the hazardous materials transport, use, storage and disposal associated with these facilities would be subject to federal, State, and local regulations and permitting as described in Standard Condition 4.6.1. The potential for hazardous materials to occur on the Site during construction are addressed under Threshold 4.6.2. With implementation of Standard Condition 4.6.1, the Project would not create significant hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Threshold 4.6.2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment

The quantities of hazardous materials that may be sold at the Project or used for maintenance activities within the development would not be expected to exceed reportable quantities or threshold planning quantities under federal or State law as defined in 40 CFR Ch. 1, Section 117.3. The potential for a significant accidental chemical spill or release from the handling of consumer quantities of hazardous materials is unlikely. Intentional dumping of consumer containers of hazardous materials (e.g., motor oil) could occur.

In the event that future commercial tenants at the Site use hazardous materials in excess of reportable quantities or threshold planning quantities (such as dry cleaners conducting on-site cleaning or automotive shops with waste oil collection services), the hazardous materials transport, use, storage and disposal associated with these facilities would be subject to federal, State, and local regulations and permitting as prescribed in Standard Condition 4.6.1.

There are no known releases identified in the Site vicinity that have a potential impact to the Site, with the exception of unexploded ordnances that may have been mistakenly fired away from the Fort Ord military base, located approximately 0.07 mile northwest of the Site (north of SR-68). This possible release was discovered while reviewing the SR-68 and Corral de Tierra Road Intersection Improvements Project Initial Site Assessment document (LSA, 2007), which indicated that based on information provided by the EPA Fort Ord Site Manager in 2002, some ordnance may have been mistakenly fired away from the base. However, based on the available data, the risk of encountering ordnance at the Site is considered very remote.

Hazardous materials may be used during construction activities for the Project, including fuel, paints, cleaning products and other chemicals used in construction. As described in Standard Condition 4.6.2, prior to construction, a Stormwater Pollution Prevention Plan would be required that would specify, among other things, Best Management Practices (BMPs) for the safe management of hazardous materials to prevent potential spills and stormwater contamination. The Project would be required to comply with the General Construction Stormwater NPDES Permit requirements for hazardous materials management. In addition, if fuel storage at the Site exceeds threshold planning quantities specified in 40 CFR Part 112 (1,320 gallons), a Spill Prevention, Control and Countermeasures (SPCC) Plan must be prepared for the Site. Finally, prior to obtaining a grading or building permit, the applicant would be required to prepare emergency access and evacuation plans for construction and operation of the Project for review and approval by the County as discussed in Standard Condition 4.6.3.

Based on this analysis and with the implementation of Standard Condition 4.6.3, the Project would not cause significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Threshold 4.6.3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school

No hazardous emissions associated with the proposed retail and office development are anticipated and hazardous or extremely hazardous substances and/or wastes would not be handled in excess of reportable quantities or threshold planning quantities under federal or State law. In addition, existing or proposed schools are located greater than 0.25 mile from the Site; therefore, no significant impacts related to the emission or handling of hazardous substances near a school would occur.

Threshold 4.6.4 Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment

Based on the regulatory database search, one site of environmental concern (the adjacent, currently non-operational gasoline service station) was listed within 0.5 mile of the Site. According to information contained in the State's on-line Geotracker database of Leaking Underground Fuel Tank (LUFT) sites, and Spills, Leak, Investigation and Cleanup (SLIC) sites (State Water Resources Control Board [SWRCB], 2007), a leak from a waste oil/used oil underground storage tank, caused by structural failure, was discovered at the currently non-operational gasoline service station located adjacent to the northwest corner of the Site on May 3, 1991, and was reported on July 7, 1991. The Central Coast Regional Water Quality Control Board assigned Case # T0605300038 to this release. The date the release began is unknown. The Finegan (2007) letter indicated that the tanks were removed, and according to the Geotracker Database (SWRCB, 2007), the case was closed on March 26, 1993. The following information was taken directly from the Brian Finegan Letter (Finegan, 2007):

"Permits for the removal of the tanks were obtained and the tanks were removed and subsequently transferred to a licensed disposal facility. Additionally, soil samples were collected as required by the Health Department. These tanks were located off-site and due to the successful removal of the potential hazards, the site was listed "closed" according to the Central Coast Regional Water Quality Control Board (Case # T0605300038)."

In addition, the database search identified a site (Markham Ranch Subdivision) in the vicinity where the pesticide toxaphene was detected in the soil. Toxaphene is a persistent organochlorine pesticide and is relatively immobile in the soil environment. Markham Ranch Subdivision is located approximately 1.25 miles south of the Site. According to the information listed on the Geotracker database (Case # S74), the case was opened on July 23, 1992 and subsequently closed on November 8, 2004. The database entry states that contaminated soil was excavated and removed from this site and the case was closed.

A visual survey of the Site and its vicinity was conducted by LSA on April 6, 2007, for the Hazardous Waste Initial Site Assessment Report for the improvement (separate project) of the intersection of SR-68 and Corral de Tierra Road (LSA, 2007), which is immediately northwest of the Site. During this survey, properties near the Site were observed. In addition, historical aerial

photographs of the Site vicinity covering the period from 1956 to 1998 were reviewed, and a regulatory records search was conducted for all properties located within a radius of 0.25 mile from the intersection improvement area. These activities were conducted to identify evidence or records that indicate a potential for chemical releases, hazardous materials use or hazardous waste impact in the vicinity of the intersection improvement project. The results of these activities are relevant for this EIR given the northwestern corner of the Site is defined by the intersection slated for improvement.

A summary of the results of these activities is as follows (LSA, 2007):

- Review of historical aerial photographs (1956, 1971, and 1998) indicates that the historical use of the Site and the surrounding area was primarily rural with pastureland until approximately 1971, when construction of the Corral de Tierra Country Club occurred on the pastureland (LSA, 2007). The review did not reveal any industrial site use, staining, or other features indicative of chemical releases.
- Fort Ord is located approximately 0.07 mile northwest of the Site (north of SR-68) and has reportedly had releases of multiple hazardous substances. In 1986, elevated levels of carbon tetrachloride, tetrachloroethylene, 1,1,1-trichloroethane, and trans-1,2-dichloroethylene were detected in off-base groundwater. These contaminants are currently emanating from the base and may be impacting the drinking water supplies of the City of Marina, California; however, the exact location of the source has not yet been identified. In addition, soil and groundwater contamination have been observed at the Fire Drill Area, and approximately 600 gallons of petroleum products have reportedly been released in this area. Fort Ord has at least 18 other identified contamination areas. According to the EPA, there are three active groundwater contamination plumes sourced from the military base, and pump and treat systems are currently in place in the northern portion of the military base to remediate the groundwater. However, there is no known soil or groundwater contamination associated with Fort Ord in the vicinity of the Site; and the contamination plumes are not located or expected to migrate near the Site.
- As noted in the SR-68 and Corral de Tierra Road Intersection Improvements Project Initial Site Assessment (LSA, 2007), based on information provided by the EPA Fort Ord Site Manager in 2002, some ordnance may have been mistakenly fired away from the base. However, based on the available data, the risk of encountering ordnance at the Site is considered very remote.

The base is also an active RCRA facility that generates and stores hazardous waste, stores and uses reportable quantities of hazardous materials, and has permits for wastewater discharges to the sewer and to surface water.

In addition to the activities described above, an investigation for aerially deposited lead, including collection and analysis of 64 soil samples, was conducted by Geocon, Inc. (2007) in the Site vicinity along SR-68. The investigation was conducted to evaluate shallow soils for elevated lead concentrations that could be associated with the historical use of leaded gasoline by cars traveling this route. The investigation reportedly determined that lead concentrations in soil did not exceed federal and State regulations in the soil samples that were collected (LSA, 2007). According to LSA, some of these samples were collected near the Corral de Tierra and SR-68 roadways in the vicinity of the Site.

Based on findings from the regulatory database search and the documents reviewed above, no groundwater contamination has been reported or was suspected to be associated with this Site. No known hazardous material sites are reported to occur at an up-gradient location from the Site with

respect to groundwater flow, where contamination might migrate beneath the Project. In addition, routine analysis of water samples from the nearby Ambler Park water supply wells has not detected any groundwater contaminants (SWRCB, 2008). Thus, contamination of groundwater beneath the Site from off-site sources is unlikely. Finally, the Site is not included on a list of hazardous materials sites compiled pursuant to Government Code 65962.5. Therefore, development of the Project would not create significant hazards to the public or the environment from the presence of hazardous materials sites.

Threshold 4.6.5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area

The Site is not located within an airport land use plan area, as the closest airport is approximately five miles away from the Site, in Monterey (Monterey Peninsula Airport). Development of the Site would not significantly impact any airport operations or create any significant airport related safety hazards.

Threshold 4.6.6 For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area

The Site is not located in the vicinity of a private airstrip, with the closest approximately 10 miles away from the Site in Salinas; therefore, the Project would not result in a significant safety hazard for people residing or working in the Site area.

Threshold 4.6.7 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan

Development of the Site would generate an increase in the volume of traffic on regional and local roadway networks. Adding additional traffic to roadways that at times have poor level of service and exceed carrying capacities (refer to Chapter 4.12 Traffic and Transportation) could potentially significantly impair implementation or physically interfere with adopted emergency response plans and/or emergency evacuation plans in the Site vicinity during construction and operation. However, the development would be subject to federal, State, and local regulations and permitting to prepare emergency access and evacuation plans as described under implementation of Standard Condition 4.6.3.

Based on this analysis, the Project would not interfere with an adopted emergency response plan or emergency evacuation plan during construction or operation and no significant impact levels are indicated.

Threshold 4.6.8 Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands

Wildfires are of concern in central and southern California, especially in areas with chaparral shrubland, a fire-prone vegetative community type (USGS, 2003). Wildfires are the most frequent type of fire in the Salinas Rural Fire District, and the Toro area is included in a region that is rated as having moderate to very high fire hazard (Monterey County General Plan, 1982). The frequency of fire is expected to be highest in shrublands, and particularly in areas with chaparral where urban expansion has occurred (USGS, 2003). The fact that the Site is not located in shrubland or chaparral vegetation, but instead occurs in a relatively level, open grassland area with scattered trees, decreases the risk of wildfires.

However, the area of the Site is within an area rated as a high risk for wildfire (D. Priolo, 2008. Salinas Rural Fire District, pers. comm., February 7, 2008). This rating is based on the Site's location in the State Responsibility Area (SRA) and was made by the California Department of Forestry. This is a broad classification, however, and the openness of the Site does not provide a contiguous fuel source. Fire flow testing conducted in 1992 and the installation of new hydrants at that time resulted in reduction of the fire insurance classification for the Site by ISO Commercial Risk Services, Inc. (Finegan, 2007). This reduction in classification reflects a reduction in fire risk.

Certain procedures are required by the County to minimize the risk of loss of life, injury, and damage to property and natural resources from fire (Monterey County General Plan, 1982). These procedures include:

- **Road Access** – Determination of the width of an all-weather surface road shall be made at the time of subdivision approval.
- **Project Review** – The County shall review project proposals to identify potential fire hazards and ensure that development in high fire hazard areas is designed and constructed in a manner that minimizes risk from fire hazards.
- **Water Supply System and Fire Suppression** – All new development shall have adequate water available for fire suppression.

The Project would need to provide fire flow that is adequate to meet Monterey County Ordinance 3600. The Salinas Rural Fire District requires a minimum fire flow for new development (D. Priolo, 2008. Salinas Rural Fire District, February 8, 2008. Personal communication). This fire flow requirement is 1563 gallons per minute (gpm) at 20-psi residual pressure for a duration of four hours. The initial flow rate is 6,250 gpm for the same duration, but it was reduced by 75% because fire sprinklers are to be installed.

Similarly, the Fire District requires a development setback of 30 ft from all property lines, which applies to all parcels greater than one acre in size, on which new structures are built and which are located within the SRA. The setback is a part of Monterey County Ordinance 3600, which adopts Public Resources Code Section 4290 with certain local amendments (the 30-foot setback is an original PRC 4290 Monterey County Ord. 3600 Section 18.56.090 (2)(a)). If the access roads/easements do not cover this setback around the buildings, alternative measures can be considered on a case-by-case basis as discussed in the ordinance.

Because the Site is located in a relatively open, level area, and would be required to implement the County and Salinas Rural Fire District fire hazard reduction procedures including 30 ft set-backs, there would be no significant impacts from wildfire risk to people from the Project with implementation of required set-backs.

4.6.6 Cumulative Impacts

The nature of the impacts discussed in this section does not contribute to a cumulative impact to the Site or the project area. Accidental spills and leaks are unplanned occurrences. It is impossible to predict the occurrences of such events and the likelihood of such events occurring in close proximity to each other at the same time is very small; therefore, such events cannot be considered a cumulative impact. Any future tenants that handle reportable quantities of hazardous materials in their operations would still be expected to handle relatively modest quantities, and would be subject to federal, State, and local regulation as discussed in Standard Condition 4.6.1. The Project would not contribute to the emission or handling of hazardous substances within 0.25 mile of an existing or proposed school; hazardous materials sites; an adopted emergency response or evacuation plan; or aviation safety hazards. Therefore, the Project's potential contribution to cumulative impacts associated with hazards or hazardous materials is considered less than significant.

Table 4.A lists Projects in the Site vicinity. Of the developments that are listed in Table 4.A, three are categorized as commercial or light industrial, indicating that these three developments have the potential to result in a significant increase in or impact associated with the routine transport, use, and disposal of hazardous materials; the emission or handling of hazardous substances within 0.25 mile of an existing or proposed school; hazardous materials sites; an adopted emergency response or evacuation plan; and/or aviation safety hazards. However, no information has been provided regarding the commercial and industrial processes and characteristics of the developments listed in Table 4.A. Therefore, cumulative impacts associated with the Site in combination with other projects in the vicinity of the Site cannot be assessed at this time.

4.6.7 Level of Significance Prior to Mitigation

There is a potential for hazardous materials from the construction and operation of the Project to affect the public or the environment without the implementation of standard conditions. Standard conditions that apply to the Project are discussed in the next section.

4.6.8 Mitigation Measures and Standard Conditions of Approval

The Project shall comply with the following standard conditions to ensure that no significant unintended impacts occur as a result of the potential use, storage, transport, or disposal of hazards or hazardous materials in association with the Project.

Standard Condition 4.6.1: Hazardous Materials Business Plan. Prior to issuance of a building permit, the applicant shall file a Hazardous Materials Business Plan, including an Emergency Response and Contingency Plan and a Hazardous Materials inventory

with the County of Monterey, Environmental Health Department and obtain a permit for hazardous materials handling if necessary. Such facilities are required to follow safe handling and storage practices, implement training and emergency response procedures and are subject to annual inspection. Facilities that generate hazardous waste are required to follow a similar set of procedures, and are also required to register as hazardous generators and comply with federal and State hazardous waste storage regulations, training requirements and contingency planning requirements. Hazardous materials facilities with air emissions are required to obtain permits from the local Air Pollution Control District and comply with emission limits and any specified monitoring, maintenance and record keeping requirements in their permits.

Future potential use, storage, transport or disposal of reportable quantities of hazardous materials (as listed in 40 CFR Ch.1 Section 117.3) or quantities exceeding threshold planning quantities would be required to follow the same procedures.

Standard Condition 4.6.2: Storm Water Pollution Prevention Plan. Prior to issuance of a grading permit, the applicant shall prepare a Stormwater Pollution Prevention Plan, to be reviewed and approved by the County of Monterey RMA – Planning Department, that would specify Best Management Practices (BMPs) for the safe management of hazardous materials to prevent potential spills and stormwater contamination. The applicant shall file a notice of intent with the Regional Water Quality Control Board (RWQCB) to comply with the requirements of the General Construction Stormwater National Pollution Discharge Elimination System (NPDES) Permit. In addition, if fuel storage at the Site exceeds threshold planning quantities specified in 40 CFR Part 112 (1,320 gallons), a Spill Prevention, Control and Countermeasures (SPCC) Plan shall be prepared for the Site, which would be reviewed and approved by the County of Monterey. The SPCC must contain an assessment of the Site’s spill hazard, methods of spill and overfill prevention, spill containment and spill response, and site responsibilities and training requirements.

Standard Condition 4.6.3: Emergency Access and Evacuation Plans. Prior to issuance of a grading or building permit, the applicant shall prepare emergency access and evacuation plans for construction and operation of the Project for review and approval by the County of Monterey RMA-Planning Department.

4.6.9 Level of Significance after Mitigation

Standard Conditions 4.6.1 to 4.6.3 are designed to minimize the potential for hazardous materials spills and exposure and to ensure prompt and appropriate emergency response in the event that a spill or other emergency does occur. Therefore, after standard procedures are followed, the potential impacts from hazards and hazardous materials are less than significant.

4.7 HYDROLOGY AND WATER QUALITY

This section addresses potential impacts to surface water and ground water hydrology and to water quality resulting from implementation of the Project. The analysis is based upon information contained in the following documents (the first six of which are available upon request at the County of Monterey-RMA Planning Department and the remaining are provided in Appendix I of Volume II of this EIR):

1. Staal, Gardner & Dunne Inc. 1991. Hydrogeologic Update, Toro Area, Monterey County California. Report prepared for Monterey County Water Resources Agency. August 1991.
2. Fugro West, Inc. 1996. Additional Hydrogeologic Update, Toro Area, Monterey County California. Report prepared for Monterey County Water Resources Agency. February 1996.
3. Kenneth D. Schmidt and Associates. 2001. Review of Reports on Groundwater Conditions. Letter report prepared for Monterey County Environmental Health Division. May 2001.
4. Yates, Feeney, and Rosenburg. 2002. Laguna Seca Subarea, Phase III Hydrogeologic Update. Report prepared for Monterey County Water Management District. November 2002.
5. Kleinfelder, Inc. 2004. Project-Specific Hydrogeologic Investigation, Omni Enterprises Property (PLN 010252), Corral de Tierra Area, Monterey County, California. Report prepared for Monterey County Health Department, Environmental Health Division. February 2004.
6. Geosyntec. 2007. El Toro Groundwater Study, Monterey County, California. A report prepared for: Monterey County Resource Management Agency, Salinas, California.
7. Schaaf and Wheeler, 2002. Preliminary Drainage Study for Proposed Development at Corral de Tierra and Highway 68.
8. Terrapin, December 11, 2008. Water Efficiency at Corral de Tierra Project.
9. Whitson Engineers, February 17, 2009. Water Budget Summary for Proposed Commercial Project Corral De Tierra Road and Highway 68.
10. Whitson Engineers, February 17, 2009. Supplement #2 to the Preliminary Drainage Report for Proposed Commercial Project Corral De Tierra Road and Highway 68.
11. Whitson Engineers, February 19, 2009. Evaluation of Potential for Increased Groundwater Recharge for Proposed Commercial Project Corral De Tierra Road and Highway 68.
12. Whitson Engineers, August 24, 2009. Evaluation of Potential for Increased Groundwater Recharge for Proposed Commercial Project Corral De Tierra Road and Highway 68.
13. Whitson Engineers, August 24, 2009. Water Budget Summary for Proposed Commercial Project Corral De Tierra Road and Highway 68.
14. Terrapin. September 28, 2009. Landscape Water Efficiency at Corral de Tierra Project.
15. Whitson Engineers, October 14, 2009. Revised Evaluation of Potential for Increased Groundwater Recharge Proposed Commercial Project Corral De Tierra Road and Highway 68.
16. Whitson Engineers, October 14, 2009. "Revised" Water Budget Summary Proposed Commercial Project Corral De Tierra Road and Highway 68.

4.7.1 Existing Environmental Setting

The Site is located in an unincorporated part of the County of Monterey known as the Toro Area. The Toro Area is approximately 74 square miles (sq mi) in size and is located in the north central portion of the County of Monterey, south west of the City of Salinas and east of the Monterey Peninsula (refer to Figure 4.7.1). The terrain of the Toro Area varies greatly and includes ridgelines, steep ravines, rolling hills, valleys, and floodplains. Elevations range from 40 ft to 3,600 ft above mean sea level. The El Toro Groundwater Study Area is divided into five subareas which are based on local topographic drainage divides. The five subareas are: Calera Creek, Watson Creek, Corral de Tierra, San Benancio Gulch, and El Toro Creek (refer to Figure 4.7.2). The Site is located in the northeastern portion of the Corral de Tierra subarea.

Surface Drainage Features

Topographically, the Site is located in the northern portion of the Corral de Tierra valley at the confluence with the north east-draining El Toro Valley, immediately upstream of its confluence with Canyon del Rey and San Benancio Creek. It is situated on valley fill at the west flank of a small bedrock knoll. El Toro Creek flows east of the knoll. El Toro Creek is a small perennial stream that drains a basin of approximately 19,000 acres (30 sq mi) in size (Geosyntec, 2007). El Toro Creek is tributary to the Salinas River and drains to the lower reach of that river just west of the town of Spreckels, California, which ultimately flows west to Monterey Bay and the Pacific Ocean.

The Soil Survey of the County classifies the majority of the Site soil as Gorgonio sandy loam and reports the permeability of this soil classification at the Site to be 6.0 to 20.0 inches per hour (Kleinfelder, 2004), which is a relatively high permeability. According to the Preliminary Geotechnical Report by Fugro West, Inc. (2007), the Paso Robles Formation appears to be exposed along the hillsides that border the easterly side of the Site, and is concealed by alluvium within the Project limits. Published geologic mapping also suggests that the low-lying hills in the Project vicinity are comprised of Pleistocene to Pliocene undifferentiated continental deposits that are equivalent to the Paso Robles Formation (USGS, 1990).

The watershed area at the Site is approximately 15.3 acres (including the adjacent 0.7 acre service station site, 11.0 acre site, and 3.6 acre adjacent hillside) with drainage to the low point of the Site near the northeast corner of the property, adjacent to the private property to the east, (Whitson Engineers, 2009). The natural topography and the divide created by Corral de Tierra Road form a watershed that includes only the Site, the eastern half of Corral de Tierra Road along the western Site boundary, and a portion of the hillside to the east, and the surface area of the adjacent service station site. Runoff from this watershed consists of overland flow to a drainage swale that flows east along the south side of SR-68 and ultimately drains to El Toro Creek. The total drainage area is comprised of two distinct sub-drainage areas. Drainage Area A (11.7 acres) generally consists of the Site and the adjacent service station site (refer to Figure 4.7.2). It is level, underlain by San Gorgonio Sandy Loam and consists of mostly open pasture land. Drainage Area B (3.6 acres) essentially includes the western half of the hillside to the east of the Site, has west-facing slopes of approximately 25 percent, is underlain by undifferentiated continental deposits equivalent to the Paso Robles Formation (refer to Figure 4.7.2). Based on the Preliminary Drainage Study conducted by Schaaf and Wheeler (2002) and Supplement #2 to the Preliminary Drainage Report (February 17, 2009), the drainage area that includes the Site has a pre-development storm water runoff flow of 4.4 cubic feet per second (cfs) during a 10-year, 24-hour storm event, and 10.5 cfs during a 100-year, 24-hour storm event.

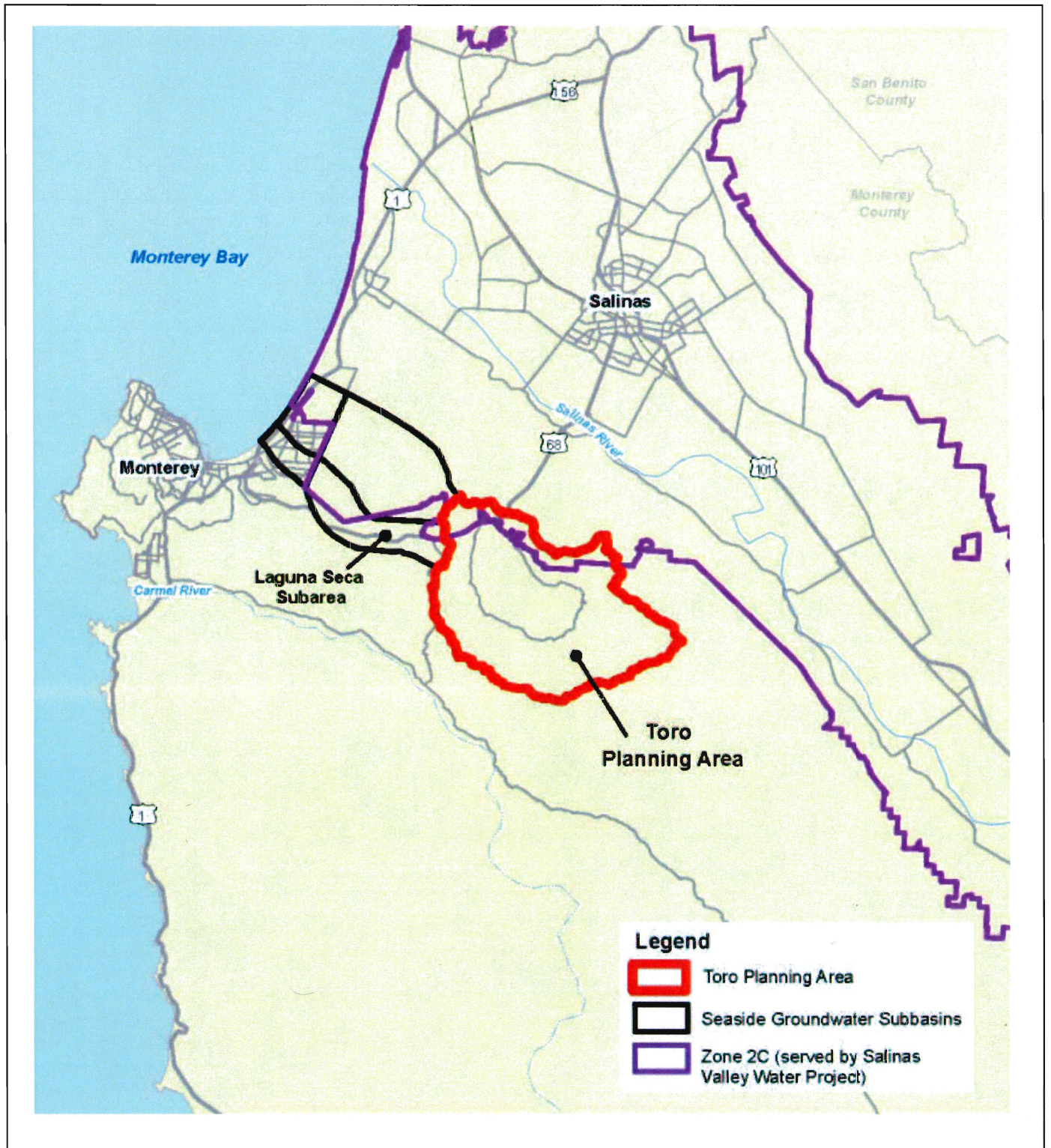
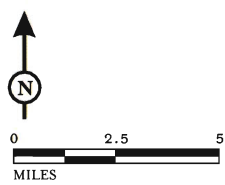


FIGURE 4.7.1

LSA



SOURCE: Geosyntec Consultants, June 2007

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Corral de Tierra Neighborhood Retail Village Project
Toro Planning Area Hydrologic Study Location

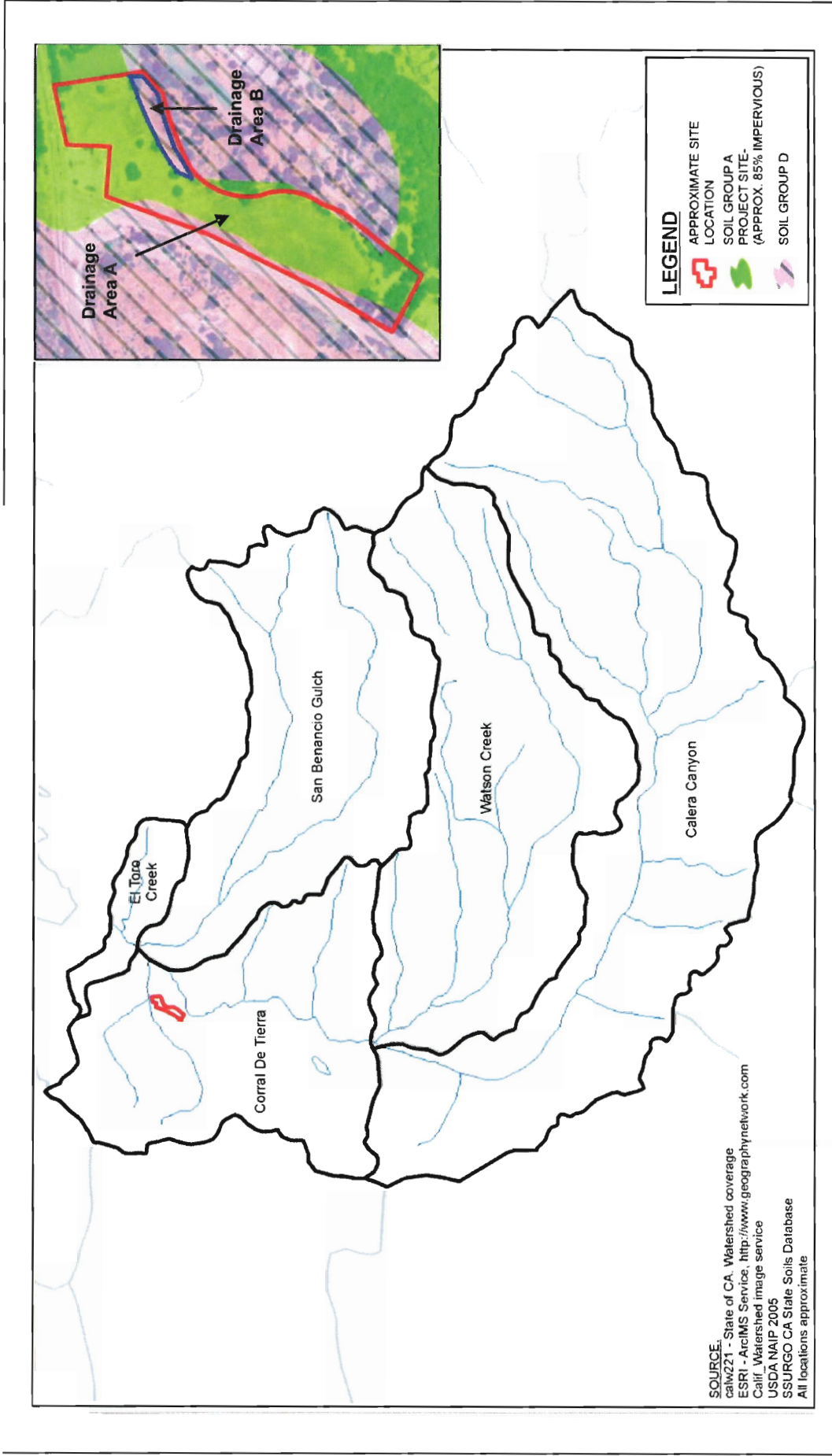


FIGURE 4.7.2

LSA



Corral de Tierra Neighborhood Retail Village Project
 Proposed Project Drainage Basins and
 Toro Planning Area Subbasins

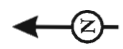
SOURCE: Geosyntec Consultants, June 2007

I:\MOC0901\G\Drainage Basins.cdr (1/28/10)



FIGURE 4.7.3

LSA



*Corral de Tierra Neighborhood Retail Village Project
Floodplain Map*

The Site is not located within a 100-year floodplain as mapped by the Federal Emergency Management Agency (refer to Figure 4.7.3) (Flood Insurance Rate Map, April 2009).

Hydrogeology

The Site is located within the El Toro Planning Area which lies to the south-west of the Salinas Valley Groundwater Basin and to the south-east of the Seaside Groundwater Basin, at the northern extent of the Sierra de Salinas range. Surface water drainage is to Toro Creek, which flows northeastward into the Salinas River. Generally, groundwater flow direction at the Site is towards the Seaside Groundwater Basin. The main source of groundwater production in the El Toro Planning Area is the El Toro Primary Aquifer System (Geosyntec, 2007) consisting of the Santa Margarita Sandstone and overlying Aromas-Paso Robles Continental Deposits. These and related hydrostratigraphic units are described below.

Hydrostratigraphy

Hydrostratigraphy refers to the stratified or layered water-bearing units that have a considerable lateral extent and compose a reasonably distinct hydrologic system. As described by Geosyntec (2007), significant groundwater is yielded from five main sedimentary units within the Toro Planning Area. These units include an unnamed marine sandstone that occurs at the base of the Tertiary sequence (Tus), the Monterey Formation (Tm), the Santa Margarita Sandstone (Tsm), continental deposits (commonly called the “Aromas-Paso Robles”), and localized alluvial deposits (refer to Figure 4.7.4). These units range in thickness from approximately 150 to 2,300 ft and are underlain by relatively impermeable granitic basement rocks. A summary of the water bearing units in the Toro area, which is based on information provided by Geosyntec (2007), is as follows:

- The lowest unit is the unnamed Miocene-age basal sandstone (Tus), which occurs at the base of the Tertiary sequence and typically is massively to thickly bedded, and moderately well sorted with a coarse conglomerate, which has been locally observed at the base of the unit. This unit is up to 150 ft thick in the vicinity of the Toro Planning Area. This unit is an important aquifer in the Upper Corral de Tierra Valley, and flowing artesian wells have been reported in this area.
- The majority of the Miocene-age Monterey Formation (Tm) consists of fine grained, low permeability porcelanite, shale and diatomite. Although a substantial number of wells in the Toro Planning Area are screened within this formation, it generally yields very limited quantities of groundwater which has poor water quality. Wells that do produce water in this formation are likely screened across localized sandy intervals or in zones where parting surfaces between thin beds and other fracturing facilitates flow of groundwater. This formation is up to 2,300 ft thick in the vicinity of the Toro Planning Area.
- The Miocene-age Santa Margarita Sandstone (Tsm) is one of the primary aquifers in the Toro Planning area. The Santa Margarita Sandstone consists of a marine, white, very thick-bedded, very fine to coarse-grained sandstone. This unit is reportedly up to 490 ft thick in the vicinity of the Toro Planning Area. The Santa Margarita Sandstone and the overlying continental deposits are collectively referred to by Geosyntec (2007) as the “El Toro Primary Aquifer System,” with a combined thickness of up to approximately 1,600 ft in the vicinity of the Toro Planning Area.
- The Plio-Pleistocene age continental deposits are the upper unit of the El Toro Primary Aquifer System. The continental deposits are non-marine, semi-consolidated, sedimentary deposits

consisting of sand and gravel. This unit is reportedly up to 750 ft thick along San Benancio Gulch and up to 1,100 ft thick in a well north of SR-68.

- Localized Quaternary-age alluvial deposits are present along alluvial valleys and yield water to some wells with shallow-screened intervals along the Watson Creek and Caldera Creek in the Toro Planning Area. The alluvial deposits are generally narrow and only tens of feet thick. These aquifers transmit and store minor quantities of groundwater relative to the other groundwater-bearing units described in this section. However, infiltration of recharge from creeks that flow through alluvial valleys, and percolation of this recharge into the underlying Primary Aquifer System is an important component of the hydrogeology of the area. It is reported that pumping groundwater from the shallow, narrow alluvial aquifers can directly decrease base flow to the creeks and impact riparian ecosystems.

In the Site vicinity, Anderson-Nichols & Co. (1981) indicate that the alluvial deposits are approximately 50 ft thick, the Plio-Pleistocene continental deposits are approximately 300 ft thick, and the Santa Margarita Formation is about 200 ft thick, which equals a combined alluvial and Primary Aquifer thickness of 550 ft; although, not all of this thickness is available for groundwater storage (Kleinfelder, 2004). Other reports variously calculate a combined aquifer thickness for these units in the Toro Planning Area as 700 ft (Herold, 1935), approximately 800 ft (refer to Figure 4.7.4), and at least 600 ft (refer to Figure 4.7.5).

Groundwater Occurrence and Flow

The El Toro Primary Aquifer System is, in part, hydrogeologically contiguous between the watershed subareas of Corral de Tierra, San Benancio Gulch, Watson Creek, at least the eastern portion of Laguna Seca, and Calera Canyon (north of Chupines fault), which allows groundwater to flow between the subareas (Kleinfelder, 2004). In addition, the aquifers of the Laguna Seca subarea, which are to the west of the Toro Planning Area, are contiguous with the northwestern margin of the Toro Planning Area (Corral de Tierra subarea) and groundwater flows from the Toro Planning area into the Laguna Seca subarea (Geosyntec, 2007).

The components of a water budget prepared by Geosyntec (2007), which was based on the results of previous studies, are illustrated in Figure 4.7.6. This water budget includes the following components.

- Groundwater underflow from the Toro Planning Area to the Laguna Seca subarea is estimated to range between 200 to 500 acre-ft/year (“AFY”) (Yates *et al.*, 2002). The direction of groundwater flow between the Toro and Laguna Seca Planning Areas depends on local groundwater gradients, which are controlled by groundwater pumping (Geosyntec, 2007). Most of the southern, eastern, and northeastern margins of the Toro Planning area are underlain by relatively impermeable basement rocks, so inflow and outflow of groundwater in these areas is likely minor (Geosyntec, 2007).

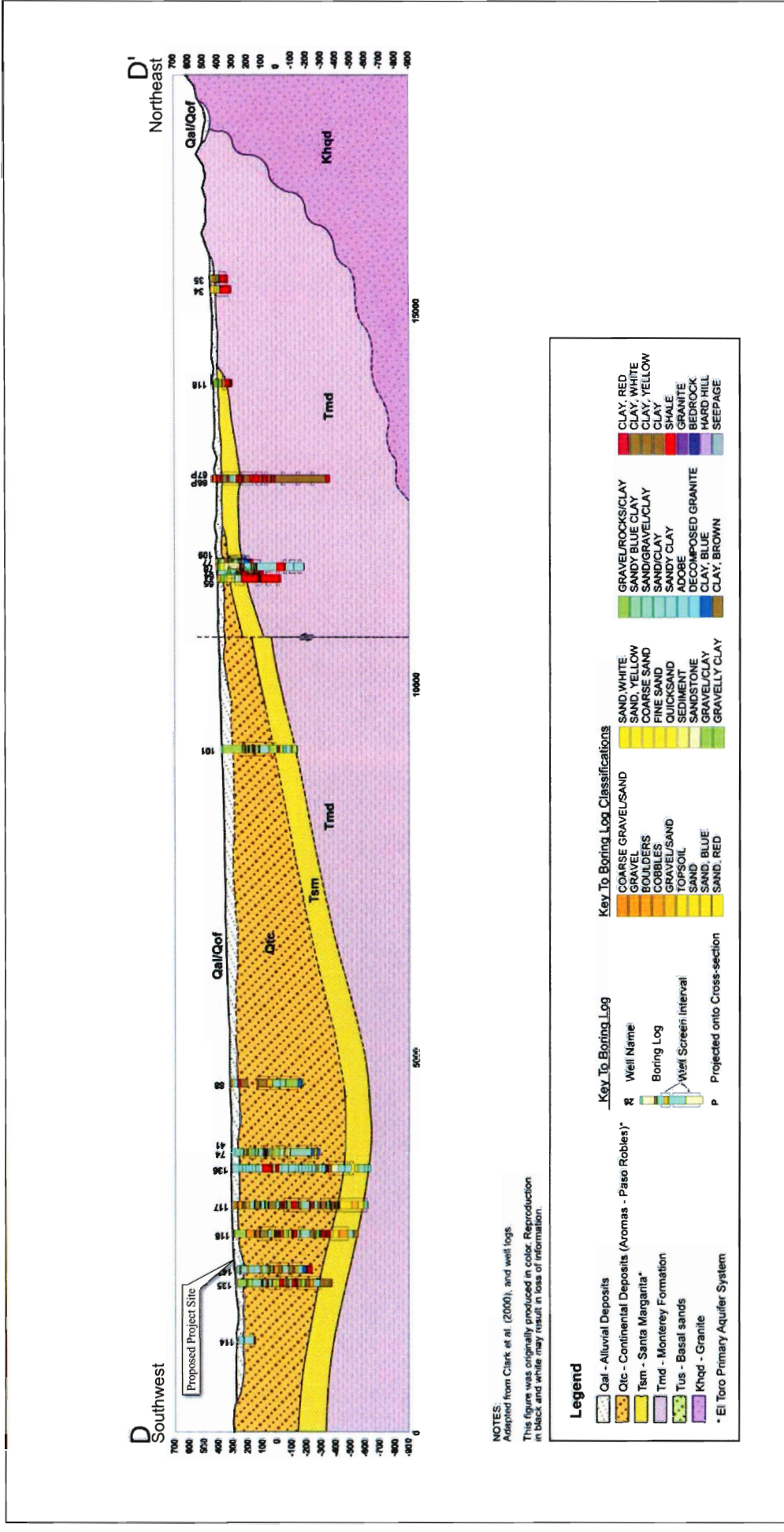


FIGURE 4-7.4

LSA

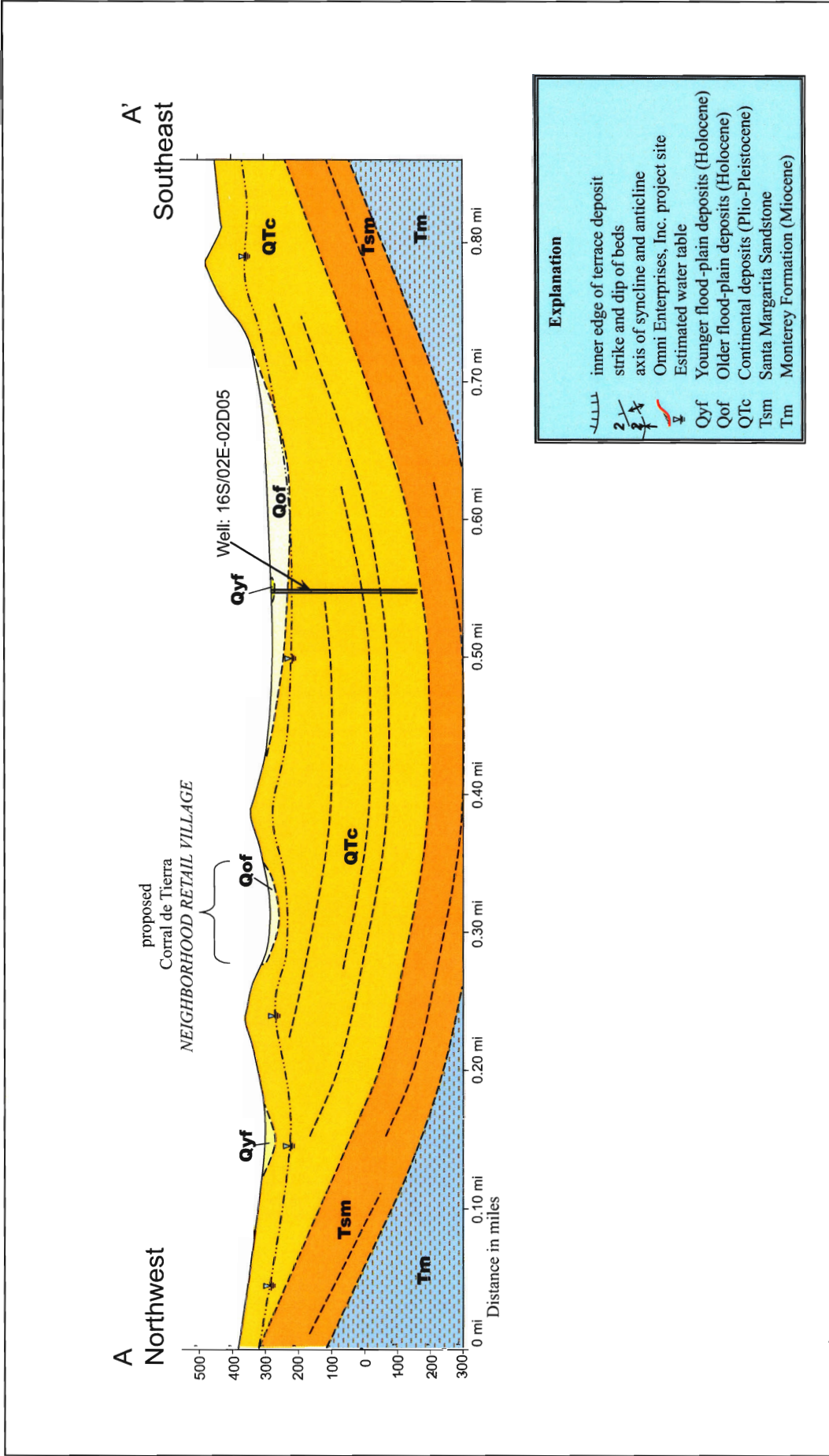


FIGURE 4.7.5

LSA

Corral de Tierra Neighborhood Retail Village Project
Hydrogeologic Cross Section A-A'

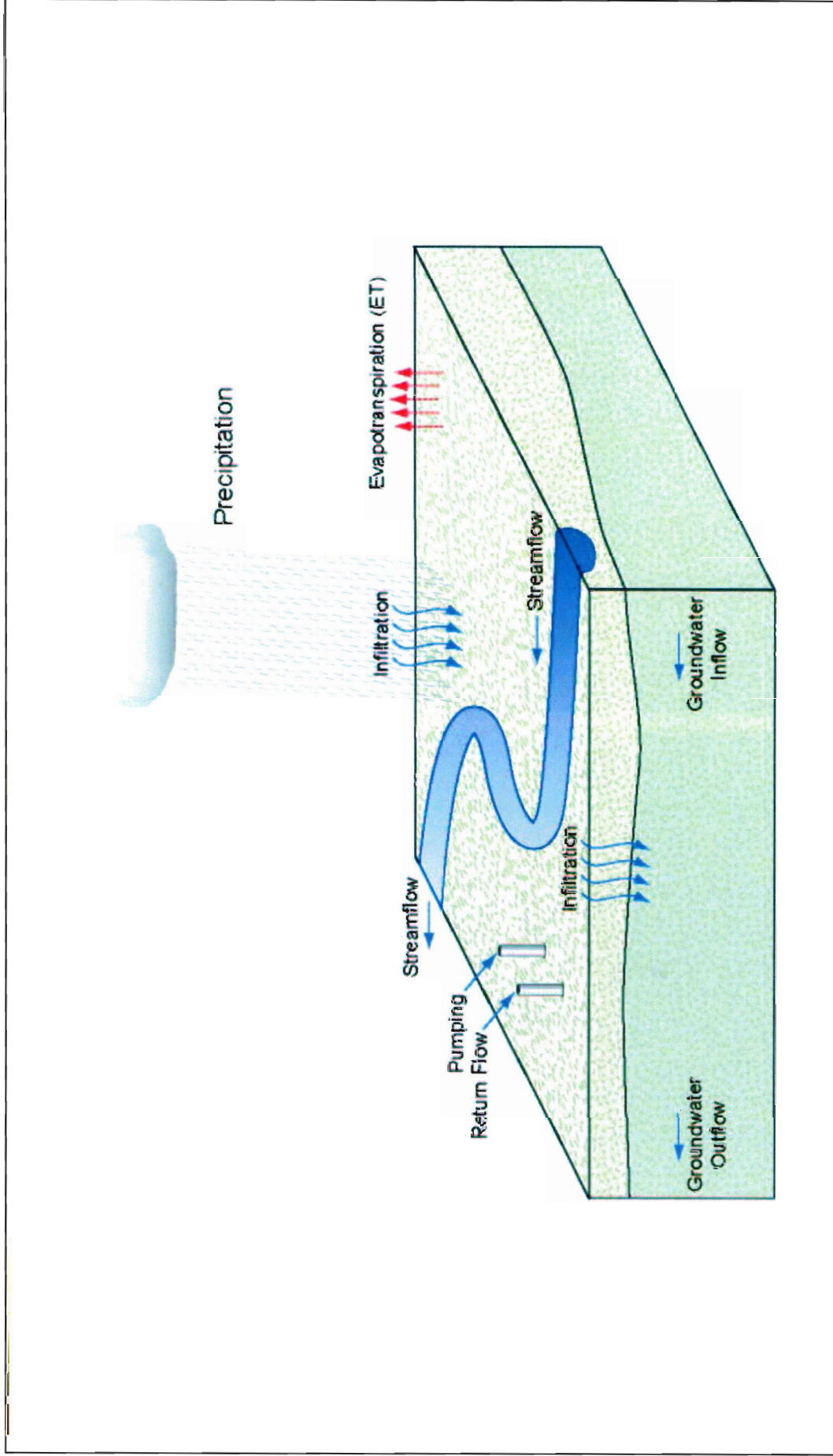


FIGURE 4.7.6

LSA

- Precipitation is the principal source of recharge for the Toro Planning Area, and because this area is defined by a watershed boundary, there is no inflow of surface water beyond that from seasonal precipitation falling within the basin (Geosyntec, 2007). Based on a deep percolation model by the United States Geological Survey (“USGS”), Fugro West, Inc. (1996) estimated the average annual recharge in the Toro Planning Area is in the range of 2 to 3 inches or 1,902 to 2,852 AFY, which is approximately 10 to 20 percent of the average rainfall. Others estimated the average annual recharge between approximately 2,000-acre ft (Staal, Gardner & Dunne, 1991) to 6,000-acre ft (Anderson-Nichols, 1981). However, the range presented by Fugro West, Inc. (1996) may be more reasonable, given it was derived from a detailed modeling evaluation of recharge. The average annual recharge in the Corral de Tierra subarea is estimated to range between approximately 557 to 836 AFY (Fugro West, Inc. 1996).
- Fugro West, Inc. (1996) completed an evaluation of water demand in the Toro Planning Area through an inventory of existing and future development plans, which were provided by the County. The estimated water demand in 1995 for the Toro Planning Area was 1,256 AFY, and the projected build-out demand for the Toro Planning Area, as estimated using projections formulated in 1995, was 2,145 AFY. Thus, the groundwater demand at build-out was projected to increase by a factor of 1.7 over 1995 conditions. For the Corral de Tierra subarea, the estimated water demand in 1995 and the projected build-out demand was 582 AFY and 781 AFY, respectively. No current updates on population or dwelling units were available for the study conducted by Geosyntec in 2007, so the most recent estimates of water demand are from the Fugro West, Inc. report prepared in 1996.

The range of average annual recharge estimated by Fugro West, Inc. (1996) brackets the estimated build-out groundwater demand for the Toro Planning Area (2,145 AFY) as well as the estimated build-out demand for the Corral de Tierra subarea (781 AFY). A groundwater deficit of approximately 244 and 224 AFY for the Toro Planning Area and the Corral de Tierra subarea, respectively, was estimated using the lower recharge value. A groundwater surplus of approximately 707 and 55 AFY for the Toro Planning Area and the Corral de Tierra subarea, respectively, was estimated using the higher recharge value.

Geosyntec (2007) estimated the aquifer properties within the El Toro Primary Aquifer System based on the analysis of aquifer testing conducted by Geosyntec, analysis of pumping test data in Monterey County Environmental Health (MCEHD) files, and calculation of transmissivity from specific capacity data in MCEHD files. Based on these data, the bulk hydraulic conductivity for the El Toro Primary Aquifer System is between approximately 0.5 and 1 foot per day (ft/day) (Geosyntec, 2007). Near the Site, a pumping test was conducted by Geosyntec (2007) using the Ambler Park wells. A transmissivity of 320 to 806 sf per day (ft²/day), and a bulk hydraulic conductivity of 0.5 to 1.1 ft/day were estimated; however, the fit of type-curves to the data was reported to be poor and the estimates of transmissivity were considered subject to considerable errors.

The saturated thickness of the El Toro Primary Aquifer System and the Quaternary alluvium in the Toro Planning Area subareas was estimated by Geosyntec (2007) to assess the potential for groundwater production in the Toro Planning Area. A large saturated thickness of the El Toro Primary Aquifer System is necessary to sustain significant pumping rates because bulk hydraulic conductivity values are low and, as such, groundwater production potential is poor where the saturated thickness is less than 100 to 200 ft (Geosyntec, 2007). Figure 4.7.7 illustrates the

relationship between the saturated thickness of the El Toro Primary Aquifer System and the production potential.

The saturated thickness of the El Toro Primary Aquifer System is greatest in the northern half of the Toro Planning Area, with thicknesses between 801 and 1,000 ft in the central portions of the Corral de Tierra and El Toro Creek subareas, and the northwestern portion of the San Benancio Gulch subarea (refer to Figure 4.7.7) (Geosyntec, 2007). In general, the saturated thickness of the El Toro Primary Aquifer System decreases to the south and east, toward areas of higher land surface elevations in the San Benancio, Corral de Tierra, and Watson Creek subareas. The saturated thicknesses illustrated in Figure 4.7.6 are subject to considerable uncertainty, particularly in the southern and eastern portions of the Toro Planning Area where the groundwater elevation is not well constrained due to a paucity of data points. Based on the geometry of the El Toro Primary Aquifer System, water level data from 2001, and a storage coefficient of 10 percent, the calculated volume of groundwater in storage in the El Toro Primary Aquifer System in the Toro Planning Area is approximately 280,000-acre ft.

The production potential for the Corral de Tierra subarea is considered good (Geosyntec, 2007). The saturated thickness near the Site and the Ambler Park water supply wells, which are proposed to supply groundwater to the Site, is between approximately 401 to 600 ft.

Groundwater generally flows west-northwest in the southern half of the Toro Planning Area and north-northwest in the northern half of the Toro Planning Area (refer to Figure 4.7.8).

Groundwater Levels and Trends

Groundwater elevations in the Toro Planning Area generally range from approximately 200 to 900 ft above mean sea level (amsl). There is one well on-site with available water level data (State Well ID 16S/02E-03A01). According to Geosyntec (2007), this well is installed to a depth of less than 200 ft below ground service ("bgs") in the quaternary alluvium and the Plio-Pleistocene continental deposits. The depth to groundwater measured in this well ranged from approximately 80 to 130 ft bgs (170 to 220 ft amsl, respectively) between 1960 and 2005 (Geosyntec, 2007). The most recent water level in this well, measured in 2005, was approximately 80 ft bgs (170 ft amsl). More recent water levels for this well were not available in the documents reviewed.

The Monterey County Water Resources Agency (MCWRA) currently conducts periodic water level monitoring of 22 wells in the Toro Planning Area, and has historically monitored as many as 38 wells (Geosyntec, 2007). Groundwater level trends were assessed based on these data, and approximately 80 percent of the long-term hydrographs (data collected since the 1960's) exhibit a downward trend in groundwater level. The average long-term rate of water level decline is -0.6 ft per year (ft/yr). Short-term trends based on data collected since 1999 exhibit a downward trend for 90 percent of the hydrographs, with an average short-term rate of water level decline of -1.8 ft/yr. Long-term trends values were based on a period of record sufficient in length so that the trends reflect change in groundwater levels that are independent of short-term fluctuations associated with rainfall variation; whereas, the short-term trends are more likely to be influenced by climatic fluctuations (Geosyntec, 2007).

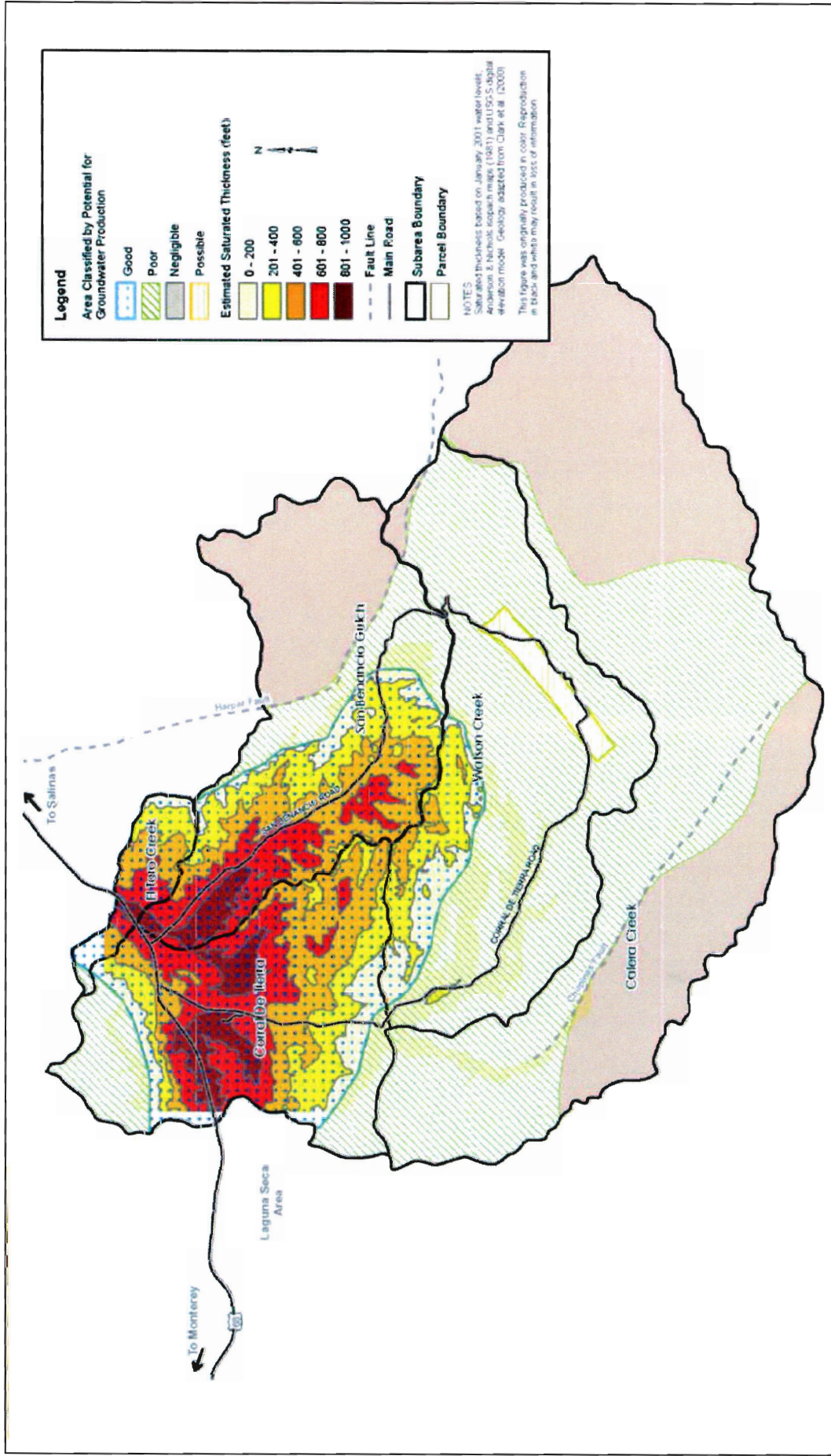


FIGURE 4.7.7

Corral de Tierra Neighborhood Retail Village Project
 Toro Primary Aquifer Thickness
 and Production Potential

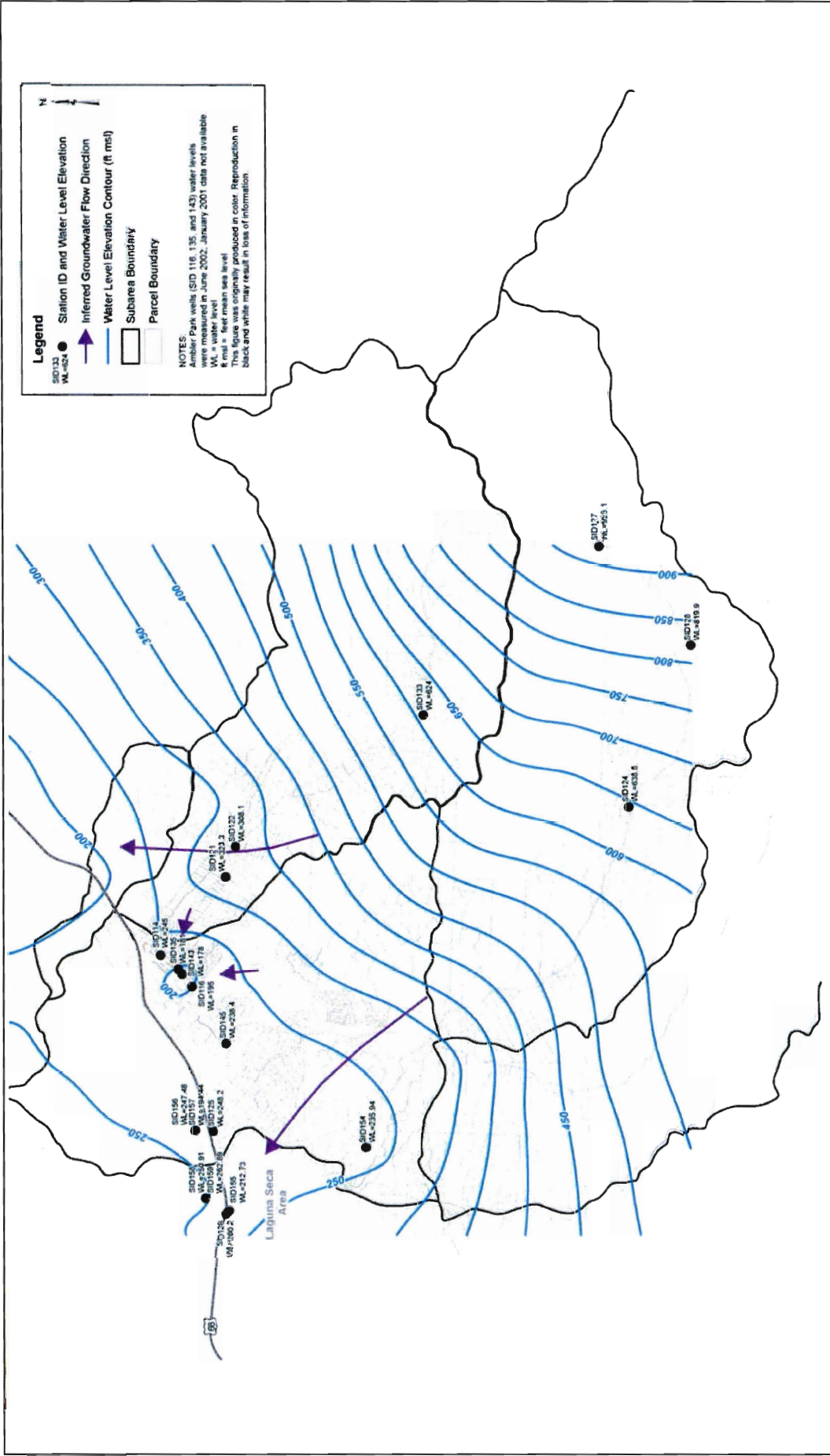


FIGURE 4.7.8

Corral de Tierra Neighborhood Retail Village Project
 January 2001 Groundwater Level Elevations

SOURCE: Geosyntec Consultants, June 2007

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In the vicinity of the Site, the long-term rate of groundwater level decline ranges from -0.5 to -1 ft/yr and the short-term rate of groundwater level change ranges from -0.5 to -2.5 ft/yr (Geosyntec, 2007). The on-site well mentioned previously (State Well ID 16S/02E-03A01) is part of the MCWRA monitoring program. Based on water level measurements available between 1960 and 2005, the long-term rate of water level decline for this well is approximately -0.7 ft/yr with an overall water level drop of approximately 33 ft since 1960. Based on water level measurements between 1999 and 2005, the short-term rate of water level decline for this well is approximately -1.6 ft/yr.

Downward trends for the majority of long-term hydrographs for wells in the Toro Planning Area indicate that the rate of groundwater pumping from the El Toro Primary Aquifer System exceeds the rate of groundwater replenishment (Geosyntec, 2007). According to Geosyntec, compilation of trend analyses for long-term hydrographs clearly shows groundwater overdraft conditions in the northern portion of the Toro Planning Area near SR-68, where the majority of the pumping occurs. Geosyntec calculated the rate of groundwater level decline for a range of overdraft scenarios potentially occurring in the El Toro Primary Aquifer System. Figure 4.7.9 illustrates these scenarios. According to Geosyntec, a constant deficit of 500 AFY for approximately 25 years results in a drop in groundwater level of 20 ft, which is similar to the average long-term rate of decline of 0.6 ft/yr (15 ft drop in 25 years) estimated from the trend analyses of the long-term hydrographs. Figure 4.7.9 also suggests that the average recent rate of groundwater level decline (1.8 ft/yr) is consistent with a deficit in excess of 1,000 AFY (Geosyntec, 2007). In addition, Figure 4.7.9 illustrates that an initial deficit of 500 AFY increasing by 20 and 50 AFY is generally consistent with the water balance calculations and records for the Ambler Park and Toro Water Systems, which both have experienced pumping rate increases of approximately 10 AFY (refer to Figure 4.7.10). The last analysis on Figure 4.7.9 illustrates the potential benefit of long-term water supply conservation and recycling efforts by reducing the increase of the initial deficit of 500 AFY by 50 AFY for the first 20 years, and by 10 AFY thereafter.

Based on their analysis of the hydrogeology of Toro Planning Area, Geosyntec (2007) concluded the following regarding the condition of the Toro Planning Area Primary Aquifer System:

“Water level data compiled and reviewed for this study indicates that the primary aquifer system in the Toro Planning Area is in overdraft. However, current and increasing rates of pumping could be sustained for decades in areas with large saturated thickness of the El Toro Primary Aquifer System because of the large volume of groundwater in storage. The most evident problem would be lowering of the water table below the screened intervals of existing wells completed in shallower portions of the aquifer system. This has already occurred in portions of the Corral de Tierra subarea. In addition, with continued overdraft conditions, groundwater production potential would likely decrease relatively quickly in hydrogeologically contiguous areas of less saturated thickness.”

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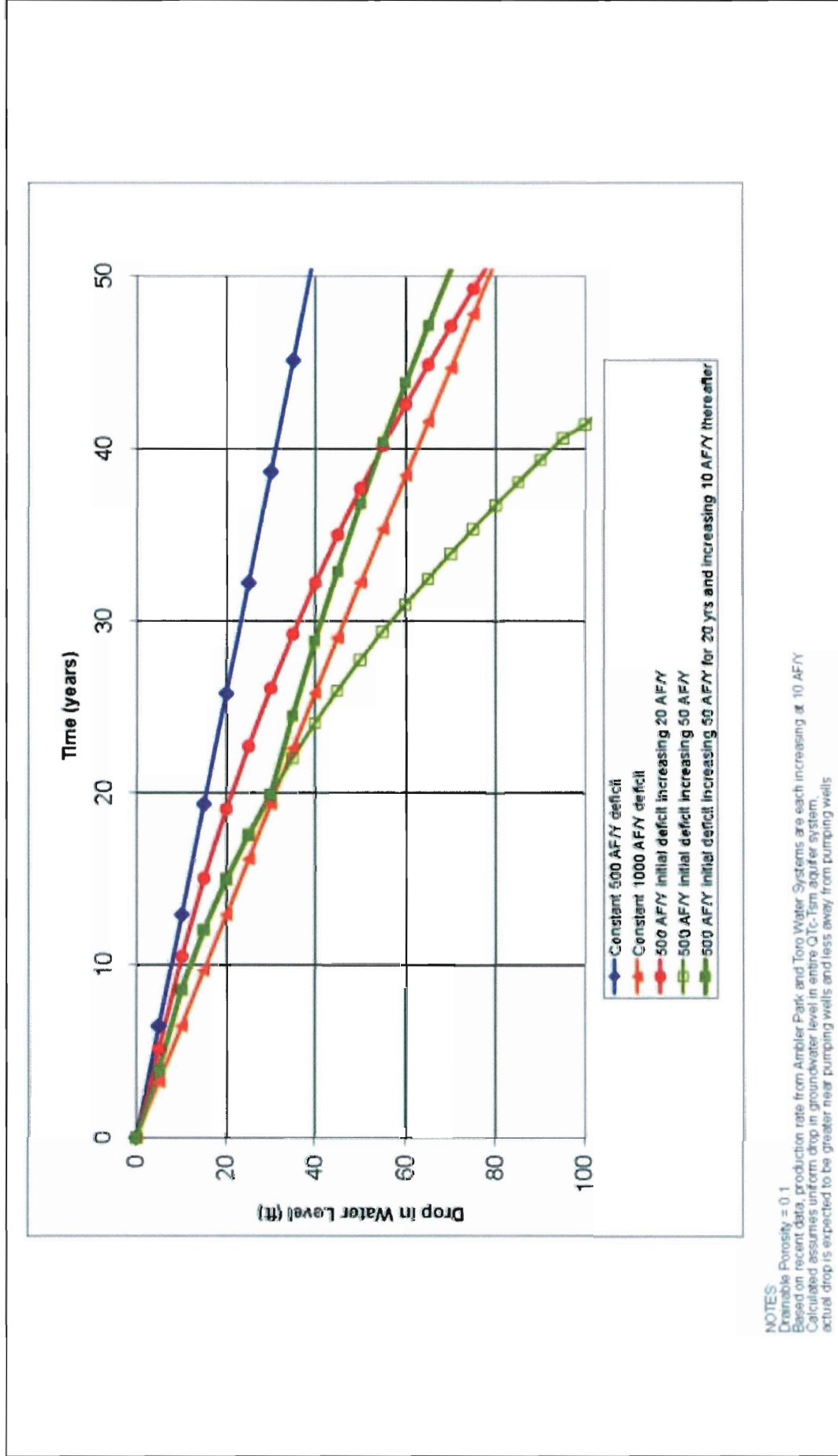


FIGURE 4.7.9

LSA

Corral de Tierra Neighborhood Retail Village Project
 Calculated Drop in Water Level with Time
 for a Range of Overdraft Scenarios

Toro Water Service & Ambler Park Annual Pumping

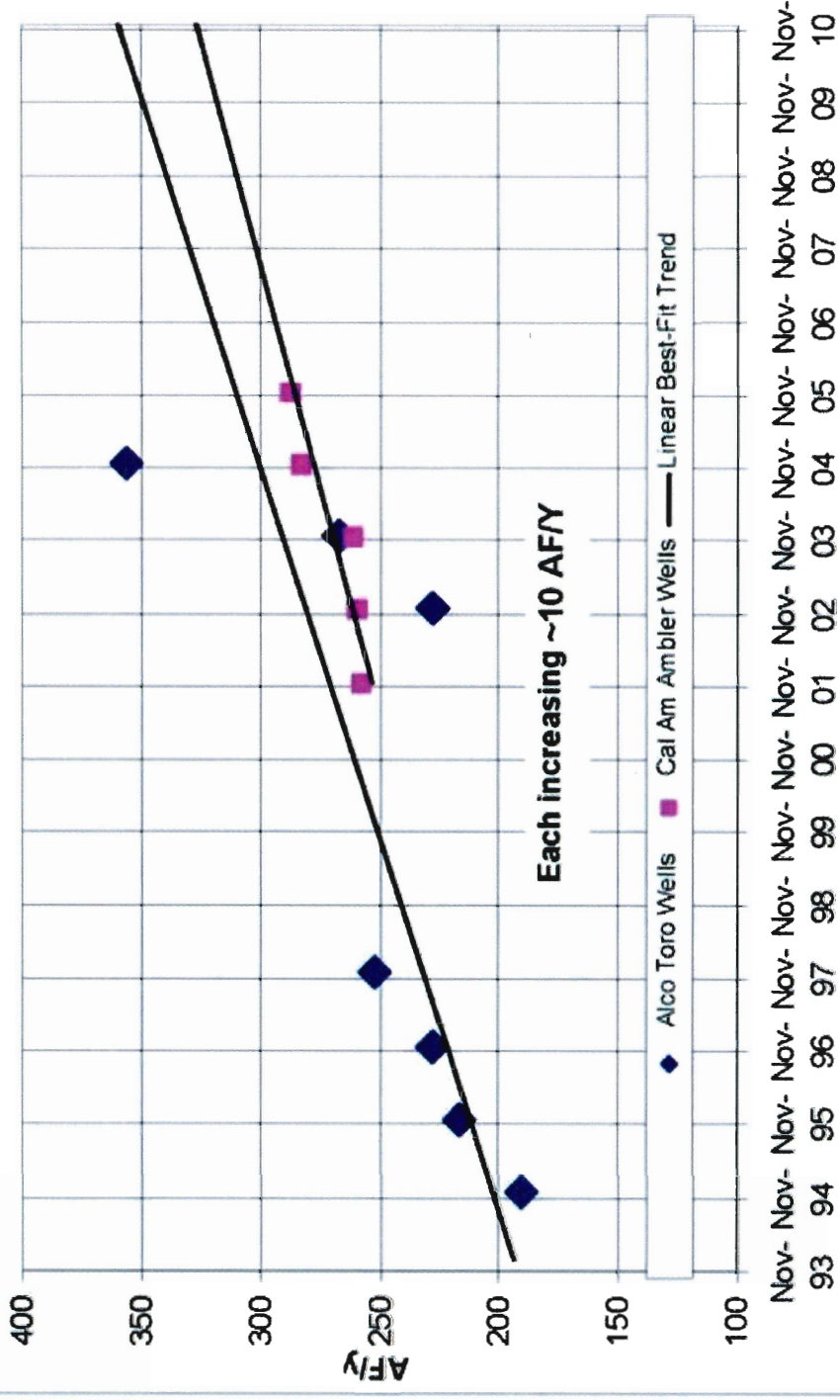


FIGURE 4.7.10

LSA

The Site is located within the B-8 zoning overlay. Figure 4.7.11 illustrates the B-8 zoning areas within the Toro Planning Area. The B-8 zoning overlay is discussed in Section 4.7.2 Regulatory Setting. Geosyntec concluded the following regarding lifting the B-8 zoning overlay in the Toro Planning Area:

“If long term declines in groundwater levels and reliance on groundwater storage are acceptable to the County, the B-8 zoning could be lifted in areas with large saturated thickness of the El Toro Primary Aquifer System where additional groundwater production is feasible for several decades. However, if County Policy does not allow overdraft conditions and mining of groundwater, the B-8 zoning should be expanded to cover the entire extent of the El Toro Primary Aquifer System.”

The B-8 overlay zone, however, does not apply to construction of the first single-family dwelling on a building site or commercial uses where construction of such uses can be found “to not adversely affect the constraints” which caused the B-8 overlay zone to be applied to a particular property.

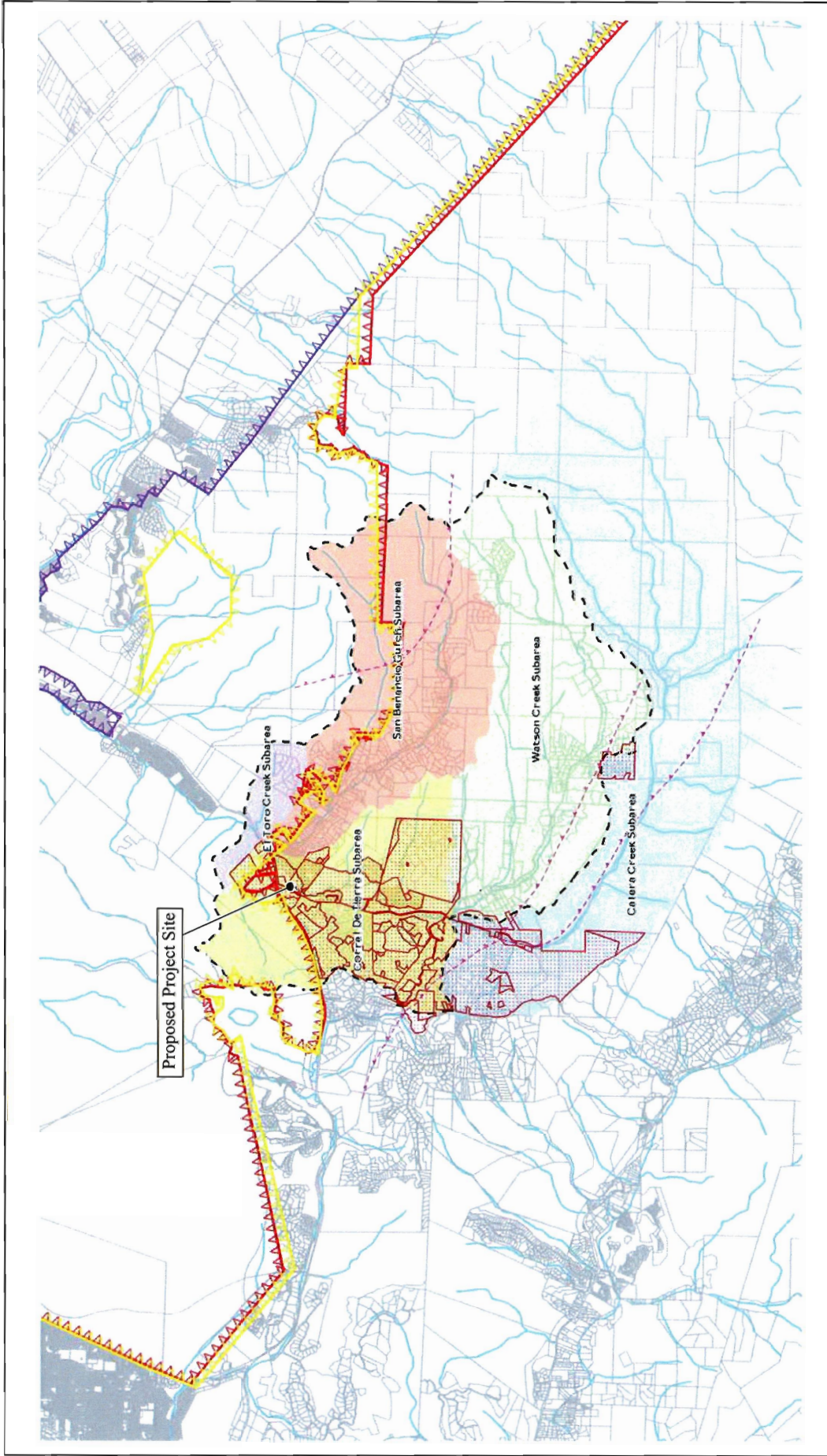
Water Quality

The distribution of wells with water quality data that do not meet regulatory drinking water standards is widespread in the Toro Planning Area (Geosyntec, 2007). Arsenic has become a contaminant of concern in the Primary Aquifer System (the Plio-Pleistocene continental deposits and the Santa Margarita Formation), and the EPA recently lowered the drinking water standard for arsenic from 50 µg/L to 10 µg/L (Kleinfelder, 2004). Based on a compilation of groundwater chemistry data from Monterey County Environmental Health Department (MCEHD), State of California Department of Health Services (DHS) files and analyses of samples recently collected from 25 wells by Geosyntec, the following is a summary of the groundwater quality in the Toro Planning Area (Geosyntec, 2007):

- Arsenic concentrations exceeded the primary maximum contaminant level (MCL) of 10 micrograms per liter (µg/L) in 33 percent (27 of 82) of wells with available data.
- Iron, manganese, chloride, sulfate and/or total dissolved solids (TDS) exceeded secondary MCLs in 78 percent (64 of 82) wells with available data.

Elevated levels of arsenic have been observed throughout the historical record of groundwater data collected for the Ambler Park wells #4, #5, and #6, located approximately 500 ft southeast from the Site. Arsenic concentrations in the groundwater samples collected from these wells have been close to or exceeded the MCL for arsenic for the entire period of record (refer to Figure 4.7.12). The Ambler Park wells are screened entirely within the Plio-Pleistocene continental deposits. Groundwater quality data is not available for the well that is located on the Site (State Well ID 16S/02E-03A01); however, based on the available data conditions are likely to be similar as in the adjacent Ambler Park area.

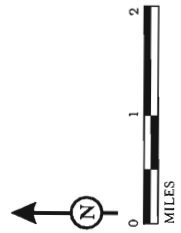
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LSA

FIGURE 4.7.11

- Legend**
- El Toro Area Subareas
 - Calera Creek Subarea
 - Corral De Tierra Subarea
 - El Toro Creek Subarea
 - San Benancio Gulch Subarea
 - Watson Creek Subarea
 - B-8 Zoning
 - Parcel Boundary
 - Proposed Hydrogeologic Unit
 - Faults (SGD, 1991)
 - Streams
 - Zone 2
 - Zone 2A
 - Zone 2C



SOURCE: Monterey County Water Resources Agency, 6/23/2008
 I:\MOC0901\GIS\B-8 Zoning.cdr (1/29/10)

Corral de Tierra Neighborhood Retail Village Project
 B-8 Zoning Overlay Areas

4.7.2 Regulatory Setting

Clean Water Act. In 1972, the Federal Water Pollution Control Act (later referred to as the Clean Water Act [CWA]) was amended to require that the discharge of pollutants into waters of the U.S. from any point source be effectively prohibited unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In 1987, the CWA was again amended to require that the EPA establish regulations for the permitting of storm water discharges (as a point source) by municipal and industrial facilities and construction activities under the NPDES permit program. The regulations require that Municipal Separate Storm Sewer System (MS4) discharges to surface waters be regulated by an NPDES permit.

The CWA requires States to adopt water quality standards for water bodies and have those standards approved by the EPA. Water quality standards consist of designated beneficial uses for a particular water body (e.g., wildlife habitat, agricultural supply, fishing), along with water quality criteria necessary to support those uses. Water quality criteria include quantitative set concentrations, levels or loading rates of constituents—such as pesticides, nutrients, salts, suspended sediment, and fecal coliform bacteria—or narrative statements that represent the quality of water that support a particular use.

Clean Water Act, Section 303, List of Water Quality Limited Segments. Section 303 of the CWA requires that the State adopt water quality standards for surface waters. When designated beneficial uses of a particular water body are being compromised by water quality, Section 303(d) of the CWA requires identifying and listing that water body as impaired. Once a water body has been deemed impaired, a Total Maximum Daily Load (TMDL) must be developed for each impairing water quality constituent. A TMDL is an estimate of the total load of pollutants from point, non-point, and natural sources that a water body may receive without exceeding applicable water quality standards (often with a “factor of safety” included, which limits the total load of pollutants to a level well below that which could cause the standard to be exceeded). Once established, the TMDL is allocated among current and future dischargers into the water body.

On November 30, 2006, the EPA gave partial approval to California's 2006 Section 303(d) List of Water Quality Limited Segments. The lower reach of the Salinas River (lower, estuary to near Gonzales Road crossing) is listed as impaired by fecal coliform bacteria, nutrients, pesticides, salinity/TDS/chloride, and sedimentation/siltation. The sources of these impairments are variously listed as unknown, agriculture, non-point sources and/or natural sources. The sources of sediment also include road development, land development and channel erosion. TMDLs for coliform impairments are in progress; however, the establishment of TMDLs for nutrients has been postponed.

Clean Water Act, Section 402, National Pollutant Discharge Elimination System. Direct discharges of pollutants into waters of the U.S. are not allowed, except in accordance with the NPDES program established in Section 402 of the CWA. Non-point source discharges to storm water are regulated under Storm water NPDES permits for municipal storm water discharges, industrial activities and construction activities. These permits require development and adherence to Storm water Pollution Prevention Plans (SWPPP).

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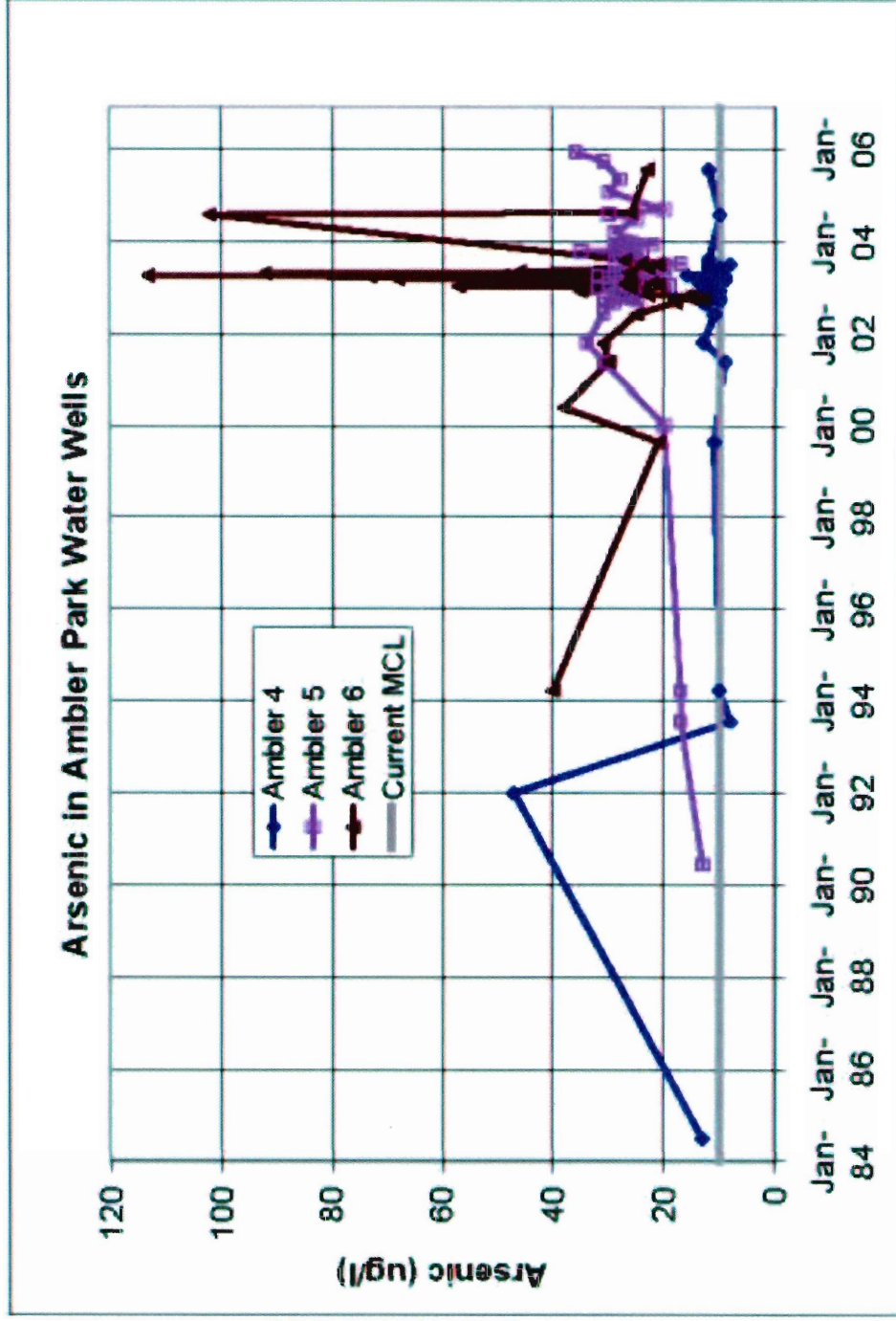


FIGURE 4.7.12

LSA

Clean Water Act, Sections 404 and 401. Under Section 404 of the CWA, the Corps regulates the discharge of dredged or fill material into waters of the U.S. Waters of the U.S. are those waters that have a connection to interstate commerce, either direct via a tributary system or indirect through a nexus identified in the Corps regulations. Under Section 401 of the CWA, the SWRCB must certify all activities requiring a 404 permit. The RWQCB regulates these activities and issues water quality certifications for those activities requiring a 404 permit.

State Water Resources Control Board (SWRCB) and the California Regional Water Quality Control Board (CRWQCB). Under existing law, SWRCB and the CRWQCB prescribe wastewater discharge requirements for publically owned treatment facilities and other dischargers. California Utilities Service, Inc. (CUS) waste discharge requirements were updated by the CRWQCB (2007; Order No. R3-2007-0008) and these updates are applicable to wastewater services after February 9, 2007, including the Project. These updates included the following:

- Effluent limitations added for biochemical oxygen demand, total suspended solids, nitrate, sodium, chloride, sulfate, and boron.
- Development and implementation of a nutrient management plan.
- Development and implementation of a salts management plan.
- Implementation of sewer overflows/sewer management plan.
- Nitrate added to water supply monitoring.
- Influent monitoring to include influent flow; weekly pH; monthly BOD, TSS, total nitrogen; semi-annual TDS, sodium, chloride, sulfate, and boron.
- Effluent monitoring to also include monthly monitoring of BOD, TSS, total nitrogen, and ammonia; nitrate monitoring retained. Weekly monitoring of total coliform organisms, settleable solids (three times per week); biweekly of dissolved oxygen; monthly total Kjeldahl nitrogen, and continuous turbidity were eliminated. Frequency of pH from quarterly to weekly.
- Groundwater monitoring frequency increased from semiannual to quarterly for depth to water, total nitrogen, nitrate, TDS, sodium, chloride, sulfate, and boron.
- Monitor effluent storage pond on weekly basis for depth and volume of stored effluent, and volume of remaining available storage; visual monitoring on a daily basis.
- Requirement for copies of all biosolids analytical data required by other agencies and licensed facilities for the previous year. Annual report of the amount of solids generated and treatment and disposal documentation.

Reporting frequency reduced from monthly to quarterly. Annual reports are still required according to the Standard Provisions.

1974 Federal Safe Drinking Water Act (SDWA). Under this Act and subsequent amendments in 1986 and 1996, the U.S. Environmental Protection Agency (EPA) set national limits on contaminant levels in drinking water for human consumption to provide public safety. These limits are known as Maximum Contaminant Levels (MCLs) and Maximum Residual Disinfectant Levels (MRDLs). For some regulations, treatment techniques were established in lieu of an MCL to control unacceptable

levels of contaminants in water. To assist in providing data for future regulatory development, Public Water Systems (PWSs) are also required to monitor for unregulated contaminants. PWSs are also regulated as to the frequency for monitoring and reporting of results for contaminants to the States or EPA. PWSs must notify their consumers when they have violated these regulations by including a clear and understandable explanation of the nature of the violation, its potential adverse health effects, steps that the PWS is undertaking to correct the violation and the possibility of alternative water supplies available during the violation.

California Porter-Cologne Water Quality Control Act. The federal CWA places the primary responsibility for the control of water pollution and for planning the development and use of water resources within the States, although it does establish certain guidelines for the States to follow in developing their programs.

California's primary statute governing water quality and water pollution is the Porter-Cologne Act. The Porter-Cologne Act grants the SWRCB and the RWQCB broad powers to protect water quality and is the primary vehicle for implementation of California's responsibility under the federal CWA. The Porter-Cologne Act grants the SWRCB and RWQCBs the authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites, and to require clean up of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, oil, or petroleum product.

Each RWQCB must formulate and adopt a water quality plan for its region (the Basin Plan). Basin Plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include in its region a regional plan with water discharge prohibitions applicable to particular conditions, areas, or types of waste. The RWQCBs are also authorized to enforce discharge limitations, take actions to prevent violations of these limitations from occurring, and conduct investigations to determine the status of quality of any of the waters of the State within their region. Civil and criminal penalties are also applicable to persons who violate the requirement of the Porter-Cologne Act or SWRCB/RWQCB orders.

California Department of Public Health (CDPH). The EPA designated the CHDPH as the primary agency responsible for the administration and enforcement of the SDWA requirements in California. On July 1, 2007 the Department of Health Services split into two Departments, and the State's Drinking Water Program became a part of CDPH. CDPH have adopted statutes and regulations to implement the requirements of the SDWA. CDPH's regulatory responsibility over public water systems include: issuance of operating permits, conducting inspections, monitoring for compliance with regulations, and taking enforcement action to compel compliance when violations are identified. Furthermore, the Field Operations Branches (FOB) are responsible for the enforcement of the federal and California Safe Drinking Water Acts (SDWAs) and to ensure the delivery of safe drinking water.

Section 1600-1616, State of California, Code of Regulations. The California Department of Fish and Game (CDFG), through provisions of Sections 1600-1616 of the State of California Code of Regulations, is empowered to issue agreements for any alteration of a river, stream, or lake where fish

or wildlife resources may be substantially adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and the conveyance of at least ephemeral flows. CDFG regulates wetlands and riparian habitats only to the extent that those areas are part of a river, stream, or lake as defined by CDFG. Wetlands and riparian habitats not associated with a lake, stream, or other regulated area are generally not subject to CDFG jurisdiction.

Water Quality Control Plan, Central Coastal Basin (Basin Plan). The Central Coast RWQCB has adopted a Water Quality Control Plan (Basin Plan) for its region of responsibility, which includes the County of Monterey. The RWQCB has delineated water resource area boundaries based on hydrological features. For purposes of achieving and maintaining water quality protection, specific beneficial uses have been identified for each of the hydrologic areas described in the Basin Plan. The Basin Plan also establishes implementation programs to achieve water quality objectives to protect beneficial uses and requires monitoring to evaluate the effectiveness of the programs. These objectives must comply with the State anti-degradation policy (State Board Resolution No. 68-16), which is designed to maintain high-quality waters while allowing some flexibility if beneficial uses are not unreasonably affected.

Beneficial uses of water are defined in the Basin Plan as those necessary for the survival or well-being of humans, plants, and wildlife. Examples of beneficial uses include drinking water supplies, swimming, industrial and agricultural water supply, and the support of freshwater and marine habitats and their organisms.

The Basin Plan has established narrative and numeric water quality objectives which, in the Regional Board's judgment, are necessary for the reasonable protection of beneficial uses and for the prevention of nuisances. If water quality objectives are exceeded, the RWQCB can use its regulatory authority to require municipalities to reduce pollutant loads to the affected receiving waters. The RWQCB utilizes water quality criteria in the form of "scientific information developed by the USEPA regarding the effect a constituent concentration has on human health, aquatic life, or other uses of water" to develop its water quality objectives.

The present and potential beneficial uses for the portion of the Salinas River that receives runoff from the Site (Salinas Hydrologic Unit, Salinas River, downstream of Spreckels Gage as designated by the RWQCB) are listed below.

- **Municipal and Domestic Supply (MUN)** – Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply. According to State Board Resolution No. 88-63, "Sources of Drinking Water Policy," all surface waters are considered suitable, or potentially suitable, for municipal or domestic water supply except where:
 - a. Total dissolved solids (TDS) exceed 3,000 milligrams per liter (mg/L) (5,000 micro Siemens per centimeter [$\mu\text{S}/\text{cm}$] electrical conductivity);
 - b. Contamination exists that cannot reasonably be treated for domestic use;
 - c. The source is not sufficient to supply an average sustained yield of 200 gpd;

- d. The water is in collection or treatment systems of municipal or industrial wastewaters, process waters, mining wastewaters, or storm water runoff; and
- e. The water is in systems for conveying or holding agricultural drainage waters.
- Agricultural Supply (AGR) – Uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.
- Non-Contact Water Recreation (REC-2) – Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide-pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.
- Wildlife Habitat (WILD) – Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.
- Cold Fresh Water Habitat (COLD) – Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates.
- Warm Fresh Water Habitat (WARM) – Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
- Migration of Aquatic Organisms (MIGR) – Uses of water that support habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish.
- Freshwater Replenishment (FRSH) – Uses of water for natural or artificial maintenance of surface water quantity or quality (e.g., salinity) which includes a water body that supplies water to a different type of water body, such as, streams that supply reservoirs and lakes, or estuaries; or reservoirs and lakes that supply streams. This includes only immediate upstream water bodies and not their tributaries.
- Commercial and Sport Fishing (COMM) – Uses of water for commercial or recreational collection of fish, shellfish, or other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.

State General Permit for Storm water Discharges Associated with Construction Activity (General Construction Permit). In accordance with NPDES regulations, the State of California requires that any construction activity disturbing one acre or more of soil comply with the State General Construction Activity Storm water Permit (Water Quality Order 99-08-DWQ). To obtain authorization for proposed storm water discharges pursuant to this permit, the landowner (discharger) is required to submit a Notice of Intent (NOI) to the SWRCB, prepare a Storm Water Pollution Prevention Plan (SWPPP), and implement Best Management Practices (BMPs) detailed in the SWPPP during construction activities. Dischargers are required to implement BMPs meeting the technological standards of Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or eliminate storm water pollution. Certain discharges of non-storm water, such as irrigation and pipe flushing/testing, are permitted as long as they do not cause or contribute to a violation of any water quality standard, violate any provision of the General Permit, require a non-storm water permit (such as that issued by the

RWQCB), or violate provisions of the Basin Plan. BMPs include programs, technologies, processes, practices, and devices that control, prevent, remove, or reduce pollution. Permittees must also maintain BMPs and conduct inspection and sampling programs as required by the permit.

The Project is subject to the General Construction Permit because it would disturb one acre or more of soil during the construction phase(s).

Municipal Phase II Small MS4 NPDES Permit. Monterey County is a co-permittee under the State NPDES General Permit, Order No. 2003-0005-DWQ (NPDES No. CAS000004), adopted on November 15, 2006. As co-permittee, the County is responsible for the management of storm drain systems within its jurisdiction. The County is required to implement BMPs that reduce pollutants in storm water runoff to the technology-based standard of Maximum Extent Practicable (MEP) to protect water quality and to satisfy the appropriate water quality requirements of the CWA. Other requirements include conducting public education and outreach, preventing illicit and illegal discharges, conducting inspections of construction sites, and enforcement actions against violators.

Monterey Regional Storm Water Management Plan (MRSWMP). The purpose of the MRSWMP is to implement and enforce a series of BMPs to accomplish the objectives of the Phase II NPDES permit. These BMPs are designed to reduce the discharge of pollutants from the municipal separate storm sewer systems to the MEP to protect water quality, and to satisfy the appropriate water quality requirements of the CWA. Achieving these objectives is gauged using a series of Measurable Goals, which are outlined in the MRSWMP. The BMPs are grouped into the following six “Minimum Control Measures”:

- Public Education and Outreach
- Public Participation/Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Runoff Control
- Pollution Prevention/Good Housekeeping

The participating entities of the MRSWMP also use the Model Urban Runoff Program (MURP), which was completed in July of 1998. MURP is a comprehensive how-to guide developed for local governments to address the issues of polluted runoff in the urban environment. The MURP provides options to help small municipalities develop their own urban runoff programs for the Phase II process.

Under the MRSWMP, the Monterey County Water Resources Agency (MCWRA) has developed Drainage Plan Guidelines including design requirements for detention basins. These guidelines are outlined as follows:

When detention facilities and oil-grease separators are required, the following shall be prepared by a registered civil engineer:

- Calculations certifying that the pond volume is adequate to limit the 100-year post-development runoff rate to the 10-year pre-development runoff rate.
- Calculations certifying that the outlet pipe has been sized to limit pond discharge to the 10-year pre-development rate.
- Calculations certifying that the reinforced spillway is capable of discharging the 100-year post-development runoff rate.
- A drainage plan showing the size and location of all drainage facilities including catch basins, storm drain lines, French drain lines, detention pond, pond fencing, pond spillway, all pond inlet and outlet pipes, and the pond stand pipe. The drainage plan shall show the direction and percent slope of all paved parking areas.
- Construction details for the pond including:
 - Cross-sections showing embankment elevations, as well as, inlet and outlet pipe elevations.
 - Anti-seep collars for the outlet pipe.
 - Cross-sections of the reinforced spillway.
 - A stand pipe with concrete base and trash rack.
 - Fencing.
- Catch basin details including oil separators.

Monterey County General Plan. The Monterey County General Plan (Monterey County, 1982) is a long-range comprehensive plan that addresses future growth, development, and conservation within the County. At the county-wide level, the plan designates all proposed major land uses according to seven basic classifications, including commercial.

The following General Plan objectives, generally applicable to hydrology and water quality, apply to the Project:

- Objective 16.2** *Reduce the risk from flooding and erosion to an acceptable level by regulating the location, type, and density of land use.*
- Objective 16.4** *Identify existing and potential erosion hazards, and prepare and implement plans to control the amount of erosion and siltation.*
- Objective 21.1** *Protect and enhance surface and groundwater quality by implementing current adopted water quality programs and by continuing to evaluate new problems; develop new programs in accordance with the following policies by 1984.*

The following General Plan policies apply to the Project:

- Policy 17.3.4** *The County shall require all new development to have adequate water available for fire suppression. Water availability can be provided from a conventional water system; from an approved alternative water system if within 300 feet of a habitable structure; by the fire fighting equipment of the*

fire district within which the property is located; or by an individual water storage facility- -water tank, swimming pool, etc.- -on the property itself. The fire and planning departments shall determine the adequacy and location of individual water storage to be provided.

Policy 21.2.3

Residential, commercial, and industrial developments which require 20 or more parking spaces shall include oil, grease, and silt traps, or other suitable means, as approved by the Monterey County Surveyor, to protect water quality; a condition of maintenance and operation shall be placed upon the development.

Monterey County Roadway Design Standards (1977). The Roadway Design Standards provide the minimum standard of improvements to be installed by developers of real property pursuant to the County of Monterey ordinances. According to the Roadway Design Standards, drainage improvements as they relate to the Project are subject to the following:

- A drainage report shall be prepared by the developer's engineer to substantiate the design of storm drain improvements, including flow on improved streets, inlet capacity, storm drain capacity, channel capacity, and a method of final disposal of additional runoff from the development. Calculations may be based on the rational method of analysis as follows:
 - A minimum of 10-year frequency storm where no lot flooding can occur.
 - A minimum of 25-year frequency for waterways of 30 sf in waterway area and/or where lot ponding and surface flow can occur, taking into account land use in the adjacent area subject to flooding. Dedicated easements for surface water shall be shown on the final map.
 - The coefficient of rainfall runoff and overland flow rates used to determine time of concentration shall be based on coefficient values for the drainage area fully developed in accordance with the zoning or Master Plans established for watershed.

Monterey County Ordinance 16.12.07. This ordinance specifies runoff control from activities subject to a development permit. According to this ordinance, runoff from activities subject to a development permit shall be properly controlled to prevent erosion. The following measures shall be used for runoff control, and shall be adequate to control runoff from a ten-year storm:

- a) On soils having high permeability (more than two inches/hour), all runoff in excess of predevelopment levels shall be retained on the Site. This may be accomplished through the use of infiltration basins, percolation pits or trenches, or other suitable means. This requirement may be waived where the Director of Building Inspection upon recommendation of the Health Department determines that high groundwater, slope stability problems, or other conditions, would inhibit or be aggravated by on-site retention, or where retention would provide no benefits for ground water recharge or erosion control.
- b) On projects where on-site percolation is not feasible, all runoff must be detained or dispersed over non-erodible vegetated surfaces so that the runoff rate does not exceed the predevelopment level. On-site detention may be required where excessive runoff would contribute to downstream erosion or flooding. Any policies and regulations for any drainage zones where the project is located would also apply.

- c) Any concentrated runoff which cannot be effectively detained or dispersed without causing erosion, shall be carried in non-erodible channels or conduits to the nearest drainage course designated for such purpose or to on-site percolation devices. Where water would be discharged to natural ground or channels, appropriate energy dissipaters shall be installed to prevent erosion at the point of discharge.
- d) Runoff from disturbed areas shall be detained or filtered by berms, vegetated filter strips, catch basins, or other means as necessary to prevent the escape of sediment from the disturbed area.
- e) No earth or organic material shall be deposited or placed where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water (Ord, 2806, 198 1.)

Monterey County Water Conservation Regulations. Ordinance No. 3932 of the County of Monterey Water Resources Agency pertains to mandatory water conservation regulations for new construction and requires, among other things, the following.

- All toilets shall be ultra-low flush toilets with a maximum tank size or flush capacity of 1.6 gallons, all shower heads shall have a maximum flow capacity of 2.5 gallons per minute, and all hot water faucets that have more than 10 ft of pipe between the faucet and the hot water heater serving such faucet shall be equipped with a hot water recirculating system.
- Landscape plans shall apply xeriscape principles, including such techniques and materials as native or low water use plants and low precipitation sprinkler heads, bubblers, drip irrigation systems and timing devices.
- A notice shall be recorded on the deed for each lot stating: “All new construction shall incorporate the use of low water use plumbing fixtures and drought tolerant landscaping, in accordance with County of Monterey Water Resources Agency Ordinance No. 3932.” Prior to recordation of the final map, a copy of the completed notice shall be provided to the Water Resources Agency for approval.

B-8 Zoning District. Chapter 21.42.030 H.1 of the Zoning Ordinance (Ordinance) states that “The purpose of the B-8 Zoning District is to restrict development and/or intensification of land use in areas where, due to water supply, water quality, sewer disposal capabilities, traffic impacts or similar measurable public-facility type constraints, additional development and/or intensification of land use is found to be detrimental to the health, safety, and welfare of the residents of the area, or the County as a whole.” Chapter 21.42.030 H.1 of the Ordinance further states that “The B-8 district does not affect construction of the first single family dwelling on a building site, additions to dwellings, guesthouses, non-habitable structures accessory to a dwelling use, or addition and/or expansion of existing commercial uses where such addition and/or expansion can be found to not adversely affect the constraints that caused the B-8 zone to be applied on the property.” Chapter 21.42.030 H.4 of the Ordinance states that “Reclassification of area from B-8 zoning may be considered when constraints existing at the time of placing the B-8 zoning may no longer exist and additional development and/or intensification of land use would not be detrimental to the health, safety, and welfare of the residents of the area, or the County as a whole.” As such, the B-8 zoning limits development to single-family dwellings in existing lots of record since 1991 for as long as the constraints leading to the imposition of the B-8 continue to exist (Geosyntec, 2007). The Site is located within the B-8 zoning overlay. Figure 4.7.11 illustrates the B-8 zoning areas within the Toro Planning Area.

The B-8 zoning overlay was adopted on November 24, 1992 and has been the focus of multiple technical reports since that time. These technical reports include the following:

1. Staal, Gardner & Dunne Inc. 1991. Hydrogeologic Update, Toro Area, Monterey County California. Report prepared for Monterey County Water Resources Agency. August 1991.
2. Fugro West, Inc. 1996. Additional Hydrogeologic Update, Toro Area, Monterey County California. Report prepared for Monterey County Water Resources Agency. February 1996.
3. Kenneth D. Schmidt and Associates. 2001. Review of Reports on Groundwater Conditions. Letter report prepared for Monterey County Environmental Health Division. May 2001.
4. Yates, Feeney, and Rosenburg. 2002. Laguna Seca Subarea, Phase III Hydrogeologic Update. Report prepared for Monterey County Water Management District. November 2002.
5. Kleinfelder, Inc. 2004. Project-Specific Hydrogeologic Investigation, Omni Enterprises Property (PLN 010252), Corral de Tierra Area, Monterey County, California. Report prepared for Monterey County Health Department, Environmental Health Division. February 2004.
6. Geosyntec. 2007. El Toro Groundwater Study, Monterey County, California. A report prepared for: Monterey County Resource Management Agency, Salinas, California.
7. Schaaf and Wheeler, 2002. Preliminary Drainage Study for Proposed Development at Corral de Tierra and Highway 68.

Fugro West, Inc. (1996) concluded that the water resources of the Toro Area as a whole may be adequate for build-out however the Corral de Tierra subarea could be overdrafted at build-out. Kleinfelder (2004) concluded that “groundwater in the vicinity of the Ambler Park wells appears to have risen and should provide sufficient supply for the Project.” Based on this conclusion, Kleinfelder (2004) recommended that “the B-8 Zoning District restriction should be lifted for the Corral de Tierra Neighborhood Retail Village project,” A peer review of all of these reports was conducted by Komex H2O Science in 2004 (Komex 2004). In this report Komex concluded that Kleinfelder’s conclusions and recommendations can only be supported through a basin-wide evaluation of the Toro Area that considers the entire water level and climate record available. In response to Kleinfelder’s findings and WorleyParsons Komex’s recommendations (refer to Appendix I of Volume II of this EIR), a hydrostratigraphic analysis of the Toro Planning Area and evaluation of the B-8 overlay was conducted by Geosyntec in 2007. This study is the most current, detailed, and comprehensive analysis of the groundwater resources in this area. The report compiled water well and hydrostratigraphic information, conducted aquifer testing, collected and analyzed water samples from wells, developed a conceptual hydrogeologic model and evaluated hydrogeologic connectivity between existing subareas.

As discussed previously under Groundwater Levels and Trends in this section, Geosyntec (2007) concluded the following regarding lifting the B-8 zoning overlay in the Toro Planning Area:

“ If long term declines in groundwater levels and reliance on groundwater storage are acceptable to the County, the B-8 zoning could be lifted in areas with large saturated thickness of the El Toro Primary Aquifer System where additional groundwater production is feasible for several decades. However, if County Policy does not allow overdraft conditions

and mining of groundwater, the B-8 zoning should be expanded to cover the entire extent of the El Toro Primary Aquifer System.”

Following review of the Geosyntec (2007) report, the County of Monterey Board of Supervisors determined that groundwater storage at this time could not be relied upon and that the B-8 overlay should not be lifted from the Site. The Board also directed staff to return with recommendations regarding expansion of the B-8 overlay and options for remediating the problem as outlined in the Geosyntec Report.

4.7.3 Methodology

The analysis of surface water hydrology is based upon information contained in the following documents:

- Preliminary Drainage Study for Proposed Development at Corral De Tierra and SR-68 (Schaaf and Wheeler, 2002);
- Supplement #2 to the Preliminary Drainage Report for Proposed Commercial Project corral De Tierra Road and Highway 68 (Whitson Engineers, February 2009);
- Revised Evaluation of Potential for Increased Groundwater Recharge Proposed Commercial Project Corral De Tierra Road and Highway 68 (Whitson Engineers, October 14, 2009);
- “Revised” Water Budget Summary Proposed Commercial Project Corral De Tierra Road and Highway 68 (Whitson Engineers, October 14, 2009);
- Preliminary Geotechnical Report, Corral De Tierra Development (Fugro West, Inc. 2007)
- Project Specific Hydrogeologic Investigation Report (Kleinfelder, 2004); and
- Vesting Tentative Map, Corral De Tierra (Whitson Engineers, 2002)

These documents are available for review at the County of Monterey RMA-Planning Department.

Project impacts to surface water hydrology and surface water quality were identified from a review and confirmation of the applicant’s drainage analyses. The results of these analyses were used to evaluate whether project designs are adequate to control runoff, minimize flooding, and control erosion, sedimentation and contamination from runoff during construction activities and after the facilities are in operation. In addition, impacts are evaluated based on the Project’s adherence to local, State, and federal regulations and standards. Evaluation of the Project’s effects considered the proposed land use change, site design, and proposed BMPs as mitigation measures for controlling surface runoff and reducing potential pollutants in the runoff.

The assessment of issues related to groundwater hydrology and groundwater water quality with respect to the Project activities were evaluated based on the Project’s adherence to local (i.e., County), State, and federal regulations and standards. The assessment included the review of all documents previously referenced in this Chapter. These reports discuss groundwater hydrology and groundwater quality in the vicinity of the Site and within the Toro Planning Area.

4.7.4 Impact Significance Criteria

Significance criteria for evaluating project impacts on hydrology and water quality on the Site are based on Appendix G of the CEQA Guidelines. Implementation of the Project would have a significant impact on hydrologic resources if the Project would:

- Threshold 4.7.1 Violate any water quality standards or waste discharge requirements;**
- Threshold 4.7.2 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);**
- Threshold 4.7.3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site;**
- Threshold 4.7.4 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site;**
- Threshold 4.7.5 Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;**
- Threshold 4.7.6 Otherwise substantially degrade water quality;**
- Threshold 4.7.7 Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;**
- Threshold 4.7.8 Place within a 100-year flood hazard area structures that would impede or redirect flood flows;**
- Threshold 4.7.9 Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; or**
- Threshold 4.7.10 Cause inundation by seiche, tsunami, or mudflow.**

4.7.5 Project Impacts

Threshold 4.7.1 Violate any water quality standards or waste discharge requirements

Construction. During construction, portions of the Site would be graded and the existing vegetation would be removed, making the Site temporarily more vulnerable to erosion and storm water discharges of sediment and pollutants used in the construction process (e.g., concrete, paint, oil and fuel). However, as the construction site would be greater than one acre, the applicant would be required to develop and implement a construction Storm Water Pollution Prevention Plan (SWPPP) and file a Notice of Intent to comply with the National Pollution Discharge Elimination System (NPDES) General Construction Permit. Requirements under the General Construction storm water NPDES permit are performance based and do not specify numerical discharge standards. SWRCB Order No. 99-08-DWQ states that “It is not feasible at this time to establish numeric effluent limitations for pollutants in storm water discharges from construction activities. Instead, the provisions of this General Permit require implementation of Best Management Practices (BMPs) to control and abate the discharge of pollutants in storm water discharges.” In addition to development and implementation of a SWPPP, the County would require a grading plan that specifies, among other things, erosion control measures to be implemented during construction.

The SWPPP would specify Best Management Practices (BMPs) and erosion control measures used during construction to prevent storm water pollution. BMPs to be utilized on the Site would include, but would not be limited to, construction of temporary detention basins and sediment traps. These and other BMPs would control sedimentation and runoff pollutant levels in storm water runoff during construction. If the SWPPP and erosion control measures (Standard Conditions 4.7.1 through 4.7. 4) are implemented as required, construction activities would not violate water quality standards of waste discharge requirements, and impacts would be less than significant.

Operation. Development of the Site could potentially generate new sources of polluted runoff. Below is a list of the potential pollutants:

- Pesticide/herbicide and fertilizer use related to landscaping;
- Deposition of certain chemicals by automobiles in the parking areas and the internal roadway system;
- Suspended pollutants from trash container areas; and
- Increase in the off-site erosion and sediment load.

In accordance with the County requirements, the Project would be required to comply with the County’s MS4 NPDES Storm water Permit and implement BMPs during the operational phase of the Project to reduce the discharge of polluted runoff from the Site. Requirements under this permit are performance based and numerical discharge standards are not specified. Specifically, operational BMPs to be implemented may include, but are not limited to, an oil/water separator at the inlet of the retention/detention basin, catch basin filtration inserts for collection of suspended sediment, screened or enclosed trash container areas, stenciling of on-site storm drain inlets, and structural treatment control devices for increasing filtration and targeted pollution control. The final selection of BMPs would be completed through coordination with the County during the construction permitting process. Project compliance with MS4 NPDES requirements and implementation of Standard

Conditions 4.7.1 through 4.7.4 (discussed below) would reduce the Project's potential to violate any water quality standards to less than significant.

The water supply for the Site is from the Ambler Park Water System. Water supply for the Ambler Park Water System is provided from three water supply wells (Ambler Park Wells #4, #5, and #6) located approximately 500 ft southeast of the Site. Elevated levels of arsenic have been observed throughout the historical record of groundwater data collected from the Ambler Park wells (#4, #5, and #6). Historically, arsenic concentrations in the groundwater samples collected from these wells have generally exceeded the MCL for arsenic or are very close to the MCL for arsenic for the entire period of record (refer to Figure 4.7.12). The Ambler Park wells are screened entirely within the continental deposits and this aquifer system has a history of elevated arsenic concentrations. However, the concentration of arsenic in the groundwater pumped from these wells is reduced below the MCL by a treatment system, which is part of the Ambler Park Water System. This treatment system was recently constructed to remove arsenic in accordance with County of Monterey Department of Public Health directives. The Project is not expected to change the quality of the water supplied by these wells and pumping is not expected to cause migration of existing contamination.

No waste discharge violations were identified in the evaluation of the compliance history of the wastewater treatment plant that is proposed to serve the Project operated by California Utilities Services, Inc., and none are anticipated (waste discharge is discussed more fully in the Chapter 4.13 Utilities).

Therefore, the Project is not expected to result in the violation of water quality standards or waste discharge requirements.

Threshold 4.7.2 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)

For the purpose of this hydrologic analysis, the project area includes 11.7 acres includes the Site (approximately 11 acres) and the former service station parcel (0.7 acre), which is owned by the applicant. Additional groundwater recharge from the adjacent hillside, which currently drains onto the Site, is not taken into account for this water balance analysis, because the Project is not proposing to retain stormwater runoff from this hillside in the engineered retention/detention system.

The retention/detention system would be located on the northeastern edge of the Site adjacent to SR-68 (refer to Figure 4.7.13). It would include a subterranean facility comprised of modular "stormtech chambers" sized to accommodate 0.8 acre ft of runoff; the facility would be either 6 or 8 ft below finished grade and set back 30-50 ft from the buildings. The system is designed to retain 10.04 afy based on mean annual precipitation as described in the Revised Evaluation of Potential for Increased Groundwater Recharge Report (Whitson, October, 2009). The system would also be designed as a stormwater detention facility, capable of limiting the 100-year post-development rate (7.8 cfs) to less than the 100-year pre-development rate (10.5 cfs). Overflow would be directed via a new 24 inch stormdrain to an existing box culvert under SR-68.

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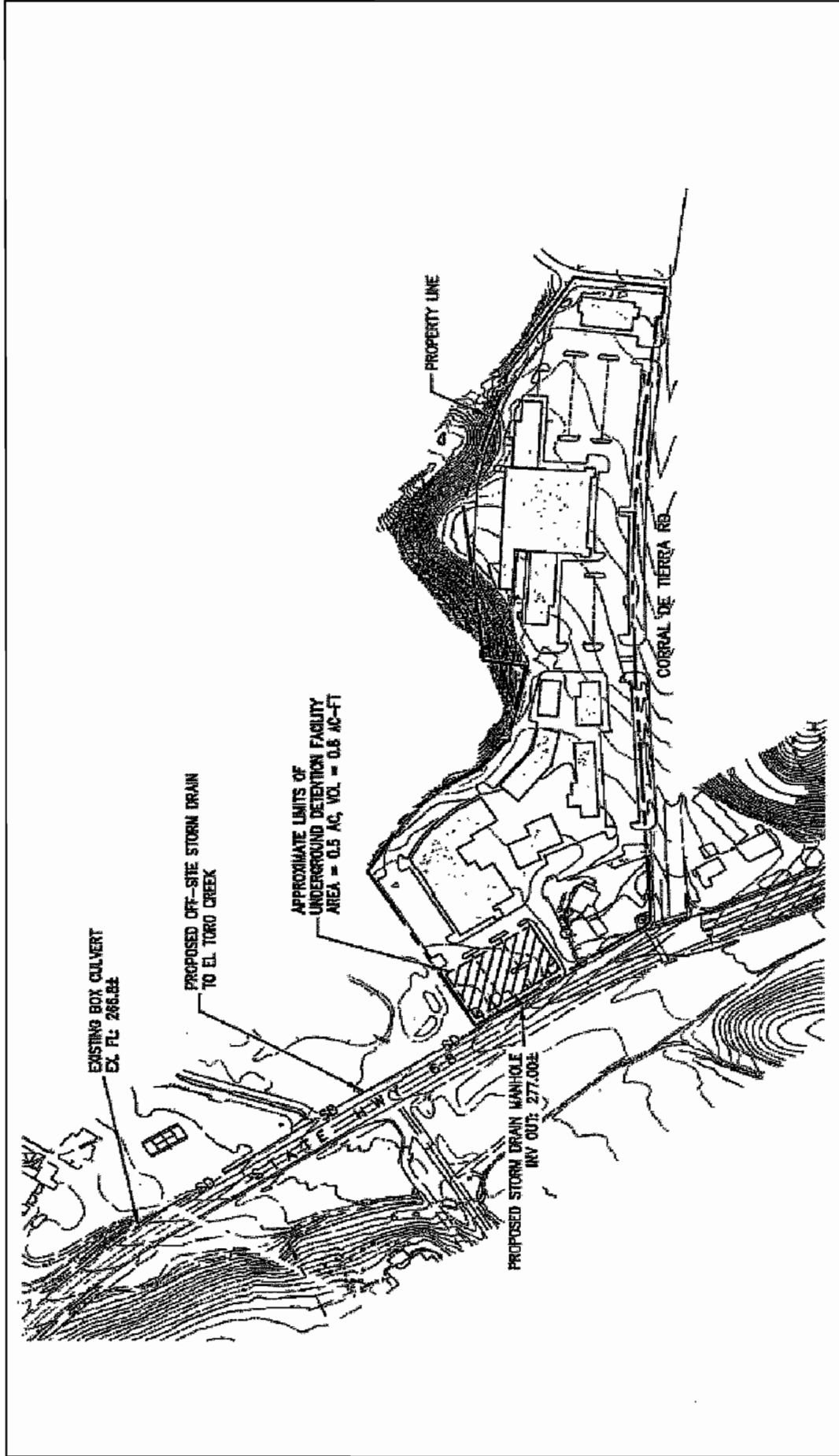


FIGURE 4.7.13

LSA



Corral de Tierra Neighborhood Retail Village Project
 Proposed Stormwater Retention/Detention System

SOURCE: Whitson Engineers

I:\MOC0901\GIS\Stormwater Detention System.cdr (4/12/10)

The Project would be supplied by the California American Water Company through the use of the Ambler Park water supply wells, which are within the Corral de Tierra subarea, approximately 500 ft southeast of the Site.

Groundwater Supplies. In its El Toro Groundwater Study, Geosyntec (2007) concluded the following regarding the condition of the Toro Planning Area Primary Aquifer System:

“Water level data compiled and reviewed for this study indicates that the primary aquifer system in the Toro Planning Area is in overdraft. However, current and increasing rates of pumping could be sustained for decades in areas with large saturated thickness of the El Toro Primary Aquifer System because of the large volume of groundwater in storage. The most evident problem would be lowering of the water table below the screened intervals of existing wells completed in shallower portions of the aquifer system. This has already occurred in portions of the Corral de Tierra subarea. In addition, with continued overdraft conditions, groundwater production potential would likely decrease relatively quickly in hydrogeologically contiguous areas of less saturated thickness.”

Geosyntec based its assertion that the El Toro Primary Aquifer System is in overdraft based on groundwater level trends observed in wells within the Toro Planning Area, which were monitored by the Monterey County Water Resources Agency (MCWRA). Declining groundwater level trends were observed in 80 percent of the long-term hydrographs (data collected since the 1960's) and 90 percent of the short-term hydrographs (data collected since 1999). The long-term groundwater level rate of change is approximately -0.7 ft/yr and the short-term groundwater level rate of change is approximately -1.6 ft/yr, based on water level trends observed in a well installed at the Site. In the vicinity of the Site, the long-term rate of groundwater level change ranges from -0.5 to -1 ft/yr and the short-term rate of groundwater level change ranges from -0.5 to -2.5 ft/yr. At build-out a deficit of approximately 244 and 224 AFY for the Toro Planning Area and the Corral de Tierra subarea, respectively, was estimated using the lower recharge value (Fugro West, Inc., 1996). As such, the El Toro Primary Aquifer System is in a state of overdraft at the present time, and this condition is expected to worsen in the future.

Currently, there is close to zero consumption of water on the Site. Pre-development natural recharge for the 15.3-acre watershed area is 0.9 afy. Accordingly, there is a net benefit to the groundwater basin of 0.9 afy (baseline conditions).

The Project has been estimated to consume 11.34 afy. Estimated groundwater recharge, based upon the calculations provided by Whitson (2009) would be 10.04 afy. This calculation is based upon the proposed retention/detention system that would be engineered on the Site to capture the impervious surface runoff from Site and adjacent gas station parcel. Therefore, the Project would result in a net deficit of 1.30 afy. Thus, it can be concluded that the Project would result in a depletion of groundwater resources in an already overdrafted groundwater basin. This impact is significant and unavoidable.¹

¹ Note: The County has proposed alternatives that modify project design in a manner that would mitigate this impact to a level that is less than significant.

Table 4.7.A summarizes this data. A complete water balance analysis is included in Table 4.7.B.

Table 4.7.A: Existing and Future Estimated Demand and Groundwater Recharge at Site

	Demand	Recharge	Net Water Balance
Baseline Conditions ¹	0 (afy)	0.9 (afy)	+ 0.9 (afy)
Project	11.34 (afy)	10.04 (afy)	- 1.3 (afy)

Table 4.7.B: Corral de Tierra Neighborhood Retail Village Project – Proposed Water Balance Analysis

Pre-Project					
Water Use					Water Use AFY
Project Site					0.00
Existing Service Station					0.00
Hillside					0.00
Total Water Use					0.00
Recharge	Total Area acres	Undeveloped Area ¹ acres	Mean Annual Precipitation ² inches/year	Recharge ³ Rate Inches/year	Recharge AFY
Project Site	11.0	11.0	15.5	0.04	0.57
Existing Service Station	0.7	0.7	15.5	0.01	0.00
Hillside	3.6	3.6	15.5	0.08	0.37
Total Recharge					0.94
Water Balance = Recharge – Water Use					0.94
Post-Project					
Water Use	Area ⁴ square feet	Multiplier ⁵			Demand AFY
Commercial/Retail/Office	109,500	0.00005			5.475
Restaurant/Deli/Food Service	17,023	0.0002			3.4046
Landscaping	1.69 acres x 1.46 af/ac per Denise Duffy & Associates				2.46
Total Water Use					11.34
Recharge	Total Area acres	Developed Area ⁶ acres	Mean Annual Precipitation inches/year	Recharge ⁷ Rate Inches/year	Recharge AFY
Project Site	11.0	9.35	15.5	0.75	9.06
Existing Service Station	0.7	0.63	15.5	0.75	0.61
Hillside	3.6	0.0	15.5	0.08	0.37
Total					10.04
Water Balance = Recharge – Water Use					-1.30
Net Change					
Post-Project Water Balance – Pre-Project Water Balance					-2.2

¹ Whitson has provided a current condition analysis that is based on the assumption that two residential units on the Site would consume .6 afy/unit. They have also included 0.6 afy/unit (equivalent of the use for 7 single family homes) for 7 shares owned by the applicant in the Hargis Water System. The County has not recognized these assumptions in the project baseline demand. The MCWRA has reviewed and approved the Revised Evaluation for Potential Recharge prepared by Whitson (October 14, 2009).

Table Notes:

1. The *Revised Evaluation of Potential for Increased Groundwater Recharge* dated October 14, 2009, states that 90 percent of the service station parcel is impervious surface and the remaining 10% of its area is available for recharge.
2. Mean Annual Precipitation provided in the *Schaaf & Wheeler Preliminary Drainage Study* dated July 30, 2002.
3. The recharge rates are based on results presented in the *Laguna Seca Subarea Phase I Hydrogeologic Update* (November 2002 prepared by Eugene B. Yates, Martin B. Feeney, and Lewis I. Rosenberg). These recharge rates represent 4%, 8%, and 1% of mean annual precipitation.
4. Estimates based on conceptual drawings.
5. Based on water demand factors from a Water Supply Assessment from the Marina Coast Water District for a shopping center for commercial retail uses and demand factors typically applied to individual deli and restaurant uses from Monterey Peninsula Water Management District.
6. The *Revised Evaluation of Potential for Increased Groundwater Recharge* prepared by Whitson Engineers dated October 14, 2009, estimated the project site would be 85% impervious surface and the service station parcel is 90% impervious.
7. The *Revised Evaluation of Potential Groundwater Recharge*, prepared by Whitson Engineers dated October 14, 2009, estimated the fraction of precipitation that would contribute to groundwater recharge could be increased to 80% for the impervious areas within the project site and former service station site due to the complete capture and percolation of runoff. According to the report, the recharge rate for adjacent hillside could be increased from 8% to 13%. The contribution to groundwater recharge from the proposed landscaped areas within the project site and service station parcel is taken as zero as a conservative assumption.

afy = acre-feet per year

The Project would also be inconsistent with Monterey County Code Title 19, which requires that subdivisions have a long term sustainable water supply. Because the Project is located in an overdrafted groundwater basin and results in a net deficit, the County cannot conclude that it would meet the requirements of Title 19.

Threshold 4.7.3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site

Construction. During construction, portions of the Site would be graded and the existing vegetation would be removed, making the Site temporarily more vulnerable to erosion and siltation on- and off-site. However, as the construction site would be greater than one acre, the applicant would be required to develop and implement a construction SWPPP and file a Notice of Intent to comply with the NPDES General Construction Permit. In addition to development and implementation of a SWPPP, the County would require a grading plan that specifies, among other things, erosion control measures to be implemented during construction.

The SWPPP would specify BMPs and erosion control measures used during construction to prevent storm water pollution. BMPs to be utilized on the Site would include, but would not be limited to, construction of temporary detention basins and sediment traps. These and other BMPs would eliminate or reduce erosion, sedimentation and runoff pollutant levels in storm water runoff during construction. Project compliance with Construction Storm water NPDES requirements, including preparation and implementation of a SWPPP, and incorporation of erosion control measures in the project grading plan per County requirements (Standard Conditions 4.7.1 through 4.7.4) would reduce the potential for erosion, siltation and alteration of drainage patterns caused by construction to less than significant.

Operation. The Schaaf and Wheeler report (2002) indicates the Project would increase impervious cover from 0% to 85% through the construction of buildings and pavements. As shown on the Vesting Tentative Map and discussed in the Preliminary Drainage Study (Schaaf and Wheeler, 2002), the applicant proposes to manage storm water discharge from the Site by collecting it using a system of storm water catch basins and conveyance pipes of (as yet) unspecified size, connected to a ½-acre subterranean retention/detention basin. The Vesting Tentative Map does not specify any structures to divert storm water that would flow from the adjacent knoll around the Site, so it is assumed that the proposed storm drain system at the Site would handle this additional flow. Schaaf and Wheeler recommended an oil water separator be installed at the inlet to the retention/detention basin to intercept potential contaminants and silt that could diminish the percolation capacity of the basin. The retention/detention basin consists of an excavation filled with drain rock to a depth of 6 ft and an assumed void ratio of 0.30. Thus, the capacity of the retention/detention basin is calculated to be approximately one acre-foot of storm water. The Vesting Tentative Map shows discharge from the retention/detention basin would be routed from the Site through a 12 inch diameter outlet pipe (note that Schaaf and Wheeler [2002] modeled an 18 inch pipe) set at an elevation approximately 2.5 ft below the top of the rock fill in the basin. This outlet pipe would be used to relieve flows in excess of the basin's percolation capacity, and as recommended by Schaaf and Wheeler, would be connected to a new 24 inch storm drain proposed to be installed by the applicant along the south side of SR-68. Schaaf and Wheeler (2002) recommended that this storm drain be installed from the Site to a location approximately 900 ft east, where El Toro Creek passes beneath SR-68 through an existing concrete box culvert.

The Project would increase impervious cover at the Site from 0% to 85% and route runoff from new hardscape areas. Because drainage would be routed to a new storm drain system that discharges to El Toro Creek approximately 900 ft east of the Site, there would be no substantial increase in erosion or siltation on the Site itself. However, there is a potential the Project could increase erosion and/or siltation off-site, or contribute to the alteration of drainage patterns because runoff would increase from impermeable surfaces constructed as part of the Project. Pre- and post-development storm water flows with and without the retention/detention basin were calculated by Schaaf and Wheeler (2002) as part of their conceptual drainage design and are discussed and evaluated below to assess whether the existing drainage design is sufficient to mitigate potential increases in storm water discharges from the Project. As discussed under Threshold 4.7.2, it was determined that the retention/detention basin is not designed to contain a 100-year 24-hour storm event, and does not meet MCWRA Drainage Plan Guidelines, which require detention facilities sized to limit the 100-year post-development runoff to the 10-year pre-development runoff rate. Thus, overland discharge of storm water could cause or contribute to erosion and siltation along SR-68 as well as cause off-site erosion and sedimentation in El Toro Creek.

Finally, the applicant has not submitted plans for an oil-water separator and sediment trap to reduce the potential for clogging of the retention/detention basin as recommended by Schaaf and Wheeler (2002), and has not submitted a regular maintenance plan to provide adequate maintenance of the storm water retention/detention basin and the storm drains. Without proper design and regular maintenance, the drainage system capacity may be diminished and may not operate adequately to mitigate the potential impacts associated with storm water discharge and resulting erosion, siltation or stream channel changes off-site. Mitigation Measure 4.7.6, which requires a regular maintenance plan and an oil water separator and sediment trap as part of the drainage plan, would mitigate impacts associated with stormwater discharge to a less than significant level.

Based on the above analysis, in the absence of a retention/detention basin with demonstrated adequate capacity per the MCWRA Drainage Plan Guidelines, and without an oil-water separator/sediment trap and a regular maintenance program to maintain the retention/detention basin capacity, the potential exists for the Project to contribute to off-site erosion, siltation and changes in El Toro Creek. Therefore, impacts are assessed as potentially significant. Mitigation Measures 4.7.5 and 4.7.6 prescribe that revised/expanded hydrologic analysis and/or drainage design be prepared to mitigate the impacts to a less than significant level.

Storm water discharge would be routed via a new 24-inch storm drain along SR-68 to El Toro Creek approximately 900 ft east of the Site. This storm drain would convey runoff from the 17.7 acre drainage area that includes the Site, as well as an additional 30 acres upslope from the intersection of SR-68 and Corral de Tierra Road. Schaaf and Wheeler (2002) calculated the additional discharge from this area to be 18 cfs for a 10-year, 24-hour storm event, which is consistent with the WorleyParsons Komex (refer to Appendix I of Volume II of this EIR) assessment of runoff from this area. Therefore, the proposed 24-inch storm drain line appears to be sufficient to convey runoff from the design (10-year, 24-hour) storm event, and no significant impacts are anticipated.

Threshold 4.7.4 **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site**

Stormwater Retention/Detention. The Project would increase the impermeable surface of the 11 acre Site from 0 % to 85% and utilize the already impermeable 0.7 acre former service station site. The storm water generated at the Site would be conveyed to a multi-purpose stormwater retention/detention facility designed to enhance groundwater recharge and mitigate the post development runoff rate.

As indicated above, the proposed system is designed to retain 10.04 afy based on mean annual precipitation (Whitson October 2009), and the proposed system is designed to limit 100-year post-development runoff rate (7.8 cfs) to less than the 100-year pre-development rate (10.5 cfs). Overflow would be directed via a new 24 inch stormdrain to an existing box culvert under SR-68.

MCWRA drainage policy requires storm water detention facilities capable of limiting 100 year post development runoff rate to the 10 year pre-development rate. The proposed 100 year post-development runoff rate (7.8 cfs) exceeds the 10-year pre-development runoff rate (4.4 cfs); therefore, the proposed system does not meet the MCWRA drainage policy.

Without a drainage design that meets MCWRA Drainage Plan Guidelines, impacts are assessed as potentially significant. Implementation of Mitigation Measures 4.7.5 and 4.7.6 would bring the project design into conformance with County standards and reduce potential impacts to less than significant.

Threshold 4.7.5 Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff

As discussed in Thresholds 4.7.2 and 4.7.3, based on the present design and analysis of the retention/detention basin, the runoff from the Project could exceed the capacity of the proposed storm water drainage systems and result in potentially significant impacts.

The existing and planned storm water drainage systems consist of a storm water collection system with storm drain inlets and pipes, a storm water retention/detention basin, a storm water discharge overflow from the retention/detention basin, a new 24-inch diameter storm drain line along SR-68, and an existing concrete box culvert that passes El Toro Creek northward under SR-68. In addition, Schaaf and Wheeler (2002) recommended that an oil-water separator/sediment trap be installed upstream from the retention/detention basin (although this feature is not shown on the Vesting Tentative Map), and a new storm water outfall be constructed at El Toro Creek.

Similarly, as discussed in Threshold 4.7.3, if the oil water separator is inadequately sized, backup of the system could result in flooding on-site and near the Site, which would be a potentially significant impact. If an adequately sized oil-water separator/sediment trap is provided as required under Mitigation Measure 4.7.6, this impact would be mitigated to a less than significant level.

The potential for surface water quality to be affected during construction is addressed under Threshold 4.7.1, which includes potential pollutants after construction. In accordance with the County requirements, the Project would be required to implement BMPs during the operational phase of the Project to reduce the discharge of polluted runoff from the Site. This includes compliance with MS4 NPDES requirements implementing BMPs, complying with MS4 NPDES requirements and implementation of Standard Conditions 4.7.3 and 4.7.4 would reduce impacts associated with water quality from the developed Site to a less than significant level.

Threshold 4.7.6 Otherwise substantially degrade water quality

Potential impacts to water quality from siltation are discussed above under Thresholds 4.7.1 and 4.7.5. These sections also indicate that given compliance with a construction SWPPP and NPDES guidelines, and compliance with the County's MS4 Storm water NPDES permit, including implementation of BMPs, the Project is not expected to degrade surface water quality due to storm water pollutants. Potential impacts from hazardous materials spills, leaks and discharges are discussed in Section 4.6 and were determined to be less than significant after mitigation. No other potential impacts to surface water quality have been identified or are anticipated; therefore, the potential for the Project to otherwise degrade water quality is determined to be less than significant.

As discussed in the Hazards and Hazardous Materials Chapter 4.6, the potential for releases of hazardous materials into the environment, including groundwater, is considered less than significant after mitigation. As discussed in the Chapter 4.13 Utilities, wastewater would be disposed of off-site and not in on-site septic systems. Therefore, there would be no foreseeable source of groundwater contamination or nitrate loading related to the Project that could substantially degrade the groundwater quality in the vicinity of the Site. Therefore, potential impacts under this threshold are considered less than significant.

Threshold 4.7.7 Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map

According to FEMA's Flood Insurance Rate Map number 06053C 0353G, the Site is not located in a FEMA-defined Special Flood Hazard Area. Impacts are therefore less than significant. In addition, the Project does not include residential development.

Threshold 4.7.8 Place within a 100-year flood hazard area structures that would impede or redirect flood flows

All aboveground structures associated with the Project would be built within the Site boundaries. Since the Site is not located within a FEMA-defined Special Flood Hazard Area, there would be no structures that would impede or redirect flood flows. Impacts would therefore be less than significant.

Threshold 4.7.9 Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam

The potential for flooding due to dam failure does not exist at the Site. The only upstream dam is at El Toro Lake (tributary to El Toro Creek), which is 1.25 miles upstream and encompasses approximately 7.0 acres. El Toro Creek is separated from the Site by a small knoll. It is anticipated that El Toro Creek would satisfactorily channelize the flow from the lake during a potential dam failure and the flow would not flood the, since the Site elevation is approximately 5 ft above the creek in addition to being separated from it by a knoll. Impacts would, therefore, be less than significant.

Threshold 4.7.10 Cause inundation by seiche, tsunami, or mudflow

The Site is approximately 280 ft above sea level and there are no substantial freshwater bodies near the Site. Therefore, there is no risk of seiche or tsunami inundation.

Most of the Site is situated on relatively flat slopes. According to the Monterey County Floodplain Management Plan (2003), the Site is situated in an area that has a low susceptibility to landslides and erosion. However, according to the Toro Area Plan (Monterey County, 1982), the hills in the Project vicinity are areas of high susceptibility to landslide and erosion hazards. Fugro West, Inc. (2007) conducted a field reconnaissance of the Site and observed morphology suggestive of possible landsliding on the knoll east of the Site. Specifically, Fugro West, Inc. observed what appeared to be a break in the slope about halfway up the west-facing slope on the hillside that borders a portion of the easterly edge of the Site. Aerial photographs reviewed by Fugro West, Inc. (2007) revealed evidence of possible shallow soil slips/debris flows on the northwest-facing slope adjacent to the property, however, evidence suggestive of deep-seated landsliding was reportedly not observed. Surficial slope instability and mud flows could damage Site structures, result in accumulation of

debris at the base of the slope, and potentially pose a risk to public health and safety. Impacts from mudflows are, therefore, assessed as potentially significant.

Retaining walls are proposed along the base of the slope on the eastern property line where evidence of surficial slope instability and landsliding was observed by Fugro West, Inc. (2007). The use of properly designed and engineered retaining walls along the base of the slope of the knoll to the east, and implementation of maintenance activities to remove accumulated debris behind the walls would reduce the impacts associated with landslides and mudflows to a less than significant level (Mitigation Measure 4.7.7).

4.7.6. Cumulative Impacts

Past, present and reasonably foreseeable (cumulative) projects within the entire Toro Planning Area and the Laguna Seca subarea were considered when assessing cumulative impacts to hydrology and surface water quality. As with the Project, all of the related projects would also be subject to County and MCWRA drainage design guidance as well as storm water NPDES permit requirements for both construction and operation. Each project would be required to develop SWPPPs and would be evaluated individually to determine appropriate BMPs and treatment measures to avoid impacts resulting from erosion, siltation, stream channel changes, increased runoff, flooding, and surface water degradation. In addition, the County of Monterey Department of Public Works reviews all construction projects on a case-by-case basis to ensure that sufficient local and regional drainage capacity is available. Thus, cumulative impacts to surface water quality are considered to be less than significant.

Implementation of the Project in conjunction with the existing water demands within the area would further increase the demand for water service in the Toro Planning Area. Cumulative groundwater demand in the Toro Planning Area has already resulted in the overdraft of El Toro Primary Aquifer System (Geosyntec, 2007). The estimated groundwater demand in the Corral de Tierra subarea in 1995 was 582 AFY, and the projected build-out groundwater demand for this subarea is 781 AFY, (Fugro West, Inc., 1996). The proposed water demand for the Project would further contribute to, and increase the cumulative deficit and is, therefore, addressed as a cumulatively significant unavoidable impact.

4.7.7 Level of Significance Prior to Mitigation

Potential project impacts related to seiches and tsunamis, 100-year floodplains, 100-year flood hazards and levy/dam failures, adherence to ground water quality standards, interference with ground water recharge processes and degradation of ground water quality would be less than significant and no additional mitigation is required beyond standard conditions. Potential impacts related to inadequate storm water management with increased flooding, erosion, siltation, and impacts to off-site stream channels (Thresholds 4.7.3, 4.7.4, and 4.7.5), depletion of ground water supplies (Threshold 4.7.2) possible mudflows (Threshold 4.7.10) and cumulative impacts to ground water supplies are assessed as significant prior to implementation of mitigation measures.

4.7.8 Mitigation Measures and Standard Conditions of Approval

The following mitigation measures and standard conditions shall be implemented to reduce potentially significant adverse impacts of the Project associated with Hydrology and Water Quality.

Standard Condition 4.7.1: Storm Water Pollution Prevention Plan. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that construction plans for the Project include features meeting the applicable construction activity Best Management Practices (BMPs) and erosion and sediment control BMPs published in the *California Storm water BMP Handbook—Construction Activity* or equivalent. The applicant shall submit a construction and operating Storm Water Pollution Prevention Plan (SWPPP) to the County of Monterey that includes the BMP types listed in the handbook or equivalent. The SWPPP shall be prepared by a civil or environmental engineer and would be reviewed and approved by the County Building Official prior to the issuance of any grading or building permits. The SWPPP shall reduce the discharge of pollutants to the maximum extent practicable using BMPs, control techniques and systems, design and engineering methods, and such other provisions as appropriate. A copy of the SWPPP shall be kept at the Site.

Standard Condition 4.7.2: General Construction Storm Water NPDES Permit Coverage. Prior to issuance of a grading permit, the applicant shall demonstrate to the County of Monterey RMA-Planning Department that coverage has been obtained under the General Construction Storm water National Pollution Discharge Elimination System (NPDES) Permit by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board. During demolition, grading, and construction, the applicant shall ensure that the Project complies with the requirements of the State General Construction Activity NPDES Permit.

Standard Condition 4.7.3: Storm Water NPDES Permit Coverage. The applicant shall comply with the provisions of the National Pollution Discharge Elimination System (NPDES) General Permit and Waste Discharge Requirements for the Storm Water Discharges from Small Municipal Separate Storm Sewer Systems Order No. 2003-0005-DWQ NPDES No. CAS000004 as they relate to construction activities for the Project. This shall include submittal of a Notification of Construction to the Central Coast Regional Water Quality Control Board (RWQCB) at least 30 days prior to the start of construction, preparation, and implementation of a Storm Water Pollution Prevention Plan (SWPPP) (Standard Condition 4.7.1) and a Notice of Completion to the Central Coast RWQCB upon completion of construction and stabilization of the Site.

Standard Condition 4.7.4: Erosion Control Plan. Prior to issuance of a grading permit, an erosion control plan indicating proposed methods for the control of runoff, erosion, and sediment movement shall be submitted by the applicant to

the County of Monterey RMA-Planning Department for approval. Erosion control plans may also be required for other types of applications where erosion can reasonably be expected to occur. The erosion control plan may be incorporated into other required plans, provided it is identified as such. Erosion control plans shall include as a minimum the measures required under Sections 16.12.070, 16.12.090, and 16.12.110 of the County of Monterey Ordinance. Additional measures or modifications of proposed measures may be required by the County of Monterey prior to Project approval. No grading or clearing may take place on the Site prior to approval of an erosion control plan for that activity. Final certification of Project completion may be delayed pending proper installation of measures identified in the approved erosion control plan.

Mitigation Measure 4.7.5: Drainage Plan. Prior to issuance of any grading or building permits, the applicant shall provide the County of Monterey Water Resources Agency, a final Drainage Plan and maintenance plan prepared by a registered civil engineer addressing on- and off-site impacts. The drainage plan shall be accompanied by a hydrologic report that would include calculations certifying that storm water retention/detention facilities are designed to limit the 100-year post-development runoff rate to the 10-year pre-development runoff rate. The drainage plan shall include an oil-water separator/sediment trap upstream from the retention/detention basin and construction details, utilizing Caltrans standards, for the proposed 24-inch storm drain line that would convey stormwater to an existing box culvert under SR-68. Calculations shall be provided certifying the oil-water separator/sedimentation trap has been sized to accommodate the flow from the Site during the County recommended storm event. Drainage improvements shall be constructed in accordance with the plans approved by the County of Monterey Water Resources Agency.

The Drainage Plan for the Project shall also include calculations demonstrating the adequacy of the existing culvert along El Toro Creek under SR-68 to pass the Caltrans-specified design flood events, including any additional stormwater discharge volumes originating from the Site after construction. If the capacity of the existing culvert is insufficient to meet Caltrans design criteria, the applicant shall submit plans for upgrading or replacing the culvert and shall upgrade or replace the culvert as part of the Project.

Mitigation Measure 4.7.6: Drainage and Flood Control Systems Agreement. Prior to filing the final map, a signed and notarized *Drainage and Flood Control Systems Agreement* shall be provided by the applicant to the County of Monterey Water Resources Agency for review and approval. The agreement shall include a summary of required annual maintenance activities and provisions for the preparation of an annual drainage report. The annual report shall be prepared by a registered civil engineer and submitted to

the County of Monterey Water Resources Agency for review and approval. If the applicant and/or subsequent property owners, after notice and hearing, fails to properly maintain, repair, or operate the site drainage and flood control facilities, the County of Monterey Water Resources Agency shall be granted the right by the property owners to enter any and all portions of the property to perform repairs, maintenance or improvements necessary to properly operate the drainage and flood control facilities in the Project. The County of Monterey Water Resources Agency shall have the right to collect the cost for said repairs, maintenance or improvements from the property owners upon their property tax bills. A hearing shall be provided by the Board of Supervisors as to the appropriateness of the costs. The *Drainage and Flood Control Systems Agreement* shall be recorded concurrently with the final map.

Mitigation Measure 4.7.7: Retaining Walls. Prior to issuance of grading and site development permits, the applicant shall submit a design approved by a registered civil engineer for retaining walls/debris deflection walls along areas of the eastern Site boundary where evidence of slope instability has been observed or areas that pose a risk of future instability. The wall shall be adequately sized so as not to be overtopped by potential mudflows, and shall be designed to withstand the impact of any mudflows travelling down the slope. The applicant shall implement a maintenance program to remove any debris that is accumulated behind the wall after any mudflow event, and at the end of every rainy season.

4.7.9 Level of Significance after Mitigation Measures

Implementation of Standard Conditions 4.7.1 through 4.7.4 and Mitigation Measures 4.7.5 through 4.7.8 are intended to assure that the Site storm drainage system functions to mitigate significant impacts related to storm water runoff including flooding, erosion, siltation, stream channel changes, and pollution. Proper implementation of these measures would reduce impacts to a less than significant level. Implementation of Mitigation Measure 4.7.7 would reduce the risk of mudflow and landslide-related impacts to a less than significant level.

However, even with implementation of all mitigation measures herein, implementation of the Project would result in a significant and unavoidable impact to groundwater supplies.

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4.8 LAND USE AND PLANNING

This section describes the existing land uses on the Site and in its vicinity and evaluates the compatibility of the Project with surrounding land uses and relevant planning or policy documents. The Project's consistency with relevant planning policies would be summarized in Table 4.8.A, and potential policy conflicts would be highlighted. A project-related policy conflict or inconsistency is not in and of itself considered a significant environmental impact under CEQA. A project's inconsistency with a policy is only considered significant if such inconsistency would cause physical environmental impacts [CEQA Section 15064 (e)]. Any physical impacts associated with policy conflicts are addressed in the appropriate topical sections of this EIR (e.g., Aesthetics, Traffic, Water Resources).

In reviewing this section, it is important to understand that the determination of whether a project is consistent with a specific policy can be subjective. As a result, policy consistency determinations are often more appropriately made by County staff and/or a local decision-making body (e.g., Board of Supervisors). It is not the purpose of this EIR to interpret policy. Goals and policies are interpreted by decision makers with a list of goals and policies that are pertinent to the project and site. The analysis in this section represents the findings of policy review by the EIR author and County staff, and is intended to provide a guide to the decision makers for policy interpretation.

4.8.1 Existing Conditions

Regional Setting. The Project is located in an unincorporated part of the County known as the Toro Planning Area (Toro Area). The Toro Area is located in the north-central portion of the County; southwest of the City of Salinas and east of the Monterey Peninsula (refer to Figure 3.1, Toro Area Boundary, in Chapter 3.0). This planning area consists of approximately 74 square miles of terrain primarily dominated by the mountains and rolling hills of the Sierra de Salinas Mountain Range. The Toro area is generally bounded by Laureles Grade Road to the west, SR-68 to the north, the Salinas River to the east and the Sierra de Salinas Mountains to the south. Public lands within the former Fort Ord property abut the Toro Area on the northwest.

Regional access to the Toro Area is provided by SR-1 from the west, US 101 from the east and SR-68, a two-lane State-designated Scenic Highway. Access to the areas within is mainly provided by Laureles Grade Road, a State-designated Scenic Highway, Corral de Tierra and San Benancio Roads, which are County-designated Scenic Routes, and River Road. Laureles Grade Road provides a scenic vista overlooking the planning area from the west. The intersection of SR-68 and River Road constitutes the Area's western entrance.

Approximately 80 percent of the land in the Toro Area is agricultural (Farmland, Rural Grazing, Permanent Grazing, or Resource Conservation) and associated rural residential development. Existing land uses in the Toro Area primarily include farming and ranching on agricultural lands, farming, grazing and rural-residential development on rural lands, and scattered, low-density residential areas with single-family residential development on larger lots along Corral de Tierra and San Benancio roads. Sizable medium density residential developments are located in the northernmost portions of the area in the Toro Estates and Las Palmas subdivisions. The Toro Area also has a large amount of lands for public and recreational uses including the Toro Regional Park, which accounts for approximately 11 percent of Toro's total acreage. Additional recreation uses in the Area can be found

at the Laguna Seca Recreation Area, home of the Mazda Raceway Laguna Seca, and the former Fort Ord located adjacent to the northwestern boundary (refer to Figure 4.8.1).

Toro's close proximity to the Monterey Peninsula and Salinas, with its rural atmosphere and its scenic open spaces, continue to make it an attractive rural residential area. The infrastructure and resource constraints affecting land use in the Toro Area have arisen including road/traffic conditions and water quality and supply. Relatively recent developments such as Las Palmas Ranch, as well as other development in the Monterey Peninsula and the City of Salinas area are generating traffic that is meeting or exceeding available roadway capacity on the SR-68 corridor between the cities of Monterey and Salinas. (Section 4.12 of this EIR, Traffic and Transportation, provides a complete discussion of traffic conditions in the Project vicinity) In addition, a substantial portion of the Toro area, including the Site, is currently within a "B-8" overlay zoning district which restricts development and/or intensification of existing land uses due to water availability constraints (refer to Sections 4.8.2 through 4.8.9 below and Chapter 4.7, Hydrology and Water Quality, of this EIR for a complete discussion of the "B-8" overlay zone).

Surrounding Land Uses. The Site lies approximately seven miles southwest of the City of Salinas and 10 miles northeast of the Monterey Peninsula within the northwest portion of the Toro Area at the entrance of an area known as Corral de Tierra. The Site is located at the three-legged intersection of SR-68 and Corral de Tierra Road¹. Land uses in the vicinity of the site include commercial, public, and residential uses. The site is bounded on the west by Corral de Tierra Road, on the north by SR-68, and the east and south by residential communities (refer to Figure 4.8.2, Land Uses in the Project Vicinity). Specifically, to the west, across Corral de Tierra Road from the northwest side of the Site, and at the southwest corner of the intersection of SR-68 and Corral de Tierra Road, there is a small commercial district consisting of the Corral de Tierra convenience market, a gas station, and several vacant buildings. Also to the west, across Corral de Tierra Road from the southwest side of the Site, there are several single family homes in a low-density residential zone. Adjacent to the Site to the north, and at the southwest corner of the intersection of SR-68 and Corral de Tierra Road, there is a small commercial parcel containing a non-operating service station that is currently used as a real estate office. Across SR-68 to the north is an area zoned as "Public/quasi-public" which includes portions of the former Fort Ord Military Reservation, now owned by the Bureau of Land Management, and the Cypress Community Church. Also to the north are several single-family homes in a low-density residential zone.

¹ A recent project to realign the driveway to the Cypress Community Church property north of SR-68/Corral de Tierra Road is under construction and will turn what is currently a three-legged intersection into a four-legged intersection.

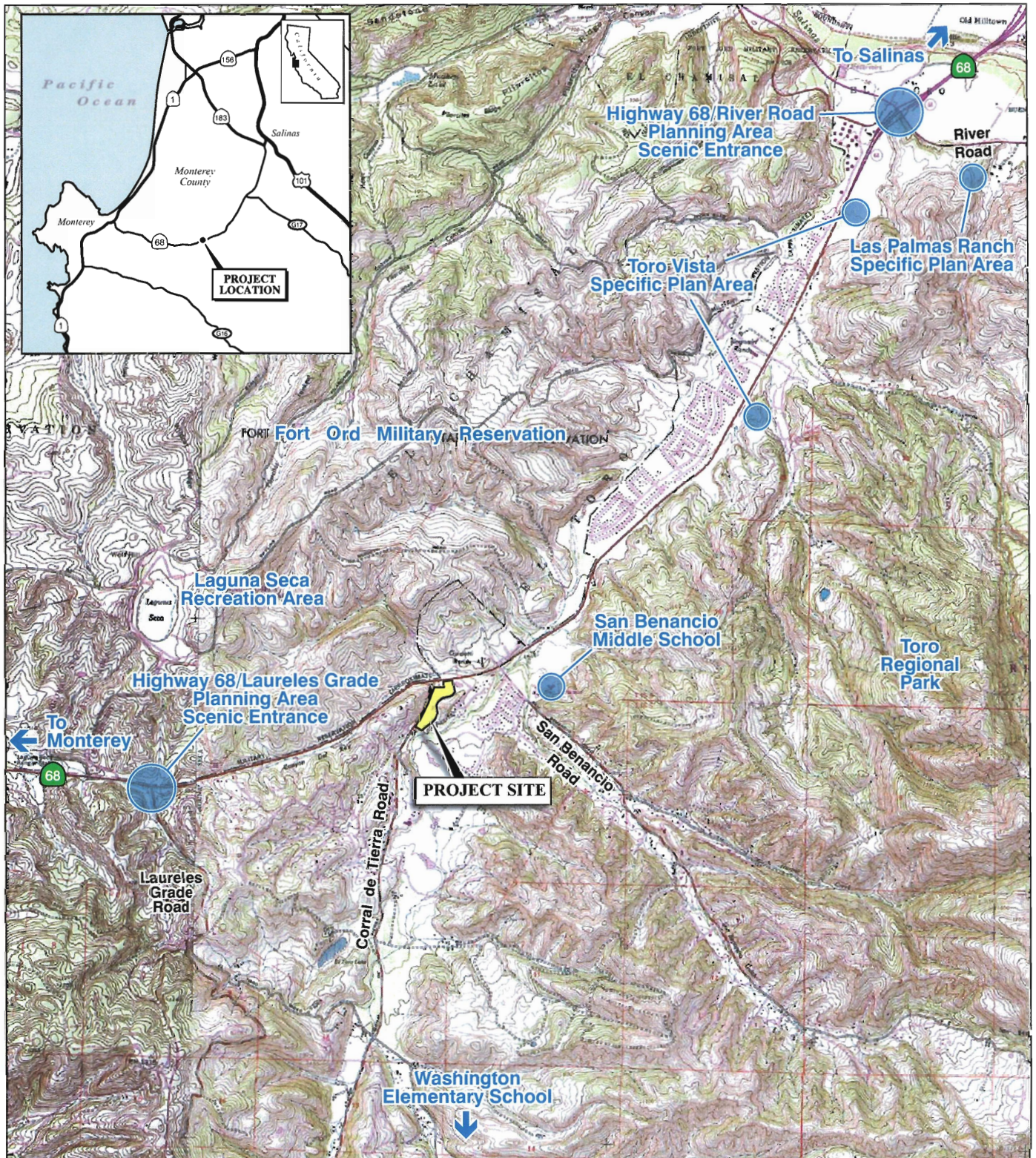


FIGURE 4.8.1

LSA



SOURCE: USGS 7.5' QUADS - Seaside & Spreckels, Ca.

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Corral de Tierra Neighborhood Retail Village Project
Regional Setting



FIGURE 4.8.2

LSA



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FEET

PHOTO SOURCE: MSN Local.Live

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Corral de Tierra Neighborhood Retail Village Project
Land Uses in the Project Vicinity

The Site is bordered on the east by the Villas residential condominium community zoned medium-density residential, and on the southwest by a single-family residential area zoned low-density residential. Also to the southwest is the Meadows, a gated residential community zoned as medium-density residential, and the Corral de Tierra Country Club zoned as open space. In addition to the previously stated zoning designations, almost all of the areas in the vicinity of the Site are zoned with the “B” (Building Site¹), “D” (Design Control²) and/or “VS” (Visual Sensitivity³) overlay zoning designations (refer to Figure 4.8.3, Project Vicinity Zoning, for the various zoning districts that surround the Site).

The Site is presently undeveloped and is characterized by ruderal (disturbed) California annual grassland series that is interspersed with mature Coast live oak, and other native and non-native tree species. The Site is the only remaining undeveloped area zoned for commercial development along SR-68 in the Toro Area Plan. The commercial zoning designation generally allows for the development of general commercial facilities such as retail stores, service-oriented businesses, professional office uses, as well as tourist-oriented commercial operations.

4.8.2 Regulatory Setting

The main guiding documents regulating land use and planning within and around the Site are:

1. Monterey County General Plan (1982)
2. Toro Area Plan (a part of the Monterey County General Plan) (1983)
3. Monterey County Zoning Ordinance, Title 21 - For Inland Areas (1983)

Consistency of the Project with land use policies contained in these planning documents is described below.

Monterey County General Plan. The Monterey County General Plan, adopted by the Board of Supervisors in 1982, is a long range, comprehensive plan addressing all aspects of future growth, development, and conservation within the County. The County’s General Plan goals, objectives, policies, land use plan and Growth Management Policy provide the basis for evaluation of development proposals and act as a guide for County decision-makers in directing land use decisions within the County. At the countywide level, the plan designates all proposed major land uses by one of seven basic descriptions: residential, commercial, industrial, agricultural, resource conservation,

¹ *Building Site Zoning Districts or “B” Districts establish specific regulations for lot size and structure setbacks and provide a manner in which areas of approved subdivisions and areas impacted by public facility constraints may be identified (Monterey County, 1983).*

² *Design Control Zoning Districts or “D” Districts are those areas of the County of Monterey where the design review of structures is appropriate to assure protection of the public viewshed, neighborhood character, and to assure the visual integrity of certain developments without imposing undue restrictions on private property (Monterey County, 1983).*

³ *Visual Sensitivity Districts or “VS” Districts are those areas of the County of Monterey in which such development could potentially create adverse visual impacts when viewed from a common public viewing area (Monterey County, 1983).*

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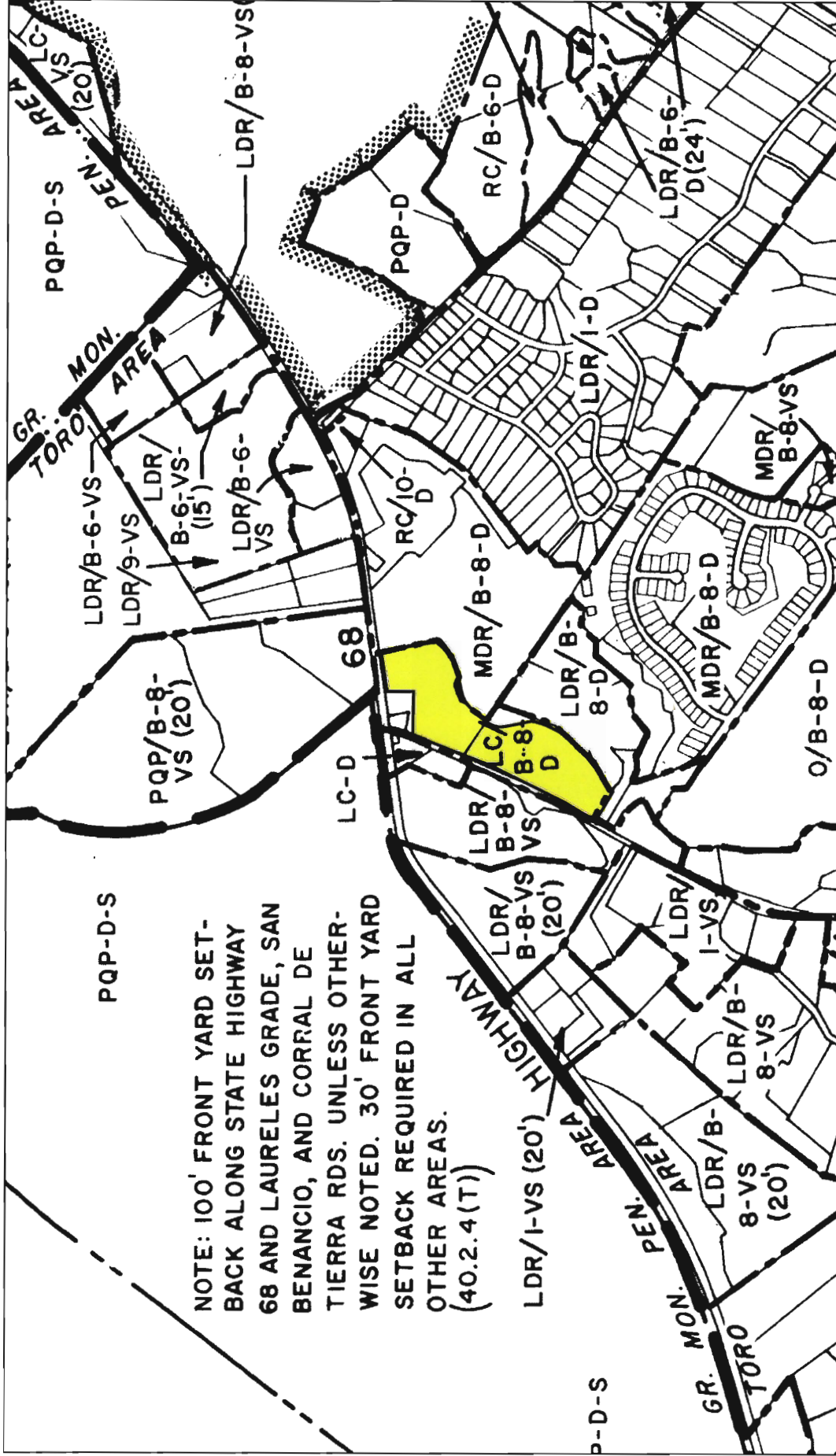


FIGURE 4.8.3

public/quasi-public, and transportation (Monterey County, 1982). The County is in the process of updating its General Plan. However, at the time this Draft EIR was prepared, the updated General Plan has not been adopted. Therefore, the 1982 General Plan is the guiding document for the Project.

Goals of the General Plan Land Use Element related to growth management, residential development, housing, open space, circulation, safety, conservation, and other pertinent issues (i.e. commercial development) which apply to and provide a framework for consideration of the Project include the following:

- Goal 1: Retain the character and natural beauty of Monterey County by the preservation, conservation, and maintenance of open space within constitutional constraints.
- Goal 24: Promote diversification and continued growth of the County's economic base with compatible industry.
- Goal 26: Promote appropriate and orderly growth and development while protecting desirable existing land uses.
- Goal 28: Encourage commercial development in close proximity to major residential areas and transportation routes.
- Goal 34: Encourage the provision of open space lands as part of all types of development including residential, commercial, industrial, and public.

Other goals and objectives of the General Plan Land Use Element related to growth management, residential development, housing, open space, circulation, safety, conservation, and other pertinent issues (e.g., energy) applicable to the Project include the following:

- | | |
|-----------------------|--|
| Goal 13: | To promote efficient energy use. |
| Objective 13.2 | <i>Incorporate energy efficiency into land use planning.</i> |
| Objective 13.3 | <i>Incorporate energy efficiency into the design and location of development projects.</i> |
| Objective 13.4 | <i>Incorporate energy efficiency into new buildings and encourage existing buildings to be retrofitted where feasible.</i> |
| Goal 14: | To encourage development of renewable energy resources |
| Objective 14.2 | <i>Encourage, where appropriate, the use of solar and other renewable resources for residential, commercial, industrial, and public building applications.</i> |
| Goal 16: | To minimize the risk from the damaging effects of flooding and erosion |
| Objective 16.2 | <i>Reduce the risk from flooding and erosion to an acceptable level by regulating the location, type, and density of land use.</i> |
| Objective 16.4 | <i>Identify existing and potential erosion hazards, and prepare and implement plans to control the amount of erosion and siltation.</i> |

- Goal 21:** To ensure that the County's water quality is protected and enhanced to meet all beneficial uses, including domestic, agricultural, industrial, recreational, and ecological
- Objective 21.1** *Protect and enhance surface and groundwater quality by implementing current adopted water quality programs and by continuing to evaluate new problems; develop new programs in accordance with the following policies by 1984.*
- Goal 20:** To provide for the protection and enhancement of Monterey County's air quality.
- Objective 20.2** *Improve the air quality of Monterey County by regulating all sources of air pollutants and by adopting programs to improve the County's air quality by 1984.*
- Goal 24:** To promote diversification and continued growth of the County's economic base with compatible industry.
- Objective 24.1** *Place a top priority on immediate efforts to stabilize and expand county employment in the agriculture, tourism, retail, manufacturing, and military sectors.*
- Objective 28.1** *Designate centers of concentrated commercial use which accommodate a mix of commercial activities and serve the County's needs.*
- Objective 28.2** *Provide for adequate access to commercial developments.*
- Objective 34.1** *Ensure that open space needs are met through operation of the planning process.*
- Objective 40.2:** *Employ a cooperative planning effort among all public and private interests to implement appropriate land use techniques and controls for maintaining the scenic beauty and atmosphere of the scenic corridor.*
- Objective 56.2** *Ensure the aesthetic placement of utility lines, including sewer pipelines*

A number of policies of the General Plan related to growth management, residential development, housing, open space, circulation, safety, conservation, and other pertinent issues (e.g., energy) also apply to the Project. Those policies, and the analysis of Project's consistency with them, are listed under Section 4.8.5 (Threshold 4.8.5.2) in this chapter.

Toro Area Plan. The Toro Area Plan is one of eight area plans for the County. Development opportunities, constraints, and natural resources of the Toro Area are unlike those in other parts of the County; therefore, the policies for the Toro Area Plan are more precisely adapted to the characteristics of this area than those of the Monterey County General Plan. The Toro Area Plan focuses on "... the balancing of present character and future needs, conservation of resources and opportunities for development, and the sentiments of the local community." (Toro Area Plan, 1983)

The following Toro Area Plan goals and assumptions apply to the Project:

- Scenic qualities and open space in the Toro Area are a valued resource, worthy of protection for the preservation of Toro’s rural character and quality of life.
- Growth is inevitable; therefore, sound planning must replace piecemeal development if Toro’s character is to be preserved.
- Development should take place first along major road corridors with special management of highly critical scenic areas and scenic road standards.
- The private automobile would continue to be the dominant form of transportation in Toro despite the ever-increasing cost.
- There would be little appreciable increase in existing sewage treatment capacities in the Toro Planning Area unless major improvements are made.

A number of policies of the Toro Area Plan related to pertinent issues apply to the Project¹. Those policies, and the analysis of Project’s consistency with them, are listed under Section 4.8.5 (Threshold 4.8.5.2) further in this chapter.

Monterey County Zoning Ordinance, Title 21 of the Monterey County Code (Zoning For Inland Areas). The Monterey County Zoning Ordinance (Ordinance) establishes zone-specific development regulations including height limits, setback requirements, parking ratios, and other development standards. It is through the implementation of the Ordinance that long-term goals and objectives of the General Plan are implemented. The County’s Zoning Map designates the Site as “LC/B-8-D” - Light Commercial (LC) combined with Building Site (B-8) and Design Control (D) Overlay Zoning Districts (refer to Figure 4.8.3, Project Vicinity Zoning).

Light Commercial Zoning District. Uses that may be allowed in the Light Commercial (LC) zoning districts (Chapter 21.18 of the Ordinance) include a broad range of light commercial uses suitable for the convenience of nearby residential areas. The proposed neighborhood shopping village would include a gourmet grocery store as the anchor of the development, supported by a mix of retail and non-retail uses that are allowed in the zoning district. Development in LC districts requires approval of a General Development Plan² by the Planning Commission when such development includes more than one use (Section 21.18.030 A.2). Development is also subject to the requirements of Chapter 21.58 (Regulations for Parking). The provisions of Chapters 21.60 (Regulations for Signs) and 21.62 (Height and Setback Exceptions) of the Ordinance are applicable to the Project.

¹ *These policies are supplemental to the goals, objectives, and policies of the Monterey County General Plan; readers are reminded to use both documents when reviewing planning matters in the Toro area. In the event of conflict between the goals, objectives, and policies of the Toro Area Plan and the countywide General Plan, as adopted on September 30, 1982, the most environmentally protective goals, objectives, and policies shall prevail (Monterey County, 1983).*

² General Development Plans shall address “the long range development and operation of the facilities including physical expansion and new development, operational changes, circulation or transportation improvements, alternative development opportunities, environmental considerations, potential mitigation of adverse environmental impacts and conformance to the policies of the area plan.” (Chapter 21.18.030 D of the Zoning Ordinance)

B-8 Overlay Zoning District. The B-8 Overlay Zone (“B-8”) is established pursuant to Monterey County Code section 21.42.030 (H), and may be placed on property to “restrict development and/or intensification of land use in areas where, due to water supply, water quality, sewage disposal capabilities, traffic impacts or similar measurable public-facility type constraints, additional development and/or intensification of land use if found to be detrimental to the health, safety, and welfare of the residents of the area, or the County as a whole.”

The B-8 was applied to the Site, and other properties in the El Toro Planning Area, by action of the Board of Supervisors in adopting Ordinance No. 03647 on November 24, 1992 (refer to Appendix J of Volume II of this EIR). The action was based on water quantity issues in the area. The Site and the adjacent service station parcel were the only commercially zoned parcels to which the B-8 was applied. At the time, the B-8 did not restrict development of the first single family house on a lot of record, or the addition or expansion of existing commercial uses provided it could be shown that such addition or expansion did not adversely affect the constraints which caused the B-8 to be applied to the Site.

In March of 1993 a status report was given to the Board regarding two of the properties to which the B-8 was applied, including the Site and another residentially zoned parcel known as the McDonald Ranch (refer to Appendix J of Volume II of this EIR). The Board referred the matter of developing commercially zoned property within the B-8 to the Planning Commission, which later that year recommended that the Board adopt an amendment to the B-8 that would permit new commercial development provided the new development had a water demand no greater than that documented for residential development (0.63 afy/unit) (refer to Appendix J of Volume II of this EIR).

In September of 1993, a hearing was held by the Board of Supervisors on the recommendation from the Planning Commission. Included for consideration were three options: 1) amend the B-8 to permit new commercial development where the development could be shown to not affect the constraints that led to the B-8 being placed on the property (the current language); 2) amend the B-8 as recommended by the Planning Commission to permit new commercial development provided the water usage was no more than would have been used by residential development; or 3) initiate a rezone to remove the B-8 designation from the property (refer to Appendix J of Volume II of this EIR). The Board rejected the amendment that would have permitted new commercial development where the water demand was no greater than that for residential development¹ and the option to remove the B-8 from the Site, and adopted the current version of the B-8 that permits new commercial development where the project does not affect the constraints that caused the B-8 to be applied to the Site. This action was taken by the adoption of Ordinance No. 3704 on September 7, 1993.

A number of reports have been prepared for the County assessing the water supply conditions in the El Toro Planning Area. In adopting Ordinance No. 3647 the Board relied in part upon the finding contained in a report prepared by Staal Garner and Dunne Inc, “Hydrogeologic Update: El Toro Area, Monterey, California” dated August 1991 (“SGD Report”). The SGD Report concluded that, “at build-out the subject areas were projected to display water supply deficits.”

¹ Had the Board adopted the Planning Commission’s recommendation, the proposed project would have a total of 1.26 afy of water available for development on the two legal lots encompassing the Site.

Further, the SGD Report's recommendations were prefaced by a statement indicating "local groundwater problems exist and would occur in additional areas unless build-out densities are reduced or reapportioned" (SGD report, p. ES2).

A follow-up report concerning the El Toro Planning Area, entitled "Additional Hydrogeologic Update, El Toro Area Monterey County, California," was prepared in February of 1996 for the Monterey County Water Resources Agency (MCWRA) by Fugro West, Inc. ("Fugro Report").

With respect to the B-8 zoning designation, the Fugro report notes that the purpose of the B-8 zone was twofold:

First, until better information was available, the Board felt it prudent to place a temporary limitation on development until it could be confirmed that such development would not result in serious overdraft and/or public health problems. Second, the "B-8" would allow time for a more long term planning approach to be used by developing and approving an allocation and distribution plan for the area, which is required under the policies in the El Toro Plan (Fugro Report, pp.1-2).

A third report to evaluate the water supply in areas designated with the B-8 was authorized by the Board of Supervisors on September 19, 2006. The report, entitled "*El Toro Groundwater Study, Monterey County, California*" ("Toro Report") was prepared for the County of Monterey Water Resources Agency by Geosyntec, Inc., and completed in July, 2007. The primary objective of the Toro Report was "to evaluate groundwater resource capacity of the El Toro Planning Area and recommend maintaining or revising the B-8 zoning overlay" (Toro Report, p. ES-2). Other objectives and tasks completed as part of the study performed for the Toro Report, and consistent with the recommendations of the Fugro Report, included "compiling water well and hydrostratigraphic information for the El Toro Planning Area; conducting aquifer testing; collecting and analyzing water samples from wells; developing a conceptual hydrogeologic model of the El Toro Planning Area; and evaluating hydrogeologic connectivity between existing subareas" (Toro Report, p. ES-2).

The Toro Report states that "Water level data compiled and reviewed for this study indicates that the primary aquifer system in the El Toro Planning Area is overdrawn. However, current and increasing rates of pumping can be sustained for decades in areas with large saturated thickness of the El Toro Primary Aquifer System because of the large amounts of groundwater in storage"¹ (Toro Report, p. ES-5). The Toro Report concludes that "[i]f long term declines in groundwater levels and reliance on groundwater storage are acceptable to the County, the B-8 zoning could be lifted in areas with large saturated thicknesses of the El Toro Primary Aquifer System where additional groundwater production is feasible for several decades. However, if County Policy does not allow overdraft conditions and mining of groundwater, the B-8 zoning should be

¹ The Toro Report states that the El Toro Planning Area "is a watershed-based planning area in Monterey County south of Salinas along the western margin of the Salinas Basin." The Study further defines the El Toro Planning Area as an area including "five designated planning subareas based on local topographic drainage divides: Calera Creek, Watson Creek, Corral de Tierra, San Benancio Gulch, and El Toro Creek." (Toro Report, p. ES-1.) These planning subareas are depicted in the Toro Report at Figure ES-4, which also portrays different areas by *Potential for Groundwater Production* and by *Estimated Saturated Thickness*.

expanded to cover the entire extent of the El Toro Primary Aquifer System”¹ (Toro Report, pp. ES-5, 6).

B-8 Overlay Zoning District Requirements – Zoning Ordinance - Chapter 21.42.030 (H).

B-8 District regulations, as amended by Ordinance N. 3704, are codified in Chapter 21.42.030 (H) of the Monterey County Code. It reads as follows:

Section 21.42.030 (H) (1):

The purpose of the “B-8” Zoning District is to restrict development and/or intensification of land use in areas where, due to water supply, water quality, sewage disposal capabilities, traffic impacts or similar measurable public-facility type constraints, additional development and/or intensification of land use if found to be detrimental to the health, safety, and welfare of the residents of the area, or the County as a whole.

For the purposes of this Section, “intensification” means the change in the use of a building site which increases the demand on the constraint(s) which caused the “B-8” District to be applied over that use existing at that time the “B-8” district is applied to the property. The “B-8” district does not affect construction of the first single family dwelling on a building site, additions to dwellings, guesthouses, non-habitable structures accessory to a dwelling use, or addition and/or expansion of existing commercial uses where such addition and/or expansion can be found to not adversely affect the constraints which caused the “B-8” District to be applied to the property.

Section 21.42.030 (H) (2):

The minimum building site shall be that which is recognized as an existing legal lot of record at the time the “B-8” Zoning District is imposed on the property, or lots that are created by a minor or standard subdivision for which an application was received by the Monterey County Planning Department prior to the imposition of the “B-8” Zoning District on the property.

Section 21.42.030 (H) (3):

Setbacks to be not less than “B-4” regulations unless otherwise indicated on parcel maps, final maps, or Sectional District Maps.

Section 21.42.030 (H) (4):

Reclassification of an area from “B-8” zoning may be considered when the constraints existing at the time of “B-8” zoning on the area zoned “B-8” no longer exists and additional development and/or intensification of land use would not be

¹ The Toro Report (Figure 7-1) delineates four classifications of groundwater potential production: good, poor, negligible and possible. The Report states that “Expansion of the B-8 zoning is recommended for areas with negligible and poor potential for groundwater production. (p.36)

detrimental to the health, safety, and welfare of the residents of the area, or the County as a whole.

Design Review (“D”) Overlay Zoning District

The purpose of the “D” Overlay Zoning District (Chapter 21.44) is “to provide regulations for the location, size, configuration, materials, and colors of structures and fences, except agricultural fences, in the appropriate areas of the County where the design review of such structures is necessary to protect public viewsheds, neighborhood character, and to assure the visual integrity of certain developments without imposing undue restriction on private property.” (Section 21.44.010) Development in D districts requires submission and approval of a Design Approval Application prior to the issuance of building permits for the construction of any structures on the Site (21.44.030A). Such application can be included as part of a Project’s overall permit requirements.

4.8.3 Methodology

Land use impacts were assessed based on the physical effects of the Project related to land use compatibility (e.g., aesthetics, hydrology and water quality, traffic and transportation) and consistency with adopted plans and regulations. Specifically, this section of the EIR addresses the potential environmental impacts related to compatibility and/or consistency of the Project with regards to the following:

- On-site land uses
- Adjacent land uses, and
- Adopted Plans and Regulations:
 - Monterey County General Plan
 - Toro Area Plan
 - Monterey County Zoning Ordinance, Title 21 (For Inland Areas)

4.8.4 Impact Significant Criteria

Significance criteria for evaluating project impacts to land use and planning conditions are from the CEQA Guidelines Appendix G. For the purposes of this EIR, the Project would represent a significant impact to land use and planning if it does one or more of the following:

Threshold 4.8.4.1 Physically divide an established community;

Threshold 4.8.4.2 Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or

Threshold 4.8.4.3 Conflict with any applicable habitat conservation plan or natural community conservation plan.

As stated in the introduction to this Land Use and Planning section of the EIR, a project's inconsistency with a policy plan or regulation is only considered significant under CEQA if such inconsistency would potentially cause physical environmental impacts. Physical impacts associated with policy conflicts are addressed in the appropriate topical sections of this EIR.

4.8.5 Project Impacts

Threshold 4.8.5.1 Physically divide an established community

The approximately 11 acre Site, located at the intersection of SR-68 and Corral de Tierra Road, is the only remaining undeveloped area zoned for commercial use along SR-68 and in the area of the Toro Area Plan. The Site is bounded on the west by Corral de Tierra Road, on the north by SR-68, on the east by a residential condominium community, and on the south by a single-family residential area. West of Corral de Tierra Road is another residential area as well as a commercial area consisting of a gasoline station, convenience market, and several vacant buildings. Across SR-68 to the north is a church and open space land of the former Fort Ord Military Reservation. In the northwest corner adjacent to the Site is a small parcel with a non-operating service station and an adjacent building currently functioning as a real estate office.

The Site, zoned light commercial, is generally surrounded by established low and medium-density residential areas. The Project would add neighborhood-serving uses into an area that is already developed at various residential densities but under-served by retail services. The proposed commercial development could be a benefit to the residential areas within the Toro Area Plan by providing basic services closer to the existing residences, and could thereby reduce traffic impacts and air quality impacts in the project vicinity and on SR-68. Therefore, the Project would not physically divide the existing Corral de Tierra community. The Project would not result in a significant impact related to the physical division of an established community, and no mitigation is required.

Threshold 4.8.5.2 Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect

Applicable land use polices from the Monterey County General Plan and the Toro Area Plan are stated below. Please refer to Table 4.8.B, Policy Consistency Analysis Summary, for a summary of the Project's consistency with all relevant planning policies contained in these planning documents related to additional topics (e.g., aesthetics, traffic). Policy consistency determinations (i.e., consistent, inconsistent, or partially consistent) are highlighted within the framework of the table. Please note that policy-related inconsistencies are determined to not result in a direct identifiable *physical* environmental impact requiring mitigation.

GENERAL PLAN POLICIES

Policy 3.1.1 Erosion control procedures shall be established and enforced for all private and public construction and grading projects.

Consistency Analysis: The Site is mostly flat. Minimal grading of the hillside along the eastern boundary of the Site would be required, behind Retail Building No. 9, for construction of vehicular circulation areas proposed along the boundary of the property. Other grading (excavation) would be required for the undergrounding of utilities and construction of the underground water retention facilities. Grading and the overall construction of the Project would be subject to all requirements of the Grading and Erosion Control Ordinances addressing erosion and water quality including runoff and sedimentation. Therefore the Project is consistent with Policy 3.1.1.

Policy 12.1.1: The County shall take such action as necessary to compile information on the location and significance of its archaeological resources so this information may be incorporated into the environmental or developmental review process.

Consistency Analysis: Based on the background research and field survey conducted for the Project, no known significant archaeological resources were found on the Site. Therefore, the Project is consistent with Policy 12.1.1.

Policy 12.1.3: All proposed development, including land division, within high sensitivity zones shall require an archaeological field inspection prior to project approval.

Consistency Analysis: The Site is located in a high archaeological sensitivity zone per Figure 6 of the Toro Area Plan Inventory and Analysis. Accordingly a “Preliminary Archaeological Reconnaissance” (Report) was conducted for the Site. The report includes background research of the files at the Northwest Regional Information Center of the California Historical Resources Information System at Sonoma State University; as well as a field reconnaissance. The report concludes that “the project area does not contain potentially significant prehistoric or historic cultural resources.” The report states the possibility that unidentified resources be found during construction and recommends that construction be halted within 50 meters of any find until it can be evaluated and mitigation measures formulated if the find is determined to be significant. The Project would be conditioned accordingly. Therefore, the Project is consistent with Policy 12.1.3.

Policy 12.1.4: All major projects (i.e., 2.5 acres or more) that are proposed for moderate sensitivity zones, including land division, shall require an archaeological field inspection prior to project approval.

Consistency Analysis: The Site is located in a high archaeological sensitivity zone per Figure 6 of the Toro Area Plan Inventory and Analysis. Accordingly a “Preliminary Archaeological Reconnaissance” (Report) was conducted for the Site. The report includes background research of the files at the Northwest Regional Information Center of the California Historical Resources Information System at Sonoma State University; as well as a field reconnaissance. The report concludes that “the project area does not contain potentially significant prehistoric or historic cultural resources.” The report states the possibility that unidentified resources be found during construction and recommends that

construction be halted within 50 meters of any find until it can be evaluated and mitigation measures formulated if the find is determined to be significant. The Project would be conditioned accordingly. Therefore, the Project is consistent with Policy 12.1.4.

Policy 12.1.6: Where development could adversely affect archaeological resources, reasonable mitigation procedures shall be required prior to project approval.

Consistency Analysis: The Site is located in a high archaeological sensitivity zone per Figure 6 of the Toro Area Plan Inventory and Analysis. Accordingly a “Preliminary Archaeological Reconnaissance” (Report) was conducted for the Site. The report includes background research of the files at the Northwest Regional Information Center of the California Historical Resources Information System at Sonoma State University; as well as a field reconnaissance. The report concludes that “the project area does not contain potentially significant prehistoric or historic cultural resources.” The report states the possibility that unidentified resources be found during construction and recommends that construction be halted within 50 meters of any find until it can be evaluated and mitigation measures formulated if the find is determined to be significant. The Project would be conditioned accordingly. Therefore, the Project is consistent with Policy 12.1.6.

Policy 12.1.7: All available measures, including purchase of archaeological easements, dedication to the County, tax relief, purchase of development rights, consideration of reasonable project alternatives, etc., shall be explored to avoid development on sensitive archaeological sites.

Consistency Analysis: The Site is located in a high archaeological sensitivity zone per Figure 6 of the Toro Area Plan Inventory and Analysis. Accordingly a “Preliminary Archaeological Reconnaissance” (Report) was conducted for the site. The report includes background research of the files at the Northwest Regional Information Center of the California Historical Resources Information System at Sonoma State University; as well as a field reconnaissance. The report concludes that “the project area does not contain potentially significant prehistoric or historic cultural resources.” The report states the possibility that unidentified resources be found during construction and recommends that construction be halted within 50 meters of any find until it can be evaluated and mitigation measures formulated if the find is determined to be significant. The Project would be conditioned accordingly. Therefore, the Project is not located on a sensitive archaeological site and is consistent with Policy 12.1.7.

Policy 13.3.1 Lots shall be oriented so structures may maximize the energy gains from solar sources and minimize energy losses where possible.

Consistency Analysis: The Site is a mostly elongated parcel located in a southwesterly-northeasterly direction along Corral de Tierra Road, with a wider area towards the intersection with SR-68 generally oriented towards the south. The buildings proposed in this part of the Site (Retail Building Nos. 1-8) located on proposed Lot Nos. 1-3, are mostly oriented towards the south with opportunity to access solar energy. The shape and orientation of the rest of the parcel does not provide an opportunity for a full southward orientation of buildings in this area. The Project would be built to current codes and standards relative to energy savings and efficiency. The final building location and

design would be required to contain measures that advance the goal of energy efficiency and green building targets such as reorientation of buildings to maximize energy gains from solar sources and minimize energy losses where possible (Mitigation Measure 4.13.3). Therefore, the Project would be consistent with Policy 13.3.1.

Policy 13.3.3 Plans for major projects shall address opportunities for reducing energy used for transportation, including pedestrian and bicycle pathways, access to transit, and roadway design.

Consistency Analysis: The Project provides sidewalks along the site frontage on Corral de Tierra Road and SR-68. The proposed sidewalks, along with the existing crosswalks at the SR-68/Corral de Tierra intersection, would provide access to the bus stops located at the Corral de Tierra Road/SR-68 intersection. The Project is automobile-oriented and does not include any features providing direct access to transit. Therefore, the Project is partially consistent with Policy 13.3.3. Project design changes addressed in mitigation measures in the Aesthetics and Traffic and Transportation Chapters of the EIR, which require the provision of expanded pedestrian areas, the provision of a transit stop on the site frontage on SR-68, and the provision of a bike lane on Corral de Tierra Road, would increase the opportunities for reduced energy used for transportation and make the project fully consistent with this policy.

Policy 13.4.3 Building designs which reduce demands for artificial heating, cooling, ventilation, and lighting shall be encouraged.

Consistency Analysis: While the Project would be built to current codes and standards, building designs associated with the Project do not contain features that, where possible, reduce demands for artificial heating, cooling, ventilation, and lighting beyond those code requirements. The final building location and building design would be required to contain construction measures that advance the goal of energy efficiency and green building targets, such as potential reorientation of buildings to maximize energy gains from solar sources and minimize energy losses where possible (Mitigation Measure 4.13.3). Project design changes required as mitigation measures would make the project consistent with Policy 13.4.3.

Policy 17.3.4: The County shall require all new development to have adequate water available for fire suppression. Water availability can be provided from a conventional water system; from an approved alternative water system if within 300 feet of a habitable structure; by the fire fighting equipment of the fire district within which the property is located; or by an individual water storage facility- -water tank, swimming pool, etc. - -on the property itself. The fire and planning departments shall determine the adequacy and location of individual water storage to be provided.

Consistency Analysis: There are currently three fire hydrants on the subject property along with associated water lines and water supply which would serve the Site. The existing water storage provided by the California-American Water Company is adequate to serve the Project provided that the largest building is of at least Type IIIA construction and the fire-flow calculation area of the largest building or building portion is not more than 39,700 sf. The largest building shall be

considered as meeting this requirement if a portion of the building is separated by fire walls without openings that are constructed in accordance with the California Building Code. In the event the Type IIIA-construction building area exceeds 39,700 sf, additional water storage would be required per California Fire Code, Appendix B. The Project would be required to meet these standards as part of the building permit plan review. Therefore, the Project is consistent with Policy 17.3.4.

Policy 17.4.12: **A zone which can inhibit the spread of wildland fire shall be required of new development in fire hazard areas to protect development. Such zones should consider irrigated greenbelts, streets, and fuel modification zones in addition to other suitable methods that may be used. The County should not accept dedications of any open space lands required as part of this fire prevention zone.**

Consistency Analysis: The Site is located in an urban/agricultural and moderate fire hazard area in the Fire Hazards Map (refer to Figure 7 of the Toro Area Plan). The Site is bounded on the north by SR-68; on the west by Corral de Tierra Road which provide buffer to areas north and west of the site. The Project includes a vehicular circulation area along the eastern boundary of the property which would provide a buffer to the residential land uses to the south and east of the site. Therefore, the Project is consistent with Policy 17.4.12.

Policy 20.1.2 **The County should encourage the use of mass transit, bicycles and pedestrian modes of transportation as an alternative to automobiles in its land use plans.**

Consistency Analysis: The Project would provide sidewalks along the site frontage on Corral de Tierra Road and SR-68. The proposed sidewalks, along with the existing crosswalks at the SR-68/Corral de Tierra intersection, would provide access to the existing bus stops located on both sides of the Corral de Tierra Road/SR-68 intersection. The Project is automobile-oriented and does not include any features providing direct access to transit. Therefore, the Project is partially consistent with Policy 13.3.3. Project design changes addressed as mitigation measures in the Aesthetics and Traffic and Transportation Chapters of the EIR, which require the provision of a transit stop on the site frontage on SR-68, expanded pedestrian areas connecting the transit stop to the shopping village, and the provision of a bike lane on Corral de Tierra Road would make the Project fully consistent with this policy.

Policy 20.1.4 **The County should concentrate commercial development in designated centers that may be more easily served by public transit.**

Consistency Analysis: The Site is designated for commercial development in the Toro Area Plan and is zoned "Light Commercial" in the Zoning Ordinance. The assigned land use and zoning designations of the property took into account its location at the intersection of two major roads in the area with potential direct access to public transit. Two bus stops are located nearby the Site, including one on the north side of SR-68, which would provide access to the Project through public transit. The Project includes sidewalks along the site frontage on Corral de Tierra Road and SR-68 which along with the existing crosswalks at the SR-68/Corral de Tierra intersection would provide access to the bus stops. Recommended project design changes in the Aesthetics and Traffic and Transportation

Chapters of the EIR require the provision of expanded pedestrian areas and the provision of a transit stop on the site frontage on SR-68. Therefore, the Project is consistent with Policy 20.1.4.

Policy 20.1.5 The County shall adopt a land use plan which promotes mixed land uses to reduce the need for vehicular travel.

Consistency Analysis: The Site is designated for commercial development in the Toro Area Plan and is zoned “Light Commercial” in the Zoning Ordinance. The land use and zoning designations of the property took into account the Site’s location at the intersection of two major roads in the area, and the need to provide access to basic services to residents in the Toro Area who currently have to travel further to obtain those services. The location and availability of basic services at the Site would reduce the need for longer vehicular travel for residents in the area of the Toro Area Plan. The designation of a commercial site at this location was included in the Toro Area Plan to be consistent with Policy 20.1.5. The Site is generally surrounded by established low and medium-density residential areas. The Project would add basic neighborhood services closer to the existing residences in an area that is already developed at various residential densities and potentially reducing vehicular travel. Therefore, the Project would be consistent with Policy 20.1.5.

Policy 20.2.1 The County shall condition approval of all new industrial and commercial development, including major modifications as defined by the Uniform Building Code, on meeting, as a minimum, federal and state ambient air quality standards and the rules and regulations of the Monterey Bay Unified Air Pollution Control District.

Consistency Analysis: As proposed, the project would be consistent with the minimum federal and state ambient air quality standards and with the MBUAPCD 2008 Air Quality Management Plan. The final building plans would be required to meet and possibly exceed minimum standards (Mitigation Measures 4.13.3 and 4.13.6). Therefore, the Project would be consistent with Policy 20.2.1.

Policy 20.2.3 The County shall continue to support air quality monitoring and air pollution control strategies and enforcement by the Monterey Bay Unified Air Pollution Control District.

Consistency Analysis: As proposed, the Project would be consistent with the MBUAPCD 2008 Air Quality Management Plan and would not substantially contribute to a projected or existing air quality violation within the air basin. Therefore, the Project is consistent with Policy 20.2.3.

Policy 20.2.5 The County shall encourage the use of the best available control technology as defined in the most current Monterey Bay Unified Air Pollution Control District rules and regulations in reducing air pollution emissions.

Consistency Analysis: As required by the CCAA, the MBUAPCD adopted the 1991 AQMP for the Monterey Bay Region. The AQMP addressed attainment of the State AAQS for ozone. The AQMP recommended adoption of 20 measures to control emissions of volatile organic compound (VOC) from stationary sources, five measures for stationary sources of NO_x, and eight transportation

measures to reduce ozone precursor emissions through reduced vehicle miles traveled. Since the 1991 AQMP was adopted, control requirements have been updated, and the plan was revised in 1994, 1997, 2000, 2004 and 2008 to reflect these and other changes in control measures. Furthermore, the MBUAPCD has enacted several rules designed to limit emissions from construction activities. They include Rule 400 for Visible Emissions, Rule 403 for Fugitive Dust, Rule 425 for Cutback Asphalt and Rule 426 for Architectural Coatings. The Project would be required to comply with all of MBUAPCD's rules and regulations, including the use of best available control technologies, to reduce air pollution emissions associated with the Project's development and operation. Therefore, the Project is consistent with Policy 20.2.5.

Policy 21.2.3 **Residential, commercial, and industrial developments which require 20 or more parking spaces shall include oil, grease, and silt traps, or other suitable means, as approved by the Monterey County Surveyor, to protect water quality; a condition of maintenance and operation shall be placed upon the development.**

Consistency Analysis: As currently designed, the Project would require more than 500 parking spaces. As a standard condition of approval, the Project would be required to include oil, grease and silt traps as part of the site design. Therefore, the Project would be consistent with Policy 21.2.3.

Policy 25.1.2 **The County shall promote economic development which is consistent with General Plan goals such as environmental, scenic, natural resource conservation, and growth management.**

Consistency Analysis: The Site is designated as Commercial in the Land Use Plan of the Toro Area Plan and is zoned for light commercial uses. Because the Site is zoned commercial and has been intended for commercial development as part of the County's land use plan and growth projections, the Project is consistent with the County's growth management plans. Development of the Project would result in a degree of economic development from actual construction and from the operation of businesses.

The Project would add a neighborhood-serving facility that would provide services to a significant residential area under-served by commercial/retail development. The proposed commercial development would provide a center of commerce closer to the existing residences and would thereby reduce the need for residents to travel on SR-68 to obtain basic needs. Implementation of mitigation measures and project changes recommended throughout the EIR would result in development of a Project that is consistent with this policy as well as with other policies of the General Plan and the Toro Area Plan.

Policy 25.1.3 **The County shall evaluate and respond to long-range infrastructure needs for existing and future residential, commercial, and industrial development.**

Consistency Analysis: The County has identified road infrastructure improvements in Policy 39.1.1.2 (T) of the Toro Area Plan to implement this policy of the General Plan. These include "Improvement to SR-68 intersections, replacement of the Toro Creek bridge, construction of alternate passing lanes,

public transit roadway improvements, and improved bicycle safety measures.” Some of these improvements have been built since the adoption of the General Plan and Toro Area Plan –including replacement of the Toro Creek bridge, and improvements at the Corral de Tierra, Los Laureles Road, Highway 218 and Ryan Ranch Road intersections with SR-68. Additional improvements to the Corral de Tierra and San Benancio Road intersections are in the environmental review and planning stages.

The County has adopted the Transportation Agency for Monterey County Regional Development Impact Fee Program to continue gathering funds for the completion of the planned road improvements. Development of the Project, if approved, would require the payment of fees consistent with the Regional Development Impact Fee Program. Furthermore, development of the Project would require infrastructure improvements to SR-68/Corral de Tierra Road as identified under in Chapter 4.12 Traffic and Transportation, of the EIR. Implementation of these required improvements would make the Project consistent with Policy 25.1.3.

Policy 26.1.1 The County, in coordination with the cities, shall manage the type, location, timing, and intensity of growth in the unincorporated area.

Consistency Analysis: The Site, located in the unincorporated Toro Area, has already been designated for light commercial uses according to the County Zoning Ordinance. Therefore the Project is consistent with Policy 26.1.1.

Policy 26.1.12 In order to preserve its open space and rural character, the County shall encourage the voluntary restriction of development through dedication of scenic or conservation easements, transfer of development rights and other appropriate techniques.

Consistency Analysis: The Site is a flat property designated for commercial development. The Project is designed to maintain a rural character; therefore a scenic easement would not be necessary and is not required by this policy. Therefore, the Project is consistent with Policy 26.1.12.

Policy 26.1.17 The placement of off-site advertising shall be discouraged due to visual clutter, scenic intrusion, and safety concerns, and my be considered only within the County’s retail, general commercial, and industrial zoning districts.

Consistency Analysis: The Project would be located on commercially designated property. The Project does not include any off-site advertising. All signage would be subject to the Sign Regulations set forth in Chapter 21.60 of the Monterey County Zoning Ordinance. A sign plan consistent with those regulations would be required as a condition of project approval prior to construction. Therefore, the Project would be consistent with Policy 26.1.17.

Policy 26.1.18 **Development proposals which are consistent with the land use plan designation (Figures 13a, 13b, 13c) may be denied due to factors including, but not limited to, lack of public facilities and services, infrastructure phasing problems, water availability and sewage problems, or presence of environmental and/or plan policy constraints which cannot be mitigated.**

Consistency Analysis: The proposed neighborhood retail village would be located on land designated for commercial uses. Therefore, the development proposal for the subject property is consistent with the commercial land use designation by both the Monterey County General Plan and the Toro Area Plan. Approval of any development on the subject site must include a finding that all needed infrastructure is available or that conditions of approval and/or mitigation measures would provide needed additional infrastructure. Any finding that infrastructure is not available or that infrastructure can not be made adequate through conditions of approval and/or mitigation measures must be supported by appropriate evidence to recommend denial of the project. Therefore, the Project is consistent with Policy 26.1.18.

Policy 27.3.1 **The County shall discourage those new land use activities which are potential nuisances and/or hazards within and in close proximity to residential areas.**

Consistency Analysis: The Project proposes commercial/retail land use activities located within close proximity to residential areas. While the intent of the Project is to provide services to the existing residential areas, it is possible that the Project could create nuisances related to the generation of construction and operational noise sources, particularly during night time hours. Additional nuisances to nearby residential areas may result from vehicular traffic going in and out of the site on Corral de Tierra Road during and after construction of the Project. A Construction Management Plan would be required limiting construction and material delivery times to day hours; additional measures may include the direction of construction equipment from nearby residences, utilization of sound muffling equipment on all construction vehicles. A proposed permanent loading dock for the market area and delivery areas for other buildings would be located along the eastern boundary of the Site shielded from nearby residences. On-street improvements and design of vehicular access points on Corral de Tierra Road would be required that maximize vehicular flow therefore reducing potential levels of nuisance to the small number of residences located nearby. On-site uses would be limited to those uses that would not generate noise or other type of nuisances. Therefore, the Project would be consistent with Policy 27.3.1.

Policy 28.1.5 **Adequate provision shall be made for professional offices, where appropriate.**

Consistency Analysis: The Site is zoned as “Light Commercial.” The regulations of this zoning district allow for development of offices (Chapter 21.18.050 P of the Zoning Ordinance). The Project includes an approximately 12,338 sf, two-story office building located on proposed Lot 7 that would account for almost 10 percent of the project’s total 126,523 sf (refer to Figure 3.3 Vesting Tentative Map, in Chapter 3.0). Offices are consistent with the commercial land use and zoning designations. Provision of professional offices at the Site could provide adequate related services nonexistent for the residents in the area of the Toro Area Plan in which case, would be consistent with Policy 28.1.5.

Policy 28.2.1 **In areas of anticipated commercial growth and expansion, provision shall be made for designation of access routes, street and road rights-of-way, off street parking, and pedestrian walkways.**

Consistency Analysis: The Site was designated for commercial development with SR-68 and Corral de Tierra Road as existing and convenient access routes. The Project includes 508 off street parking spaces and pedestrian areas along Corral de Tierra Road (refer to Figure 3.3). Specific truck and delivery entry points, street and road rights-of-way and/or additional pedestrian walkways would be required in compliance with this and other policies. Additional infrastructure improvements for the SR-68/Corral de Tierra Road intersection as well as for the site's frontages on Corral de Tierra Road and SR-68 would be required as conditions of approval or mitigation measures (refer to Chapter 4.12, Traffic and Transportation, of the EIR for a complete discussion of the additional infrastructure improvements). Therefore, the Project would be consistent with Policy 28.2.1.

Policy 28.2.2 **Commercial areas shall be designated in a manner which offers convenient access.**

Consistency Analysis: The Project would be located on a site designated for commercial use adjacent to SR-68, one of the County's major transportation corridors, and adjacent to Corral de Tierra Road which is one of the two main access points to the Toro area. This location provides convenient access. Therefore, development of the Project would be consistent with Policy 28.2.2.

Policy 28.2.3 **Provision shall be made, wherever possible for separate facilities adequate for the movement of pedestrians, transit vehicles, automobiles, and service vehicles.**

Consistency Analysis: The Project, bounded on the north by SR-68 and on the west by Corral de Tierra Road, provides pedestrian accessibility along Corral de Tierra Road. The Project includes significant pedestrian connectivity internally. The Project does not include any features providing direct access to transit. Therefore, the Project is partially consistent with Policy 28.2.3. Recommended project design changes in the Aesthetics and Traffic and Transportation Chapters of the EIR, which require the provision of expanded pedestrian areas, the provision of transit stop on the site frontage on SR-68, as well as changes to the southernmost project entrance on Corral de Tierra Road required to provide adequate entrance for service vehicles, would make the Project consistent with this Policy.

Policy 34.1.3 **Wherever possible, open space lands provided as part of a development project should be integrated into an area wide open space network.**

Consistency Analysis: The Site is a flat property designated for commercial development. The Site is a rural property designated for commercial development. The Site is partially abutted to the east and southeast by a designated scenic easement (APN 161-571-001-000); this easement buffers the Site from the residential development located further east from the property and provide sufficient open space between the Project and those uses. A hillside separates the southernmost portion of the Site from scattered residential development in that area. The scenic easement area and the hillside provide

an adequate open space network in the area which would not be affected by the project. The Project does not include designated open space areas since no additional open space is necessary for connectivity. Therefore, the Project is consistent with Policy 34.1.3.

Policy 34.1.4 **Open space areas should be used as a buffer between land uses of different types and/or intensities.**

Consistency Analysis: The Site is bounded on the west by Corral de Tierra Road, on the north by SR-68, and the east and south by residential communities. The Site is a rural property abutted by open space to the east and southeast; this open space buffers the Site from the residential development in those areas and provide sufficient buffer for those areas. The Project is consistent with Policy 34.1.4 as no additional open space would be required.

Policy 37.2.1 **Transportation demands of proposed development shall not exceed an acceptable level of service for existing transportation facilities, unless appropriate increases in capacities are provided for.**

Consistency Analysis: With implementation of the Project, the Level of Service (LOS) at the intersection of Corral de Tierra Road and SR-68 would deteriorate to below an acceptable LOS. Required project changes and mitigation measures in Section 4.12.5 and 4.12.8 of the EIR, and payment of the Regional Development Impact Fee (RDIF) would improve overall travel time across the highway corridor. Future roadway improvements planned in the RDIF Program would ultimately increase roadway capacity along the SR-68 corridor. Therefore, the Project is consistent with Policy 37.2.1.

Policy 37.4.1 **The County shall encourage overall land use patterns which reduce the need to travel.**

Consistency Analysis: The Project proposes to add neighborhood-serving uses into an area that is already developed at various residential densities but under-served by retail and neighborhood-serving uses. The Project would reduce the need for the residents of the residential areas in the Toro Area Plan to travel to Salinas or the Monterey Peninsula to obtain those services, thereby reducing the need to travel along the SR-68 corridor. Therefore, the Project is consistent with Policy 37.4.1.

Policy 39.1.3 **Rights-of-way needed for new roads or expansion of existing roads shall be planned for; land uses that would preclude the timely development of such rights-of-way shall be prohibited.**

Consistency Analysis: Development of the Project would not preclude planned improvements for the SR-68/Corral de Tierra Road intersection. Additional frontage improvements for roadway, bicycle and pedestrian facilities would be required (refer to improvements identified in Chapter 4.12 Traffic and Transportation). Therefore, implementation of these recommended changes would make the Project consistent with Policy 39.1.3.

Policy 39.4.2 **Land uses generating significant and regular goods movement shall be provided with easy access to the highways and arterials most capable of carrying large trucks; where feasible, this access shall be complemented by rail access.**

Consistency Analysis: The Project, which could generate significant and regular movement of goods, is located adjacent to one of the County's major transportation corridors, SR-68, capable of carrying large trucks. Therefore, the Project is consistent with Policy 39.4.2.

Policy 40.2.1: **Additional sensitive treatment provisions shall be employed within the scenic corridor, including placement of utilities underground, where feasible; architectural and landscape controls; outdoor advertising restrictions; encouragement of area native plants, especially on public lands and dedicated open spaces; and cooperative landscape programs with adjoining public and private open space lands.**

Consistency Analysis: The northern and western edges of the Site's front on the SR-68 State-designated Scenic Highway Corridor and the Corral de Tierra Road County-designated Scenic Route respectively. All utilities would be required to be underground as standard County requirement. The architectural design includes some of the features and characteristics of the ranch and farm structures in this rural area. The preliminary landscaping plans include a level of landscaping (trees) along the scenic corridors; additional landscape controls such as mounding and/or project design changes would be required to enlarge proposed landscaping areas for the purpose of ameliorating impacts to the scenic corridor, and to make the Project consistent with the character of the scenic corridors. Use of native drought-tolerant plant species is required by County ordinance. The Project does not include plans for outdoor advertising. A sign plan would be required for review and approval by the RMA-Planning Department; all signage would be required to be unobtrusive and consistent with the character of the scenic corridors. No cooperative landscape program with adjoining public and private open space lands is needed as the Site is well buffered from residential areas. The Project would be consistent with Policy 40.2.1 with the implementation of these additional measures.

Policy 40.2.2: **Land use controls shall be applied or retained to protect the scenic corridor and to encourage sensitive selection of sites and open space preservation. Where land is designated for development at a density which, should maximum permissible development occur, would diminish scenic quality, the landowner shall be encouraged to voluntarily dedicate a scenic easement to protect the scenic corridor.**

Consistency Analysis: The northern and western edges of the Project would fall respectively into the SR-68 or County-designated Scenic Route (Corral de Tierra Road) scenic view corridors. The Site is a flat property designated for commercial development. The Project is designed architecturally to maintain a rural character. As discussed in Chapter 4.1 Aesthetic Resources of the EIR development of the Project would have a moderate and moderately high impact on the scenic quality of the Site vis-à-vis the scenic corridors. Recommended mitigation measures required in Chapter 4.1 Aesthetics, would reduce impacts to a level where scenic easements are not required to maintain the quality of the scenic corridors. Therefore, the Project would be consistent with Policy 40.2.2.

Policy 41.1.2 **Developers of major traffic generating activities shall provide fixed transit facilities such as bus shelters and pullouts, consistent with anticipated demand.**

Consistency Analysis: As part of the implementation of the Project, the County would work closely with the applicant to add a bus stop or turn out area along SR-68 with an improved pedestrian connection between the bus stop and the shopping village. Therefore, the Project would be consistent with Policy 41.1.2.

Policy 53.1.4 **New development shall be required to connect to existing water service providers that are public utilities, where feasible.**

Consistency Analysis: The Project would connect to the existing water service provider, Ambler Park Water Company, a public water system owned and operated by the California American Water Company. Therefore, the Project is consistent with Policy 53.1.4.

Policy 56.1.1 **The County shall, when planning development, provide for utility corridor rights-of-way.**

Consistency Analysis: According to the Vesting Tentative Map sufficient utility easements have been provided to support the Project. Additional utility easements may be required upon submission of final development plans. Therefore, the Project is consistent with Policy 56.1.1.

TORO AREA PLAN POLICIES

Policy 7.2.1 (T) **Landowners and developers shall be encouraged to preserve the integrity of existing terrain and natural vegetation in visually sensitive areas such as hillsides and ridges.**

Consistency Analysis: A significant portion of the Project is located in the Critical Viewshed and areas of Visual Sensitivity designated in the “Visual Sensitivity and Scenic Highways” map of the Toro Area Plan (refer to Figure 9 in the Toro Area Plan). While the proposed Project would convert an existing mostly flat site containing annual grasslands into a shopping center, the Project would not significantly alter the topography of the Site or impact the surrounding hillsides and ridges. Therefore, the Project is consistent with Policy 7.2.1.

Policy 7.2.2 (T) **Native and native compatible species, especially drought resistant species, shall be utilized to the extent possible in fulfilling landscaping requirements imposed as conditions of discretionary permits.**

Consistency Analysis: The proposed landscape plan includes a nominal amount of native species for the replacement of trees and other existing vegetation to be removed. Final landscaping plans would be required to include native, drought resistant plant species. The Project is partially consistent with Policy 7.2.2 (T) and would be fully consistent with implementation of required conditions of approval regarding landscaping.

Policy 26.1.4.3 (T) **A standard subdivision map and/or vesting tentative and/or Preliminary Project Review Subdivision map application for either a standard subdivision or minor subdivision shall not be approved until:**

- 1) An applicant provides evidence of an assured long-term water supply in terms of yield and quality for all lots which are to be created through subdivision. A recommendation on a water supply shall be made to the decision making body by the County’s Health Officer and the General Manager of the Water Resources Agency, or their respective designees.**
- 2) The applicant provides proof that the water supply to serve the lots meets both the water quality and quantity standards as set forth in Title 22 of the California Code of Regulations, and Chapters 15.04 and 15.08 of the Monterey County Code subject to the review and recommendation by the County Health Officer to the decision making body.**

Consistency Analysis: The Project includes the subdivision of two existing parcels into seven parcels. Because the Project is located in an overdrafted groundwater basin and its development would result in a net water use deficit, the Project would not meet the requirements of Title 19. Therefore, the subdivision component of the Project would not be consistent with Policy 26.1.4.3 (T) (refer to Chapter 4.7.2 of this EIR for additional discussion).

Policy 26.1.6.1 (T): **Within areas of visual sensitivity as indicated on the Toro Visual Sensitivity Map, no development shall be permitted without a finding by the Board of Supervisors or its designee that such development will not adversely affect the natural scenic beauty of the area. Additionally, areas of visual sensitivity shall be reviewed critically for landscaping and building design and sighting which will enhance the scenic value of the area.**

Consistency Analysis: Significant portions of the Site are designated as “Areas of Visual Sensitivity” and “Critical Viewshed” in the “Visual Sensitivity and Scenic Highways” Map of the Toro Area Plan (refer to Figure 9 of the Toro Area Plan and Figure 4.1.3 of the EIR). The conclusions of the visual impact analysis of this EIR (refer to Chapter 4.1 Aesthetics) are that the Project, prior to mitigation, would have potentially significant impacts on the designated scenic corridors on SR-68 and Corral de Tierra Road. Mitigation measures in Chapter 4.1, Aesthetics, would reduce those impacts to less than significant levels. Requirement and implementation of the mitigation measures could be used as evidence to support the finding required by Policy 26.1.6.1 (T) should the Project be approved. A finding to the contrary would result in denial of the elements of the Project proposed in visual sensitivity areas or significant redesign that would allow the making of the finding. Therefore, if approved, the Project would be consistent with Policy 26.1.6.1 (T).

Policy 26.1.20.1 (T): **Lighting of outdoor areas shall be minimized and carefully controlled to preserve the quality of darkness. Street lighting shall be as unobtrusive as practicable and shall be consistent in intensity throughout the Toro Area.**

Consistency Analysis: The conceptual lighting plan (refer to Figure 3.9) includes light poles and cut-off lighting fixtures throughout the Project which would eliminate night sky glow; poles and fixtures would blend with the architectural design theme. The lighting plan includes high pressure sodium light bulbs similar to the light bulbs used by Caltrans on street lighting and which reflect less glare than other type of light bulbs. Parking lighting would be the minimum for the size of the parking area. The applicant would be required to submit a detailed lighting plan for County review and approval in accordance with County lighting policies and standards. The final lighting plan would be required to include full cut-off and to be the least obtrusive possible for the location and the type of project. Therefore, the Project would be fully consistent with Policy 26.1.20.1.

Policy 39.1.1.1 (T): **The County shall be encouraged to work with the state, local agencies and citizens groups to alleviate traffic congestion on, and still maintain the scenic beauty of, Highway 68. With the goal of eventually constructing a scenic four-lane divided highway, the County shall support the following interim measures¹:**
5. construction of bus stops, pull-outs, and shelters where needed.

Consistency Analysis: It is anticipated that the Project would generate an increase in the number of vehicle trips to the Site for the proposed commercial/retail services. In addition, it is anticipated that the Project would also generate additional demand for transit in an area that currently has limited transit services. The Project (refer to Figure 3.3) does not include any fixed transit facilities such as bus stops, bus shelters, or pull-outs to handle the anticipated demand. Project changes required in Chapter 4.1, Aesthetics, to mitigate visual impacts and project changes required in Chapter 4.12, Traffic and Transportation, to comply with other policy requirements, would make the Project consistent with Caltrans' and the County's design standards and would make the Project consistent with Policy 39.1.1.1 (T).

Policy 39.1.1.3 (T): **The County shall require significant financial contributions from each new subdivision in the Toro Planning Area in order to expedite funding and construction of Highway 68.**

Consistency Analysis: The Project includes the subdivision of the two existing lots of record into seven parcels. As stated above (refer to discussion under Policy 26.1.4.3) the subdivision component of the Project is not consistent with certain requirements of the County Code and cannot be approved; therefore policy 39.1.1.3 (T) would not apply to the Project. However, should this component of the Project be approved, it would be subject to payment of fees as determined by the Public Works Department consistent with the requirements of the policy. These fees shall be used to fund construction of improvement projects on SR-68. The payment of fees, if required, would make the application consistent with Policy 39.1.1.3 (T).

¹ Four other interim measures are listed under this Policy in the Area Plan which are not listed here as they do not apply to the Project.

Policy 39.2.2.1 (T) Improvements to Corral de Tierra and San Benancio Roads shall be designed to accommodate bicycles, horses, and people.

Consistency Analysis: The Project includes a pedestrian path along Corral de Tierra road but does not include areas for bicycles or horses. The Project also includes minimal sidewalk areas along SR-68. Therefore, the Project is partially consistent with this policy. Mitigation measures required in the Aesthetic and Traffic and Transportation Chapters of the EIR would make the Project consistent with Policy 39.2.2.1 (T) and also consistent with the provisions of the 2008 Monterey County General Bikeways Plan.

Policy 39.2.2.2 (T) The County shall require developers to make safety improvements to Corral de Tierra Road with first priority given to pedestrian, equestrian, and bicycle uses. Road improvements such as widening or straightening which may lead to increase vehicle speeds shall be discouraged.

Consistency Analysis: Road improvements along Corral de Tierra Road required by the Department of Public Works under Mitigation Measure 4.12.4 would assure compliance with this policy and with the provisions of the 2008 Monterey County Bikeways Plan.

Policy 40.2.4 (T) The County shall require a 100 foot building setback on all parcels adjacent to County and State scenic routes. The 100 foot setback will also apply to areas designated on the Toro Visual Sensitivity Map (Toro Area Plan, Figure 9) as critical viewshed. This setback is established without causing existing structures to become nonconforming and without rendering existing lots of record unbuildable. Critical viewshed areas shall also have open space zoning applied to the 100 foot setback area.

Consistency Analysis: The Site includes two lots of record (refer to Table 3.A) located on a corner bounded on the north by SR-68, a State-designated Scenic Highway, and on the west by Corral de Tierra Road, a County-designated Scenic Route. Existing Lot 1 wraps around a separate parcel containing a temporarily closed service station. This portion of the Site has frontages on both SR-68 and Corral de Tierra Road; the portion fronting on Corral de Tierra Road is located partially in an area designated as critical viewshed (refer to Figure 4.1.4). Existing Lot 2 fronts on Corral de Tierra Road and is located completely within the critical viewshed area (refer to Figure 4.1.4). The designated critical viewshed on the site accounts for approximately two thirds of the total site area.

Policy 40.2.4 (T) provides for a 100-foot building setback along the frontage on both SR-68 and Corral de Tierra Road and within the areas designated as critical viewshed; and would require Open Space zoning to be applied to the area within the 100-foot setback. The 100-foot setback requirement is reflected in the zoning map but no open space zoning has been applied to the areas within setback on the property or on any other property along these corridors.

The Site is an elongated, narrow and irregular-shaped site with depths ranging from 175 ft at the narrowest part on the southernmost end, to about 390 ft at the widest part off SR-68. At the mid

point of the site along Corral de Tierra Road, the site is approximately 210 ft deep. The proposed building layout takes into account this configuration and the intrinsic restrictions resulting from it. The location of all buildings fronting on the SR-68 scenic corridor would comply with the 100-foot setback and would be consistent with Policy 40.2.4 (T). Proposed Retail Building Nos. 4 and 5, the Market building and the Office building are proposed with a front yard setback of 85, 70, 90 and 35 ft respectively from Corral de Tierra Road which would not be consistent with the policy. The project design does not strictly comply with the 100-foot setback but does take into account the irregular shape of the Site and the Toro Area Plan direction to maintain the scenic character of the scenic roads and critical viewshed areas.

The Project design has many elements which are consistent with the Site's location in the critical viewshed, which include:

- A village component with strong internal pedestrian orientation.
- Parking around the perimeter in the eastern boundary to minimize the expanse of asphalt visible from the designated scenic corridors.
- Architectural design that provides a number of building designs and a variation in the pattern of the buildings to minimize the unbroken wall space which can characterize typical commercial shopping centers.
- Use of an office building to provide a physical buffer as a transition between the commercial areas and the residential development to the south.

The 100 foot setback must be viewed in the context of the intent of other policies of the Toro Area plan and the overarching goals of the Toro Area Plan. This policy and others [26.1.7.1(T), 40.1.2 (T), and 40.2.3(T)] are intended to protect the scenic resources of the area. Consideration must also be given to the fact that the Toro Area Plan designates the Site as Commercial. A balance must be stricken in the application of these policy requirements with the normal and logical development of a commercial property; the concept of balancing is stated in Policy 40.2.7 (T) of the Toro Area Plan which states: "*Where plan policies would prohibit any development on a parcel, the density allowed by the land use designation shall be permitted in the critical viewshed*". Again this policy refers to situations where development would be prohibited with the strict application of policies, but it does consider that property should be given the opportunity to develop at intensity consistent with the Land Use. In this particular case, the site is designated for commercial development and the proposed intensity of development is within the normal range of a parcel this size.

From a consistency standpoint the question is whether it is better to maintain the 100-foot setback and end up with a linear strip mall and all the parking in front of the buildings or would it be better to allow some minor deviation from the setback in order to achieve broader design objectives. This policy and other policies within the plan help to answer this question. This policy states in part: *This setback is established without causing existing structures to become nonconforming and without rendering existing lots of record unbuildable*. The notion raised by this statement is that there can be some flexibility to the 100 foot setback when other competing demands are more pressing. The consideration here is that where there are competing objectives, they must be balanced to achieve the overall goals of the Monterey County General Plan and Toro Area Plan. The overarching goals are related to the visual impact of the center. This is directly related to the Project design and layout.

The strict application of the 100-foot setback requirement to the Site, in addition to the restrictions arising from the designation of the majority of the Site as critical viewshed, would significantly limit the size, shape and location of the buildings, could unreasonably reduce the buildability of the Site under the allowances of the zoning district (50% lot coverage), and potentially result in the development of a typical strip mall that completely loads parking in the front of the Site. The application of this 100 foot building setback on a large square parcel would not have the same affect as applying this setback to a linear and irregularly shaped parcel such as the Site. In addition, the setback requirement would eliminate or significantly compromise the application of all the desirable design features identified above. Development of a commercial center with a design theme that is in keeping with the critical viewshed concerns should be a significant factor.

The Project's consistency with Policy 40.2.4 (T) must also be considered in context with the discussion under Policy 26.1.6.1 (T) above. Under that Policy, development can be approved in the critical viewshed and areas of visual sensitivity where the Board of Supervisors finds that such development "will not adversely affect the natural scenic beauty of the area." The analysis of Policy 26.1.6.1 (T) concludes that recommended mitigation measures in Chapter 4.1, Aesthetics, would reduce identified potentially significant impacts from development in the critical viewshed to less than significant levels. Requirement and implementation of the mitigation measures can also be used as evidence to support the finding that development within the critical viewshed, including the buildings with less than a 100-foot front yard setback, is consistent with Policy 4.2.4 (T). Therefore, if a project is approved the finding required under Policy 26.1.6.1 (T) must include a statement that, with the considerations stated above, the buildings proposed within the 100 foot setback would be consistent with the intent of the designation of the critical viewshed on the Site. Such finding would make the Project consistent with Policy 40.4.2 (T).

Policy 40.2.5 (T): The County shall require newly created parcels to have building sites outside of the critical viewshed.

Consistency Analysis: The Project includes subdivision of two existing lots of record, Lots 1 and 2, into seven parcels (refer to Table 3.A). Lot 1 would be divided into three parcels and Lot 2 would be divided into four parcels. Lot 1 is partially located within a designated critical viewshed area. The subdivision of this Lot includes one parcel (proposed Lot 1) and building sites (Retail Building Nos. 1, 2, 3, 6 and 7) outside of the critical viewshed consistent with the policy; however a small area of proposed Lots 2 and 3, a small portion of proposed Buildings No. 4 and 7, and proposed Building Nos. 5 and 8 in their entirety would be located within the critical viewshed, which would be inconsistent with the policy. Lot 2 is located completely within the critical viewshed area (refer to Figure 4.1.4); therefore the subdivision of this Lot and the proposed building locations (sites) would be inconsistent with this policy because it has no areas outside of the critical viewshed.

As stated above (refer to discussion under Policy 26.1.4.3) the subdivision component of the Project is not consistent with certain requirements of the County Code and therefore cannot be approved; therefore, this policy would only apply to the location of the proposed buildings or building sites. Since Lot 2 is located completely within the critical viewshed, the application of this policy would not allow any development in it and would allow limited development in the area of Lot 1 since this lot is located partially within the critical viewshed. The intent of Policy 40.2.5 (T) is the limitation of development within the critical viewshed. Since the designated critical viewshed on the Site accounts for approximately two thirds of its size, the application of this policy to the project could constitute unreasonable restrictions. Therefore, the finding required under Policy 26.1.6.1 (T) must include a

statement that implementation of the recommended mitigation measures in Chapter 4.1, Aesthetics, would reduce identified potentially significant impacts from allowing the location of building sites within the critical viewshed to less than significant levels. Such statement would make the Project consistent with Policy 40.2.5 (T).

Policy 40.2.7 (T): **Where plans and policies would prohibit any development on a parcel, the density allowed by the land use designation shall be permitted in the critical viewshed.**

Consistency Analysis: One of the two parcels encompassing the project site, APN 161-581-001-000, is located completely within the critical viewshed area (refer to Figure 4.1.4). The size of this parcel is 5.6 acres or 243,936 sf. The other parcel (APN 161-571-003-000) is 5.3 acres or 230,868 sf with about one-third of the parcel restricted by critical viewshed and areas of visual sensitivity. The total size of the Site is approximately 11 acres.

The Site is a flat, vacant, corner lot behind a temporarily closed gas station. The Site is designated for commercial development and is zoned as Light Commercial. The Light Commercial Zoning District allows commercial development with a maximum of 50% site coverage. The proposed development for the Project is 126,523 sf, which calculates to an approximate 26.6 % lot coverage.

Per the consistency analysis of Toro Area Plan Policies 26.1.6.1 (T) and 40.2.4 (T) above, a finding could be made to approve this development in the critical viewshed. The General Development Plan includes adequate set backs, some landscaping to reduce the visibility of the project, and architectural design befitting of the rural character of the area. The proposed amount of development is reasonable for the size of the site and given the regulatory constraints of the commercial property. Mitigation measures required in the Aesthetics and Traffic/Transportation Chapters of this EIR would require changes to the site plan that would further reduce impacts and make the Project consistent with Policy 40.2.7 (T).

Policy 41.2.1.1 (T): **If new sites for office employment, services, and local conveniences are found to be appropriate, such sites should incorporate designs to allow use of alternate modes of transportation.**

Consistency Analysis: The Project includes office space as well as areas for services and local conveniences. An existing bus stop located on SR-68 adjacent to the Site, would be improved and integrated with this project design as part of the mitigation measures required in the Aesthetic and Traffic and Transportation Chapters of the EIR. Implementation of these measures would make the Project consistent with this policy.

MONTEREY COUNTY ZONING ORDINANCE TITLE 21**Zoning Ordinance Sections 21.42.030 (H)(1) – (H)(4) - B-8 Overlay Zoning District Requirements:****Section 21.42.030 (H) (1):**

The purpose of the “B-8” Zoning District is to restrict development and/or intensification of land use in areas where, due to water supply, water quality, sewage disposal capabilities, traffic impacts or similar measurable public-facility type constraints, additional development and/or intensification of land use if found to be detrimental to the health, safety, and welfare of the residents of the area, or the County as a whole.

For the purposes of this Section, “intensification” means the change in the use of a building site which increases the demand on the constraint(s) which caused the “B-8” District to be applied over that use existing at that time the “B-8” district is applied to the property. The “B-8” district does not affect construction of the first single family dwelling on a building site, additions to dwellings, guesthouses, non-habitable structures accessory to a dwelling use, or addition and/or expansion of existing commercial uses where such addition and/or expansion can be found to not adversely affect the constraints which caused the “B-8” District to be applied to the property.

Section 21.42.030 (H) (2):

The minimum building site shall be that which is recognized as an existing legal lot of record at the time the “B-8” Zoning District is imposed on the property, or lots that are created by a minor or standard subdivision for which an application was received by the Monterey County Planning Department prior to the imposition of the “B-8” Zoning District on the property.

Section 21.42.030 (H) (3):

Setbacks to be not less than “B-4” regulations unless otherwise indicated on parcel maps, final maps, or Sectional District Maps.

Section 21.42.030 (H) (4):

Reclassification of an area from “B-8” zoning may be considered when the constraints existing at the time of “B-8” placing on the area zoned “B-8” no longer exists and additional development and/or intensification of land use would not be detrimental to the health, safety, and welfare of the residents of the area, or the County as a whole.

Consistency Analysis: Several findings would need to be made in order to determine the Project’s consistency and compliance with the provisions of the B-8:

1. Per the provisions of Section 21.42.030 (H) (1), a finding, with supporting evidence, would be needed for approval of the project stating that “The proposed project would result in construction of commercial uses that do not adversely affect the constraints that caused the B-8 District to be applied to the property.”

Consistency Analysis: The Site includes two separate commercially zoned legal lots of record (Assessor’s Parcel Numbers 161-571-003-000 and 161-581-001-000) which existed at the time that the B-8 overlay was adopted for the area by the Board of Supervisors. Pursuant to the provisions of Section 21.42.030 (H) (1), the B-8 does not affect the construction of new commercial uses provided those uses do not adversely affect the constraints that led the B-8 to be applied to the Site. In other words, any new commercial development on the Site cannot increase net water demand.

Water use on the Site at the time the B-8 District regulations were approved was zero acre/feet/year (afy) (refer to discussion under Threshold 4.7.2 in Chapter 4.7). The estimated water demand for the Project is 11.34 afy and the estimated groundwater recharge rate would be 10.04 afy of water, which would result in a net increase in water demand of 1.3 afy on the Site. This increase would exceed the level of water used on the Site at the time when the B-8 District was applied. Therefore, the Project would adversely affect the constraints (water quantity) which caused the B-8 District to be applied to the Site. The finding required under Section 21.42.030 (H) (1) of the Zoning Ordinance cannot be made, and the Project would not be consistent with the provisions of Section 21.42.030 (H) (1).

2. Per the provisions of Section 21.42.030 (H) (2), the minimum building sites for properties in the area covered by the B-8 are those that were recognized as legal lots at the time the B-8 was imposed. This provision requires that the size of properties within the area covered by the B-8 be restricted to their size at the time of the imposition of the B-8; therefore, properties to which the B-8 applies cannot be subdivided. The Site includes two separate legal lots of record of approximately 5.3 acres and 5.6 acres (APN 161-571-003-000 and 161-581-001-000, respectively, recorded in Volume 6 of Parcel Maps, page 22, and Volume 9 of Parcel Maps, page 224, of the official County records).

Consistency Analysis: The Project includes the subdivision of the two existing lots of record into seven smaller parcels. Therefore, this portion of the Project application would not be consistent with the provisions of Section 21.42.030 (H) (2) and the subdivision cannot be approved.

3. Per the provisions of Section 21.42.030 (H) (3), building setbacks for development in lots within the B-8 are to be “not less than ‘B-4’ regulations unless otherwise indicated on parcel maps, final maps, or Sectional District Maps.”

Consistency Analysis: The Site’s principal zoning designation is Light Commercial (LC) with Building Site (B-8) and Design Control (D) overlays or “LC-B-8-D”. Section 21.18.070(A)(2) of the Zoning Ordinance states that setbacks in the “LC” District are established by the approval of a General Development Plan where such plan is required, and section 21.18.070(A)(4) states that minimum setback requirements by a combining “B” district shall apply.

A General Development Plan (GDP) is required because the Project exceeds one acre, includes more than one use, and includes an application for subdivision. The GDP for the Project establishes required setbacks that vary. Section 21.42.030(H)(3) of the Ordinance requires that building setbacks

for development on lots with a “B-8” overlay not be less than is required in the “B-4” regulations unless otherwise indicated on parcel maps, final maps or Section District maps.

Table 4.8.A summarizes development standards required by the "B" District, required for a GDP, and what is proposed by the Project:

Table 4.8.A Development Standards Required by the “B” District

Standard	B Overlay	GDP	Project
Site	1 acre	1 Acre	11 acres
Front Setback	30 feet	Set by project	Range from 100 to 35 feet.
Rear Setback	20 feet	Set by project	Range from 60 to 35 feet.
Side Setback	10% or 20-feet (max.)	Set by project	Range from 80 to 40 feet.

General Development Plans are intended to allow flexibility in applying development standards for commercial and industrial projects depending on surrounding conditions. Therefore, the Project is allowed to establish setbacks through the GDP and is consistent with required setbacks.

- Per the provisions of Section 21.42.030 (H) (4), removal of the B-8 would require that a finding be made, with supporting evidence, demonstrating that the constraints existing at the time the B-8 was applied to the property no longer exist; and that development of the Project would not be detrimental to the health, safety, and welfare of the residents of the area, or the County as a whole. The Project application includes the rezoning of the Site to remove the B-8 from the Site’s combined LC-B-8-D zoning designation.

Consistency Analysis: Based upon the studies performed over time with regard to water supply in the El Toro Planning Area (refer to discussion under Threshold 4.7.2 in Chapter 4.7), the conditions under which the B-8 was applied to the Site are still present. Removal of the B-8 from the Site would not be consistent with the requirements of the B-8 overlay zone.

Table 4.8.B: Policy Consistency Analysis Summary

Policies	Summary of Consistency Analysis	Consistency
<p>4.1 Aesthetic Resources</p> <p>Policy 7.2.1 (T): <i>Landowners and developers shall be encouraged to preserve the integrity of existing terrain and natural vegetation in visually sensitive areas such as hillsides and ridges.</i></p> <p>Policy 7.2.2 (T): <i>Native and native compatible species, especially drought resistant species, shall be utilized to the extent possible in fulfilling landscaping requirements imposed as conditions of discretionary permits.</i></p>	<p>A significant portion of the Project is located in the Critical Viewshed and areas of Visual Sensitivity designated in the “Visual Sensitivity and Scenic Highways” map of the Toro Area Plan (refer to Figure 9 in the Toro Area Plan). While the proposed Project would convert an existing mostly flat site containing annual grasslands into a shopping center, the Project would not significantly alter the topography of the Site or impact the surrounding hillsides and ridges. <u>Therefore, the Project is consistent with Policy 7.2.1.</u></p> <p>The proposed landscape plan includes a nominal amount of native species for the replacement of trees and other existing vegetation to be removed. Final landscaping plans would be required to include native, drought resistant plant species. <u>The Project is partially consistent with Policy 7.2.2 (T) and would be fully consistent with implementation of required conditions of approval regarding landscaping.</u></p>	<p>Consistent</p> <p>Consistent</p>
<p>Policy 26.1.6.1 (T): <i>Within areas of visual sensitivity as indicated on the Toro Visual Sensitivity Map, no development shall be permitted without a finding by the Board of Supervisors or its designee that such development will not adversely affect the natural scenic beauty of the area. Additionally, areas of visual sensitivity shall be reviewed critically for landscaping and building design and siting which will enhance the scenic value of the area.</i></p>	<p>Significant portions of the Site are designated as “Areas of Visual Sensitivity” and “Critical Viewshed” in the “Visual Sensitivity and Scenic Highways” Map of the Toro Area Plan (refer to Figure 9 of the Toro Area Plan and Figure 4.1.3 of the EIR). The conclusions of the visual impact analysis of this EIR (refer to Chapter 4.1 Aesthetics) are that the Project, prior to mitigation, would have potentially significant impacts on the designated scenic corridors on SR-68 and Corral de Tierra Road. Mitigation measures in Chapter 4.1, Aesthetics, would reduce those impacts to less than significant levels. Requirement and implementation of the mitigation measures could be used as evidence to support the finding required by Policy 26.1.6.1 (T) should the Project be approved. A finding to the contrary would result in denial of the elements of the Project proposed in visual sensitivity areas or significant redesign that would allow the making of the finding. <u>Therefore, if approved, the Project would be consistent with Policy 26.1.6.1 (T).</u></p>	<p>Consistent</p>
<p>Policy 26.1.20.1 (T): <i>Lighting of outdoor areas shall be minimized and carefully controlled to preserve the quality of darkness. Street lighting shall be as unobtrusive as practicable and shall be consistent in intensity throughout the Toro Area.</i></p>	<p>The conceptual lighting plan (refer to Figure 3.9) includes light poles and cut-off lighting fixtures throughout the Project which would eliminate night sky glow; poles and fixtures would blend with the architectural design theme. The lighting plan includes high pressure sodium light bulbs similar to the light bulbs used by Caltrans on street lighting and which reflect less glare than other type of light bulbs. Parking lighting would be the minimum for the size of the parking area. The applicant would be required to submit a detailed lighting plan for County review and approval in accordance with County lighting policies and standards. The final lighting plan would be required to include full cut-off and to be the least obtrusive possible for the location and the type of project. <u>Therefore, the Project would be fully consistent with Policy 26.1.20.1.</u></p>	<p>Consistent</p>

Policies	Summary of Consistency Analysis	Consistency
<p>Policy 40.2.1 (GP): <i>Additional sensitive treatment provisions shall be employed within the scenic corridor, including placement of utilities underground, where feasible; architectural and landscape controls; outdoor advertising restrictions; encouragement of area native plants, especially on public lands and dedicated open spaces; and cooperative landscape programs with adjoining public and private open space lands.</i></p>	<p>The northern and western edges of the Site's front on the SR-68 State-designated Scenic Highway Corridor and the Corral de Tierra Road County-designated Scenic Route respectively. All utilities would be required to be underground as standard County requirement. The architectural design includes some of the features and characteristics of the ranch and farm structures in this rural area. The preliminary landscaping plans include a level of landscaping (trees) along the scenic corridors; additional landscape controls such as mounding and/or project design changes would be required to enlarge proposed landscaping areas for the purpose of ameliorating impacts to the scenic corridor, and to make the Project consistent with the character of the scenic corridors. Use of native drought-tolerant plant species is required by County ordinance. The Project does not include plans for outdoor advertising. A sign plan would be required for review and approval by the RMA-Planning Department; all signage would be required to be unobtrusive and consistent with the character of the scenic corridors. No cooperative landscape program with adjoining public and private open space lands is needed as the Site is well buffered from residential areas. <u>The Project would be consistent with Policy 40.2.1 with the implementation of these additional measures.</u></p>	<p>Consistent</p>
<p>Policy 40.2.2 (GP): <i>Land use controls shall be applied or retained to protect the scenic corridor and to encourage sensitive selection of sites and open space preservation. Where land is designated for development at a density which, should maximum permissible development occur, would diminish scenic quality, the landowner shall be encouraged to voluntarily dedicate a scenic easement to protect the scenic corridor.</i></p>	<p>The northern and western edges of the Project would fall respectively into the SR-68 or County-designated Scenic Route (Corral de Tierra Road) scenic view corridors. The Site is a flat property designated for commercial development. The Project is designed architecturally to maintain a rural character. As discussed in Chapter 4.1 Aesthetic Resources of the EIR, development of the Project would have a moderate and moderately high impact on the scenic quality of the Site vis-à-vis the scenic corridors. Recommended mitigation measures required in Chapter 4.1 Aesthetics, would reduce impacts to a level where scenic easements are not required to maintain the quality of the scenic corridors. <u>Therefore, the Project would be consistent with Policy 40.2.2.</u></p>	<p>Consistent</p>
<p>Policy 40.2.4 (T): <i>The County shall require a 100-foot building setback on all parcels adjacent to County and State scenic routes. The 100-foot setback will also apply to areas designated on the Toro Visual Sensitivity Map (Toro Area Plan, Figure 9) as critical viewshed. This setback is established without causing existing structures to become nonconforming and without rendering existing lots of record unbuildable. Critical viewshed areas shall also have open space zoning applied to the 100-foot setback area (added 7/31/84) (amended 5/22/90).</i></p>	<p>The Site includes two lots of record (refer to Table 3.A) located on a corner bounded on the north by SR-68, a State-designated Scenic Highway, and on the west by Corral de Tierra Road, a County-designated Scenic Route. Existing Lot 1 wraps around a separate parcel containing a temporarily closed service station. This portion of the Site has frontages on both SR-68 and Corral de Tierra Road; the portion fronting on Corral de Tierra Road is located partially in an area designated as critical viewshed (refer to Figure 4.1.4). Existing Lot 2 fronts on Corral de Tierra Road and is located completely within the critical viewshed area (refer to Figure 4.1.4). The designated critical viewshed on the site accounts for approximately two thirds of the total site area.</p> <p>Policy 40.2.4 (T) provides for a 100-foot building setback along the frontage on both SR-68 and Corral de Tierra Road and within the areas designated as critical viewshed; and would require Open Space zoning to be applied to the area within the 100-foot setback. The 100-foot setback requirement is reflected in the zoning map but no open space zoning</p>	<p>Consistent</p>

Policies	Summary of Consistency Analysis	Consistency
	<p>has been applied to the areas within setback on the property or on any other property along these corridors.</p> <p>The Site is an elongated, narrow and irregular-shaped site with depths ranging from 175 feet at the narrowest part on the southernmost end, to about 390 feet at the widest part off SR-68. At the mid point of the site along Corral de Tierra Road, the site is approximately 210 feet deep. The proposed building layout takes into account this configuration and the intrinsic restrictions resulting from it. The location of all buildings fronting on the SR-68 scenic corridor would comply with the 100-foot setback and would be consistent with Policy 40.2.4 (T). Proposed Retail Building Nos. 4 and 5, the Market building and the Office building are proposed with a front yard setback of 85, 70, 90 and 35 feet respectively from Corral de Tierra Road which would not be consistent with the policy. The project design does not strictly comply with the 100-foot setback but does take into account the irregular shape of the Site and the Toro Area Plan direction to maintain the scenic character of the scenic roads and critical viewshed areas.</p> <p>The Project design has many elements which are consistent with the Site's location in the critical viewshed, which include:</p> <ul style="list-style-type: none"> • A village component with strong internal pedestrian orientation. • Parking around the perimeter in the eastern boundary to minimize the expanse of asphalt visible from the designated scenic corridors. • Architectural design that provides a number of building designs and a variation in the pattern of the buildings to minimize the unbroken wall space which can characterize typical commercial shopping centers. • Use of an office building to provide a physical buffer as a transition between the commercial areas and the residential development to the south. <p>The 100 foot setback must be viewed in the context of the intent of other policies of the Toro Area plan and the overarching goals of the Toro Area Plan. This policy and others [26.1.7.1(T), 40.1.2 (T), and 40.2.3(T)] are intended to protect the scenic resources of the area. Consideration must also be given to the fact that the Toro Area Plan designates the Site as Commercial. A balance must be stricken in the application of these policy requirements with the normal and logical development of a commercial property; the concept of balancing is stated in Policy 40.2.7 (T) of the Toro Area Plan which states: "<i>Where plan policies would prohibit any development on a parcel, the density allowed by the land use designation shall be permitted in the critical viewshed</i>". Again this policy refers to situations where development would be prohibited with the strict application of policies, but it does consider that property should be given the opportunity to develop at</p>	

Policies	Summary of Consistency Analysis	Consistency
	<p>intensity consistent with the Land Use. In this particular case, the site is designated for commercial development and the proposed intensity of development is within the normal range of a parcel this size.</p> <p>From a consistency standpoint the question is whether it is better to maintain the 100-foot setback and end up with a linear strip mall and all the parking in front of the buildings or would it be better to allow some minor deviation from the setback in order to achieve broader design objectives. This policy and other policies within the plan help to answer this question. This policy states in part: <i>This setback is established without causing existing structures to become nonconforming and without rendering existing lots of record unbuildable.</i> The notion raised by this statement is that there can be some flexibility to the 100 foot setback when other competing demands are more pressing. The consideration here is that where there are competing objectives, they must be balanced to achieve the overall goals of the Monterey County General Plan and Toro Area Plan. The overarching goals are related to the visual impact of the center. This is directly related to the Project design and layout.</p> <p>The strict application of the 100-foot setback requirement to the Site, in addition to the restrictions arising from the designation of the majority of the Site as critical viewshed, would significantly limit the size, shape and location of the buildings, could unreasonably reduce the buildability of the Site under the allowances of the zoning district (50% lot coverage), and potentially result in the development of a typical strip mall that completely loads parking in the front of the Site. The application of this 100 foot building setback on a large square parcel would not have the same affect as applying this setback to a linear and irregularly shaped parcel such as the Site. In addition, the setback requirement would eliminate or significantly compromise the application of all the desirable design features identified above. Development of a commercial center with a design theme that is in keeping with the critical viewshed concerns should be a significant factor.</p> <p>The Project's consistency with Policy 40.2.4 (T) must also be considered in context with the discussion under Policy 26.1.6.1 (T) above. Under that Policy, development can be approved in the critical viewshed and areas of visual sensitivity where the Board of Supervisors finds that such development "will not adversely affect the natural scenic beauty of the area." The analysis of Policy 26.1.6.1 (T) concludes that recommended mitigation measures in Chapter 4.1, Aesthetics, would reduce identified potentially significant impacts from development in the critical viewshed to less than significant levels. Requirement and implementation of the mitigation measures can also be used as evidence to support the finding that development within the critical viewshed, including the buildings with less than a 100-foot front yard setback, is consistent with Policy 4.2.4</p>	

Policies	Summary of Consistency Analysis	Consistency
<p>Policy 40.2.5 (T): <i>The County shall require newly created parcels to have building sites outside of the critical viewshed.</i></p>	<p>(T). Therefore, if a project is approved the finding required under Policy 26.1.6.1 (T) must include a statement that, with the considerations stated above, the buildings proposed within the 100 foot setback would be consistent with the intent of the designation of the critical viewshed on the Site. <u>Such finding would make the Project be consistent with Policy 40.4.2 (T).</u></p> <p>The Project includes subdivision of two existing lots of record, Lots 1 and 2, into seven parcels (refer to Table 3.A). Lot 1 would be divided into three parcels and Lot 2 would be divided into four parcels. Lot 1 is partially located within a designated critical viewshed area. The subdivision of this Lot includes one parcel (proposed Lot 1) and building sites (Retail Building Nos. 1, 2, 3, 6 and 7) outside of the critical viewshed consistent with the policy; however a small area of proposed Lots 2 and 3, a small portion of proposed Buildings No. 4 and 7, and proposed Building Nos. 5 and 8 in their entirety would be located within the critical viewshed, which would be inconsistent with the policy. Lot 2 is located completely within the critical viewshed area (refer to Figure 4.1.4); therefore the subdivision of this Lot and the proposed building locations (sites) would be inconsistent with this policy because it has no areas outside of the critical viewshed.</p> <p>As stated above (refer to discussion under Policy 26.1.4.3) the subdivision component of the Project is not consistent with certain requirements of the County Code and therefore cannot be approved; therefore, this policy would only apply to the location of the proposed buildings or building sites. Since Lot 2 is located completely within the critical viewshed, the application of this policy would not allow any development in it and would allow limited development in the area of Lot 1 since this lot is located partially within the critical viewshed. The intent of Policy 40.2.5 (T) is the limitation of development within the critical viewshed. Since the designated critical viewshed on the Site accounts for approximately two thirds of its size, the application of this policy to the project could constitute unreasonable restrictions. Therefore, the finding required under Policy 26.1.6.1 (T) must include a statement that implementation of the recommended mitigation measures in Chapter 4.1, Aesthetics, would reduce identified potentially significant impacts from allowing the location of building sites within the critical viewshed to less than significant levels. <u>Such statement would make the Project consistent with Policy 40.2.5 (T).</u></p>	<p>Consistent</p>
<p>Policy 40.2.7 (T): <i>Where plans and policies would prohibit any development on a parcel, the density allowed by the land use designation shall be permitted in the critical viewshed.</i></p>	<p>One of the two parcels encompassing the project site, APN 161-581-001-000, is located completely within the critical viewshed area (refer to Figure 4.1.4). The size of this parcel is 5.6 acres or 243,936 square feet. The other parcel (APN 161-571-003-000) is 5.3 acres or 230,868 square feet with about one-third of the parcel restricted by critical viewshed and areas of visual sensitivity. The total size of the Site is approximately 11 acres.</p> <p>The Site is a flat, vacant, corner lot behind a temporarily closed gas station. The Site is designated for commercial development and is zoned as Light Commercial. The Light</p>	<p>Consistent</p>

Policies	Summary of Consistency Analysis	Consistency
<p>Policy 41.2.1.1. (T): <i>If new sites for office employment, services, and local conveniences are found to be appropriate, such sites should incorporate designs to allow use of alternate modes of transportation.</i></p>	<p>Commercial Zoning District allows commercial development with a maximum of 50% site coverage. The proposed development for the Project is 126,523 square feet, which calculates to an approximate 26.6 % lot coverage.</p> <p>Per the consistency analysis of Toro Area Plan Policies 26.1.6.1 (T) and 40.2.4 (T) above, a finding could be made to approve this development in the critical viewshed. The General Development Plan includes adequate set backs, some landscaping to reduce the visibility of the project, and architectural design befitting of the rural character of the area. The proposed amount of development is reasonable for the size of the site and given the regulatory constraints of the commercial property. Mitigation measures required in the Aesthetics and Traffic/Transportation Chapters of this EIR would require changes to the site plan that would further reduce impacts and make the <u>Project consistent with Policy 40.2.7 (T).</u></p> <p>The Project includes office space as well as areas for services and local conveniences. An existing bus stop located on SR-68 adjacent to the Site, would be improved and integrated with this project design as part of the mitigation measures required in the Aesthetic and Traffic and Transportation Chapters of the EIR. Implementation of these measures would make the <u>Project consistent with this policy.</u></p>	<p>Consistent</p>
<p>4.2 Air Quality</p>		
<p>Policy 20.2.1 (GP) <i>The County shall condition approval of all new industrial and commercial development, including major modifications as defined by the Uniform Building Code, on meeting, as a minimum, federal and state ambient air quality standards and the rules and regulations of the Monterey Bay Unified Air Pollution Control District.</i></p>	<p>As proposed, the project would be consistent with the minimum federal and state ambient air quality standards and with the MBUAPCD 2008 Air Quality Management Plan. The final building plans would be required to meet and possibly exceed minimum standards (Mitigation Measures 4.13.3 and 4.13.6). <u>Therefore, the Project would be consistent with Policy 20.2.1.</u></p>	<p>Consistent</p>
<p>Policy 20.2.3 (GP) <i>The County shall continue to support air quality monitoring and air pollution control strategies and enforcement by the Monterey Bay Unified Air Pollution Control District.</i></p>	<p>As proposed, the Project would be consistent with the MBUAPCD 2008 Air Quality Management Plan and would not substantially contribute to a projected or existing air quality violation within the air basin. <u>Therefore, the Project is consistent with Policy 20.2.3.</u></p>	<p>Consistent</p>
<p>Policy 20.2.5 (GP) <i>The County shall encourage the use of the best available control technology as defined in the most current Monterey Bay Unified Air Pollution Control District rules and regulations in reducing air pollution emissions.</i></p>	<p>As required by the CCAA, the MBUAPCD adopted the 1991 AQMP for the Monterey Bay Region. The AQMP addressed attainment of the State AAQS for ozone. The AQMP recommended adoption of 20 measures to control emissions of volatile organic compound (VOC) from stationary sources, five measures for stationary sources of NO_x, and eight transportation measures to reduce ozone precursor emissions through reduced vehicle miles traveled. Since the 1991 AQMP was adopted, control requirements have been updated, and the plan was revised in 1994, 1997, 2000, 2004 and 2008 to reflect these and other changes in control measures. Furthermore, the MBUAPCD has enacted several rules designed to limit emissions from construction activities. They include Rule 400 for Visible</p>	<p>Consistent</p>

Policies	Summary of Consistency Analysis	Consistency
	Emissions, Rule 403 for Fugitive Dust, Rule 425 for Cutback Asphalt and Rule 426 for Architectural Coatings. The Project would be required to comply with all of MBUAPCD's rules and regulations, including the use of best available control technologies, to reduce air pollution emissions associated with the Project's development and operation. <u>Therefore, the Project is consistent with Policy 20.2.5.</u>	
4.3 Biological Resources		
N/A		
4.4 Cultural Resources		
Policy 12.1.1 (GP): <i>The County shall take such action as necessary to compile information on the location and significance of its archaeological resources so this information may be incorporated into the environmental or developmental review process.</i>	Based on the background research and field survey conducted for the Project, no known significant archaeological resources were found on the Site. <u>Therefore, the Project is consistent with Policy 12.1.1.</u>	Consistent
Policy 12.1.3 (GP): <i>All proposed development, including land division, within high sensitivity zones shall require an archaeological field inspection prior to project approval.</i>	The Site is located in a high archaeological sensitivity zone per Figure 6 of the Toro Area Plan Inventory and Analysis. Accordingly a "Preliminary Archaeological Reconnaissance" (Report) was conducted for the Site. The report includes background research of the files at the Northwest Regional Information Center of the California Historical Resources Information System at Sonoma State University; as well as a field reconnaissance. The report concludes that "the project area does not contain potentially significant prehistoric or historic cultural resources." The report states the possibility that unidentified resources be found during construction and recommends that construction be halted within 50 meters of any find until it can be evaluated and mitigation measures formulated if the find is determined to be significant. <u>The Project would be conditioned accordingly. Therefore, the Project is consistent with Policy 12.1.3.</u>	Consistent
Policy 12.1.4 (GP): <i>All major projects (i.e., 2.5 acres or more) that are proposed for moderate sensitivity zones, including land division, shall require an archaeological field inspection prior to project approval.</i>	The Site is located in a high archaeological sensitivity zone per Figure 6 of the Toro Area Plan Inventory and Analysis. Accordingly a "Preliminary Archaeological Reconnaissance" (Report) was conducted for the Site. The report includes background research of the files at the Northwest Regional Information Center of the California Historical Resources Information System at Sonoma State University; as well as a field reconnaissance. The report concludes that "the project area does not contain potentially significant prehistoric or historic cultural resources." The report states the possibility that unidentified resources be found during construction and recommends that construction be halted within 50 meters of any find until it can be evaluated and mitigation measures formulated if the find is determined to be significant. <u>The Project would be conditioned accordingly. Therefore, the Project is consistent with Policy 12.1.4.</u>	Consistent

Policies	Summary of Consistency Analysis	Consistency
<p>Policy 12.1.6 (GP): <i>Where development could adversely affect archaeological resources, reasonable mitigation procedures shall be required prior to project approval.</i></p>	<p>The Site is located in a high archaeological sensitivity zone per Figure 6 of the Toro Area Plan Inventory and Analysis. Accordingly a "Preliminary Archaeological Reconnaissance" (Report) was conducted for the Site. The report includes background research of the files at the Northwest Regional Information Center of the California Historical Resources Information System at Sonoma State University; as well as a field reconnaissance. The report concludes that "the project area does not contain potentially significant prehistoric or historic cultural resources." The report states the possibility that unidentified resources be found during construction and recommends that construction be halted within 50 meters of any find until it can be evaluated and mitigation measures formulated if the find is determined to be significant. The Project would be conditioned accordingly. <u>Therefore, the Project is consistent with Policy 12.1.6.</u></p>	<p>Consistent</p>
<p>Policy 12.1.7 (GP): <i>All available measures, including purchase of archaeological easements, dedication to the County, tax relief, purchase of development rights, consideration of reasonable project alternatives, etc., shall be explored to avoid development on sensitive archaeological sites.</i></p>	<p>The Site is located in a high archaeological sensitivity zone per Figure 6 of the Toro Area Plan Inventory and Analysis. Accordingly a "Preliminary Archaeological Reconnaissance" (Report) was conducted for the site. The report includes background research of the files at the Northwest Regional Information Center of the California Historical Resources Information System at Sonoma State University; as well as a field reconnaissance. The report concludes that "the project area does not contain potentially significant prehistoric or historic cultural resources." The report states the possibility that unidentified resources be found during construction and recommends that construction be halted within 50 meters of any find until it can be evaluated and mitigation measures formulated if the find is determined to be significant. The Project would be conditioned accordingly. <u>Therefore, the Project is not located on a sensitive archaeological site and is consistent with Policy 12.1.7.</u></p>	<p>Consistent</p>
<p>4.5 Geology and Soils</p>		
<p>Policy 3.1.1 (GP): <i>Erosion control procedures shall be established and enforced for all private and public construction and grading projects.</i></p>	<p>The Site is mostly flat. Minimal grading of the hillside along the eastern boundary of the Site would be required, behind Retail Building No. 9, for construction of vehicular circulation areas proposed along the boundary of the property. Other grading (excavation) would be required for the undergridding of utilities and construction of the underground water retention facilities. Grading and the overall construction of the Project would be subject to all requirements of the Grading and Erosion Control Ordinances addressing erosion and water quality including runoff and sedimentation. <u>Therefore the Project is consistent with Policy 3.1.1.</u></p>	<p>Consistent</p>
<p>4.6 Hazards/Hazardous Materials</p>		
<p>N/A</p>		
<p>4.7 Hydrology and Water Quality</p>		

Policies	Summary of Consistency Analysis	Consistency
<p>Policy 17.3.4 (GP): <i>The County shall require all new development to have adequate water available for fire suppression. Water availability can be provided from a conventional water system; from an approved alternative water system if within 300 feet of a habitable structure; by the fire fighting equipment of the fire district within which the property is located; or by an individual water storage facility--water tank, swimming pool, etc. --on the property itself. The fire and planning departments shall determine the adequacy and location of individual water storage to be provided.</i></p> <p>Policy 21.2.3 (GP): <i>Residential, commercial, and industrial developments which require 20 or more parking spaces shall include oil, grease, and silt traps, or other suitable means, as approved by the Monterey County Surveyor, to protect water quality; a condition of maintenance and operation shall be placed upon the development.</i></p> <p>4.8 Land Use and Planning</p> <p>Policy 20.1.5 (GP): <i>The County shall adopt a land use plan which promotes mixed land uses to reduce the need for vehicular travel.</i></p>	<p>There are currently three fire hydrants on the subject property along with associated water lines and water supply which would serve the Site. The existing water storage provided by the California-American Water Company is adequate to serve the Project provided that the largest building is of at least Type IIIA construction and the fire-flow calculation area of the largest building or building portion is not more than 39,700 square feet. The largest building shall be considered as meeting this requirement if a portion of the building is separated by fire walls without openings that are constructed in accordance with the California Building Code. In the event the Type IIIA-construction building area exceeds 39,700 square feet, additional water storage would be required per California Fire Code, Appendix B. The Project would be required to meet these standards as part of the building permit plan review. <u>Therefore, the Project is consistent with Policy 17.3.4.</u></p> <p>As currently designed, the Project would require more than 500 parking spaces. As a standard condition of approval, the Project would be required to include oil, grease and silt traps as part of the site design. <u>Therefore, the Project would be consistent with Policy 21.2.3.</u></p>	<p>Consistent</p>
<p>Policy 25.1.2 (GP): <i>The County shall promote economic development which is consistent with General Plan goals such as environmental, scenic, natural resource conservation, and growth management.</i></p>	<p>The Site is designated for commercial development in the Toro Area Plan and is zoned "Light Commercial" in the Zoning Ordinance. The land use and zoning designations of the property took into account the Site's location at the intersection of two major roads in the area, and the need to provide access to basic services to residents in the Toro Area who currently have to travel further to obtain those services. The location of basic services at the Site would reduce the need for longer vehicular travel for residents in the area of the Toro Area Plan. The designation of a commercial site at this location in the Toro Area Plan is consistent with Policy 20.1.5. The Site is generally surrounded by established low and medium-density residential areas. The Project would add basic neighborhood services closer to the existing residences in an area that is already developed at various residential densities and potentially reducing vehicular travel. <u>Therefore, the Project would be consistent with Policy 20.1.5.</u></p> <p>The Site is designated as Commercial in the Land Use Plan of the Toro Area Plan and is zoned for light commercial uses. Because the Site is zoned commercial and has been intended for commercial development as part of the County's land use plan and growth projections, the Project is consistent with the County's growth management plans. Development of the Project would result in a degree of economic development from actual construction and from the operation of businesses.</p> <p>The Project would add a neighborhood-serving facility that would provide services to a significant residential area under-served by commercial/retail development. The proposed</p>	<p>Consistent</p>

Policies	Summary of Consistency Analysis	Consistency
<p>Policy 25.1.3 (GP): <i>The County shall evaluate and respond to long-range infrastructure needs for existing and future residential, commercial, and industrial development.</i></p>	<p>commercial development would provide a center of commerce closer to the existing residences and would thereby reduce the need for residents to travel on SR-68 to obtain basic needs. Implementation of mitigation measures and project changes recommended throughout the EIR would result in development of a Project that is consistent with this policy as well as with other policies of the General Plan and the Toro Area Plan.</p> <p>The County has identified road infrastructure improvements in Policy 39.1.1.2 (T) of the Toro Area Plan to implement this policy of the General Plan. These include "Improvement to SR-68 intersections, replacement of the Toro Creek bridge, construction of alternate passing lanes, public transit roadway improvements, and improved bicycle safety measures." Some of these improvements have been built since the adoption of the General Plan and Toro Area Plan – including replacement of the Toro Creek bridge, and improvements at the Corral de Tierra, Los Laureles Road, Highway 218 and Ryan Ranch Road intersections with SR-68. Additional improvements to the Corral de Tierra and San Benancio Road intersections are in the environmental review and planning stages.</p>	<p>Consistent</p>
<p>Policy 26.1.1 (GP): <i>The County, in coordination with the cities, shall manage the type, location, timing, and intensity of growth in the unincorporated area.</i></p> <p>Policy 26.1.12 (GP): <i>In order to preserve its open space and rural character, the County shall encourage the voluntary restriction of development through dedication of scenic or conservation easements, transfer of development rights and other appropriate techniques.</i></p> <p>Policy 26.1.17 (GP): <i>The placement of off-site advertising shall be discouraged due to visual clutter, scenic intrusion, and safety concerns, and may be considered only within the County's retail, general commercial, and industrial zoning districts.</i></p>	<p>The County has adopted the Transportation Agency for Monterey County Regional Development Impact Fee Program to continue gathering funds for the completion of the planned road improvements. Development of the Project, if approved, would require the payment of fees consistent with the Regional Development Impact Fee Program. Furthermore, development of the Project would require infrastructure improvements to SR-68/Corral de Tierra Road as identified under in Chapter 4.12 Traffic and Transportation, of the EIR. <u>Implementation of these required improvements would make the Project consistent with Policy 25.1.3.</u></p> <p>The Site, located in the unincorporated Toro Area, has already been designated for light commercial uses according to the County Zoning Ordinance. <u>Therefore the Project is consistent with Policy 26.1.1.</u></p> <p>The Site is a flat property designated for commercial development. The Project is designed to maintain a rural character; therefore a scenic easement would not be necessary and is not required by this policy. <u>Therefore, the Project is consistent with Policy 26.1.12.</u></p> <p>The Project would be located on commercially designated property. The Project does not include any off-site advertising. All signage would be subject to the Sign Regulations set forth in Chapter 21.60 of the Monterey County Zoning Ordinance. A sign plan consistent with those regulations would be required as a condition of project approval prior to construction. <u>Therefore, the Project would be consistent with Policy 26.1.17.</u></p>	<p>Consistent</p>

Policies	Summary of Consistency Analysis	Consistency
<p>Policy 26.1.18 (GP): <i>Development proposals which are consistent with the land use plan designation (Figures 13a, 13b, 13c) may be denied due to factors including, but not limited to, lack of public facilities and services, infrastructure phasing problems, water availability and sewage problems, or presence of environmental and/or plan policy constraints which cannot be mitigated.</i></p>	<p>The proposed neighborhood retail village would be located on land designated for commercial uses. Therefore, the development proposal for the subject property is consistent with the commercial land use designation by both the Monterey County General Plan and the Toro Area Plan. Approval of any development on the subject site must include a finding that all needed infrastructure is available or that conditions of approval and/or mitigation measures would provide needed additional infrastructure. Any finding that infrastructure is not available or that infrastructure can not be made adequate through conditions of approval and/or mitigation measures must be supported by appropriate evidence to recommend denial of the project. <u>Therefore, the Project is consistent with Policy 26.1.18.</u></p>	<p>Consistent</p>
<p>Policy 27.3.1 (GP): <i>The County shall discourage those new land use activities which are potential nuisances and/or hazards within and in close proximity to residential areas.</i></p>	<p>The Project proposes commercial/retail land use activities located within close proximity to residential areas. While the intent of the Project is to provide services to the existing residential areas, it is possible that the Project could create nuisances related to the generation of construction and operational noise sources, particularly during night time hours. Additional nuisances to nearby residential areas may result from vehicular traffic going in and out of the site on Corral de Tierra Road during and after construction of the Project. A Construction Management Plan would be required limiting construction and material delivery times to day hours; additional measures may include the direction of construction equipment from nearby residences, utilization of sound muffling equipment on all construction vehicles. A proposed permanent loading dock for the market area and delivery areas for other buildings would be located along the eastern boundary of the Site shielded from nearby residences. On-street improvements and design of vehicular access points on Corral de Tierra Road would be required that maximize vehicular flow therefore reducing potential levels of nuisance to the small number of residences located nearby. On-site uses would be limited to those uses that would not generate noise or other type of nuisances. <u>Therefore, the Project would be consistent with Policy 27.3.1.</u></p>	<p>Consistent</p>
<p>Policy 28.1.5 (GP): <i>Adequate provision shall be made for professional offices, where appropriate.</i></p>	<p>The Site is zoned as "Light Commercial." The regulations of this zoning district allow for development of offices (Chapter 21.18.050 P of the Zoning Ordinance). The Project includes an approximately 12,338 square feet, two-story office building located on proposed Lot 7 that would account for almost 10 percent of the project's total 126,523 square feet (refer to Figure 3.3 Vesting Tentative Map, in Chapter 3.0). Offices are consistent with the commercial land use and zoning designations. Provision of professional offices at the Site could provide adequate related services nonexistent for the residents in the area of the Toro Area Plan in which case, would be consistent with Policy <u>28.1.5.</u></p>	<p>Consistent</p>

Policies	Summary of Consistency Analysis	Consistency
<p>Policy 28.2.1 (GP): <i>In areas of anticipated commercial growth and expansion, provision shall be made for designation of access routes, street and road rights-of-way, off street parking, and pedestrian walkways.</i></p>	<p>The Site was designated for commercial development with SR-68 and Corral de Tierra Road as existing and convenient access routes. The Project includes 508 off street parking spaces and pedestrian areas along Corral de Tierra Road (refer to Figure 3.3). Specific truck and delivery entry points, street and road rights-of-way and/or additional pedestrian walkways would be required in compliance with this and other policies. Additional infrastructure improvements for the SR-68/Corral de Tierra Road intersection as well as for the site's frontages on Corral de Tierra Road and SR-68 would be required as conditions of approval or mitigation measures (refer to Chapter 4.12, Traffic and Transportation, of the EIR for a complete discussion of the additional infrastructure improvements). <u>Therefore, the Project would be consistent with Policy 28.2.1.</u></p> <p>The Project would be located on a site designated for commercial use adjacent to SR-68, one of the County's major transportation corridors, and adjacent to Corral de Tierra Road which is one of the two main access points to the Toro area. This location provides convenient access. <u>Therefore, development of the Project would be consistent with Policy 28.2.2.</u></p>	<p>Consistent</p>
<p>Policy 28.2.2 (GP): <i>Commercial areas shall be designated in a manner which offers convenient access.</i></p>	<p>The Project, bounded on the north by SR-68 and on the west by Corral de Tierra Road, provides pedestrian accessibility along Corral de Tierra Road. The Project includes significant pedestrian connectivity internally. The Project does not include any features providing direct access to transit. <u>Therefore, the Project is partially consistent with Policy 28.2.3.</u> Recommended project design changes in the Aesthetics and Traffic and Transportation Chapters of the EIR, which require the provision of expanded pedestrian areas, the provision of transit stop on the site frontage on SR-68, as well as changes to the southernmost project entrance on Corral de Tierra Road required to provide adequate entrance for service vehicles, <u>would make the Project consistent with this Policy.</u></p>	<p>Consistent</p>
<p>Policy 28.2.3 (GP): <i>Provision shall be made, wherever possible for separate facilities adequate for the movement of pedestrians, transit vehicles, automobiles, and service vehicles.</i></p>	<p>The Site is a flat property designated for commercial development. The Site is a rural property designated for commercial development. The Site is partially abutted to the east and southeast by a designated scenic easement (APN 161-571-001-000); this easement buffers the Site from the residential development located further east from the property and provide sufficient open space between the Project and those uses. A hillside separates the southernmost portion of the Site from scattered residential development in that area. The scenic easement area and the hillside provide an adequate open space network in the area which would not be affected by the project. The Project does not include designated open space areas since no additional open space is necessary for connectivity. <u>Therefore, the Project is consistent with Policy 34.1.3.</u></p>	<p>Consistent</p>
<p>Policy 34.1.3 (GP): <i>Wherever possible, open space lands provided as part of a development project should be integrated into an area wide open space network.</i></p>	<p>The Site is bounded on the west by Corral de Tierra Road, on the north by SR-68, and the east and south by residential communities. The Site is a rural property abutted by open space to the east and southeast; this open space buffers the Site from the residential development in those areas and provide sufficient buffer for those areas. <u>The Project is consistent with Policy 34.1.4 as no additional open space would be required.</u></p>	<p>Consistent</p>
<p>Policy 34.1.4 (GP): <i>Open space areas should be used as a buffer between land uses of different types and/or intensities.</i></p>	<p>The Site is bounded on the west by Corral de Tierra Road, on the north by SR-68, and the east and south by residential communities. The Site is a rural property abutted by open space to the east and southeast; this open space buffers the Site from the residential development in those areas and provide sufficient buffer for those areas. <u>The Project is consistent with Policy 34.1.4 as no additional open space would be required.</u></p>	<p>Consistent</p>

Policies	Summary of Consistency Analysis	Consistency
<p>Policy 37.4.1 (GP): <i>The County shall encourage overall land use patterns which reduce the need to travel.</i></p>	<p>The Project proposes to add neighborhood-serving uses into an area that is already developed at various residential densities but under-served by retail and neighborhood-serving uses. The Project would reduce the need for the residents of the residential areas in the Toro Area Plan to travel to Salinas or the Monterey Peninsula to obtain those services, thereby reducing the need to travel along the SR-68 corridor. <u>Therefore, the Project is consistent with Policy 37.4.1.</u></p>	<p>Consistent</p>
<p>Policy 39.1.3 (GP): <i>Rights-of-way needed for new roads or expansion of existing roads shall be planned for; land uses that would preclude the timely development of such rights-of-way shall be prohibited.</i></p>	<p>Development of the Project would not preclude planned improvements for the SR-68/Corral de Tierra Road intersection. Additional frontage improvements for roadway, bicycle and pedestrian facilities would be required (refer to improvements identified in Chapter 4.12 Traffic and Transportation). <u>Therefore, implementation of these recommended changes would make the Project consistent with Policy 39.1.3.</u></p>	<p>Consistent</p>
<p>Policy 39.4.2 (GP): <i>Land uses generating significant and regular goods movement shall be provided with easy access to the highways and arterials most capable of carrying large trucks; where feasible, this access shall be complemented by rail access.</i></p>	<p>The Project, which could generate significant and regular movement of goods, is located adjacent to one of the County's major transportation corridors, SR-68, capable of carrying large trucks. <u>Therefore, the Project is consistent with Policy 39.4.2.</u></p>	<p>Consistent</p>
<p>Policy 26.1.4.3 (T): <i>A standard subdivision map and/or vesting tentative and/or Preliminary Project Review Subdivision map application for either a standard subdivision or minor subdivision shall not be approved until:</i></p> <ol style="list-style-type: none"> 1) <i>An applicant provides evidence of an assured long-term water supply in terms of yield and quality for all lots which are to be created through subdivision. A recommendation on a water supply shall be made to the decision making body by the County's Health Officer and the General Manager of the Water Resources Agency, or their respective designees.</i> 2) <i>The applicant provides proof that the water supply to serve the lots meets both the water quality and quantity standards as set forth in Title 22 of the California Code of Regulations, and Chapters 15.04 and 15.08 of the Monterey County Code subject to the review and recommendation by the County Health Officer to the decision making body.</i> 	<p>The Project includes the subdivision of two existing parcels into seven parcels. Because the Project is located in an overdrafted groundwater basin and its development would result in a net water use deficit, the Project would not meet the requirements of Title 19. <u>Therefore, the subdivision component of the Project would not be consistent with Policy 26.1.4.3 (T) (refer to Chapter 4.7.2 of this EIR for additional discussion).</u></p>	<p>Inconsistent</p>

Policies	Summary of Consistency Analysis	Consistency
<p>Zoning Ordinance Sections 21.42.030 (H)(1) – (H)(4) - B-8 Overlay Zoning District Requirements:</p> <p>Section 21.42.030 (H) (1):</p> <p><i>The purpose of the “B-8” Zoning District is to restrict development and/or intensification of land use in areas where, due to water supply, water quality, sewage disposal capabilities, traffic impacts or similar measurable public-facility type constraints, additional development and/or intensification of land use if found to be detrimental to the health, safety, and welfare of the residents of the area, or the County as a whole.</i></p> <p><i>For the purposes of this Section, “intensification” means the change in the use of a building site which increases the demand on the constraint(s) which caused the “B-8” District to be applied over that use existing at that time the “B-8” district is applied to the property. The “B-8” district does not affect construction of the first single family dwelling on a building site, additions to dwellings, guesthouses, non-habitable structures accessory to a dwelling use, or addition and/or expansion of existing commercial uses where such addition and/or expansion can be found to not adversely affect the constraints which caused the “B-8” District to be applied to the property.</i></p>	<p>Several findings would need to be made in order to determine the Project’s consistency and compliance with the provisions of the B-8:</p> <p>1. Per the provisions of Section 21.42.030 (H) (1), a finding, with supporting evidence, would be needed for approval of the project stating that “The proposed project would result in construction of commercial uses that do not adversely affect the constraints that caused the B-8 District to be applied to the property.”</p> <p>The Site includes two separate commercially zoned legal lots of record (Assessor’s Parcel Numbers 161-571-003-000 and 161-581-001-000) which existed at the time that the B-8 overlay was adopted for the area by the Board of Supervisors. Pursuant to the provisions of Section 21.42.030 (H) (1), the B-8 does not affect the construction of new commercial uses provided those uses do not adversely affect the constraints that led the B-8 to be applied to the Site. In other words, any new commercial development on the Site cannot increase net water demand.</p> <p>Water use on the Site at the time the B-8 District regulations were approved was zero acre/feet/year (afy) (refer to discussion under Threshold 4.7.2 in Chapter 4.7). The estimated water demand for the Project is 11.34 acre-feet per year (afy) and the estimated groundwater recharge rate would be 10.04 afy of water, which would result in a net increase in water demand of 1.3 afy on the Site. This increase would exceed the level of water used on the Site at the time when the B-8 District was applied. Therefore, the Project would adversely affect the constraints (water quantity) which caused the B-8 District to be applied to the Site. <u>The finding required under Section 21.42.030 (H) (1) of the Zoning Ordinance cannot be made, and the Project would not be consistent with the provisions of Section 21.42.030 (H) (1).</u></p>	<p>Inconsistent</p>
<p>Section 21.42.030 (H) (2):</p> <p><i>The minimum building site shall be that which is recognized as an existing legal lot of record at the time the “B-8” Zoning District is imposed on the property, or lots that are created by a minor or standard subdivision for which an application was received by the Monterey County Planning Department prior to the imposition of the “B-8” Zoning District on the property.</i></p>	<p>2. Per the provisions of Section 21.42.030 (H) (2), the minimum building sites for properties in the area covered by the B-8 are those that were recognized as legal lots at the time the B-8 was imposed. This provision requires that the size of properties within the area covered by the B-8 be restricted to their size at the time of the imposition of the B-8; therefore, properties to which the B-8 applies cannot be subdivided. The Site includes two separate legal lots of record of approximately 5.3 acres and 5.6 acres (APN 161-571-003-000 and 161-581-001-000, respectively, recorded in Volume 6 of Parcel Maps, page 22, and Volume 9 of Parcel Maps, page 224, of the official County records).</p>	<p>Inconsistent</p>

Policies	Summary of Consistency Analysis	Consistency																				
<p>Section 21.42.030 (H) (3):</p> <p><i>Setbacks to be not less than "B-4" regulations unless otherwise indicated on parcel maps, final maps, or Sectional District Maps.</i></p>	<p>The Project includes the subdivision of the two existing lots of record into seven smaller parcels. Therefore, this portion of the Project application would not be consistent with the provisions of Section 21.42.030 (H) (2) and the subdivision cannot be approved.</p> <p>3. Per the provisions of Section 21.42.030 (H) (3), building setbacks for development in lots within the B-8 are to be "not less than "B-4" regulations unless otherwise indicated on parcel maps, final maps, or Sectional District Maps."</p> <p>The Site's principal zoning designation is Light Commercial (LC) with Building Site (B-8) and Design Control (D) overlays or "LC-B-8-D". Section 21.18.070(A)(2) of the Zoning Ordinance states that setbacks in the "LC" District are established by the approval of a General Development Plan where such plan is required, and section 21.18.070(A)(4) states that minimum setback requirements by a combining "B" district shall apply.</p> <p>A General Development Plan (GDP) is required because the Project exceeds one acre, includes more than one use, and includes an application for subdivision. The GDP for the Project establishes required setbacks that vary. Section 21.42.030(H)(3) of the Ordinance requires that building setbacks for development on lots with a "B-8" overlay not be less than is required in the "B-4" regulations unless otherwise indicated on parcel maps, final maps or Section District maps.</p> <p>Table 4.8.A summarizes development standards required by the "B" District, required for a GDP, and what is proposed by the Project:</p> <p>Table 4.8.A Development Standards Required by the "B" District</p> <table border="1"> <thead> <tr> <th>Standard</th> <th>B Overlay</th> <th>GDP</th> <th>Project</th> </tr> </thead> <tbody> <tr> <td>Site</td> <td>1 acre</td> <td>1 acre</td> <td>11 acres</td> </tr> <tr> <td>Front Setback</td> <td>30 feet</td> <td>Set by project</td> <td>Range from 100 to 35 feet</td> </tr> <tr> <td>Rear Setback</td> <td>20 feet</td> <td>Set by project</td> <td>Range from 60 to 35 feet</td> </tr> <tr> <td>Side Setback</td> <td>10% or 20 feet (max.)</td> <td>Set by project</td> <td>Range from 80 to 40 feet</td> </tr> </tbody> </table> <p>General Development Plans are intended to allow flexibility in applying development standards for commercial and industrial projects depending on surrounding conditions. Therefore, the Project is allowed to establish setbacks through the GDP and is consistent with required setbacks.</p>	Standard	B Overlay	GDP	Project	Site	1 acre	1 acre	11 acres	Front Setback	30 feet	Set by project	Range from 100 to 35 feet	Rear Setback	20 feet	Set by project	Range from 60 to 35 feet	Side Setback	10% or 20 feet (max.)	Set by project	Range from 80 to 40 feet	<p>Consistent</p>
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Policies	Summary of Consistency Analysis	Consistency
<p>Section 21.42.030 (H) (4): <i>Reclassification of an area from "B-8" zoning may be considered when the constraints existing at the time of "B-8" placing on the area zoned "B-8" no longer exists and additional development and/or intensification of land use would not be detrimental to the health, safety, and welfare of the residents of the area, or the County as a whole.</i></p>	<p>4. Per the provisions of Section 21.42.030 (H) (4), removal of the B-8 would require that a finding be made, with supporting evidence, demonstrating that the constraints existing at the time the B-8 was applied to the property no longer exist; and that development of the Project would not be detrimental to the health, safety, and welfare of the residents of the area, or the County as a whole. The Project application includes the rezoning of the Site to remove the B-8 from the Site's combined LC-B-8-D zoning designation.</p> <p>Based upon the studies performed over time with regard to water supply in the El Toro Planning Area (refer to discussion under Threshold 4.7.2 in Chapter 4.7), the conditions under which the B-8 was applied to the Site are still present. Removal of the B-8 from the Site would not be consistent with the requirements of the B-8 overlay zone.</p>	Inconsistent
4.9 Noise		
N/A		
4.10 Population, Employment, and Housing		
N/A		
4.11 Public Services		
<p>Policy 17.4.12 (GP): <i>A zone which can inhibit the spread of wildland fire shall be required of new development in fire hazard areas to protect development. Such zones should consider irrigated greenbelts, streets, and fuel modification zones in addition to other suitable methods that may be used. The County should not accept dedications of any open space lands required as part of this fire prevention zone.</i></p>	<p>The Site is located in an urban/agricultural and moderate fire hazard area in the Fire Hazards Map (refer to Figure 7 of the Toro Area Plan). The Site is bounded on the north by SR-68; on the west by Corral de Tierra Road which provide buffer to areas north and west of the site. The Project includes a vehicular circulation area along the eastern boundary of the property which would provide a buffer to the residential land uses to the south and east of the site. Therefore, the Project is consistent with Policy 17.4.12.</p>	Consistent
<p>Policy 39.1.1.1 (T): <i>The County shall be encouraged to work with the state, local agencies and citizens groups to alleviate traffic congestion on, and still maintain the scenic beauty of, Highway 68. With the goal of eventually constructing a scenic four-lane divided highway, the County shall support the following interim measures:</i> 5. construction of bus stops, pull-outs, and shelters where needed.</p>	<p>It is anticipated that the Project would generate an increase in the number of vehicle trips to the Site for the proposed commercial/retail services. In addition, it is anticipated that the Project would also generate additional demand for transit in an area that currently has limited transit services. The Project (refer to Figure 3.3) does not include any fixed transit facilities such as bus stops, bus shelters, or pull-outs to handle the anticipated demand. Project changes required in Chapter 4.1, Aesthetics, to mitigate visual impacts and project changes required in Chapter 4.12, Traffic and Transportation, to comply with other policy requirements, would make the Project consistent with Caltrans' and the County's design standards and would make the Project consistent with Policy 39.1.1.1 (T).</p>	Consistent

Policies	Summary of Consistency Analysis	Consistency
<p>Policy 41.1.2: <i>Developers of major traffic generating activities shall provide fixed transit facilities such as bus shelters and pullouts, consistent with anticipated demand.</i></p>	<p>As part of the implementation of the Project, the County would work closely with the applicant to add a bus stop or turn out area along SR-68 with an improved pedestrian connection between the bus stop and the shopping village. <u>Therefore, the Project would be consistent with Policy 41.1.2.</u></p>	<p>Consistent</p>
<p>4.12 Traffic and Transportation</p>		
<p>Policy 20.1.2 (GP) <i>The County should encourage the use of mass transit, bicycles and pedestrian modes of transportation as an alternative to automobiles in its land use plans.</i></p>	<p>The Project would provide sidewalks along the site frontage on Corral de Tierra Road and SR-68. The proposed sidewalks, along with the existing crosswalks at the SR-68/Corral de Tierra intersection, would provide access to the existing bus stops located on both sides of the Corral de Tierra Road/SR-68 intersection. The Project is automobile-oriented and does not include any features providing direct access to transit. <u>Therefore, the Project is partially consistent with Policy 13.3.3.</u> Project design changes addressed as mitigation measures in the Aesthetics and Traffic and Transportation Chapters of the EIR, which require the provision of a transit stop on the site frontage on SR-68, expanded pedestrian areas connecting the transit stop to the shopping village, and the provision of a bike lane on Corral de Tierra Road would make <u>the Project fully consistent with this policy.</u></p>	<p>Consistent</p>
<p>Policy 20.1.4 (GP) <i>The County should concentrate commercial development in designated centers that may be more easily served by public transit.</i></p>	<p>The Site is designated for commercial development in the Toro Area Plan and is zoned “Light Commercial” in the Zoning Ordinance. The assigned land use and zoning designations of the property took into account its location at the intersection of two major roads in the area with potential direct access to public transit. Two bus stops are located nearby the Site, including one on the north side of SR-68, which would provide access to the Project through public transit. The Project includes sidewalks along the site frontage on Corral de Tierra Road and SR-68 which along with the existing crosswalks at the SR-68/Corral de Tierra intersection would provide access to the bus stops. Recommended project design changes in the Aesthetics and Traffic and Transportation Chapters of the EIR require the provision of expanded pedestrian areas and the provision of a transit stop on the site frontage on SR-68. <u>Therefore, the Project is consistent with Policy 20.1.4.</u></p>	<p>Consistent</p>
<p>Policy 20.1.5 (GP) <i>The County shall adopt a land use plan which promotes mixed land uses to reduce the need for vehicular travel.</i></p>	<p>The Site is designated for commercial development in the Toro Area Plan and is zoned “Light Commercial” in the Zoning Ordinance. The land use and zoning designations of the property took into account the Site’s location at the intersection of two major roads in the area, and the need to provide access to basic services to residents in the Toro Area who currently have to travel further to obtain those services. The location and availability of basic services at the Site would reduce the need for longer vehicular travel for residents in the area of the Toro Area Plan. The designation of a commercial site at this location was included in the Toro Area Plan to be consistent with Policy 20.1.5. The Site is generally surrounded by established low and medium-density residential areas. The Project would add basic neighborhood services closer to the existing residences in an area that is already developed at various residential densities and potentially reducing vehicular travel. <u>Therefore, the Project would be consistent with Policy 20.1.5.</u></p>	<p>Consistent</p>

Policies	Summary of Consistency Analysis	Consistency
<p>Policy 37.2.1 <i>Transportation demands of proposed development shall not exceed an acceptable level of service (LOS C) for existing transportation facilities, unless appropriate increases in capacities are provided for.</i></p>	<p>With implementation of the Project, the Level of Service (LOS) at the intersection of Corral de Tierra Road and SR-68 would deteriorate to below an acceptable LOS. Required project changes and mitigation measures in Section 4.12.5 and 4.12.8 of the EIR, and payment of the Regional Development Impact Fee (RDIF) would improve overall travel time across the highway corridor. Future roadway improvements planned in the RDIF Program would ultimately increase roadway capacity along the SR-68 corridor. Therefore, the Project would be consistent with Policy 37.2.1.</p>	<p>Consistent</p>
<p>Policy 39.1.1.3 (T): <i>The County shall require significant financial contributions from each new subdivision in the Toro Planning Area in order to expedite funding and construction of Highway 68.</i></p>	<p>The Project includes the subdivision of the two existing lots of record into seven parcels. As stated above (refer to discussion under Policy 26.1.4.3) the subdivision component of the Project is not consistent with certain requirements of the County Code and cannot be approved; therefore policy 39.1.1.3 (T) would not apply to the Project. However, should this component of the Project be approved, it would be subject to payment of fees as determined by the Public Works Department consistent with the requirements of the policy. These fees shall be used to fund construction of improvement projects on SR-68. The payment of fees, if required, would make the application consistent with Policy 39.1.1.3 (T).</p>	<p>Consistent</p>
<p>Policy 39.2.2.1 (T): <i>Improvements to Corral de Tierra and San Benancio Roads shall be designed to accommodate bicycles, horses, and people.</i></p>	<p>The Project includes a pedestrian path along Corral de Tierra road but does not include areas for bicycles or horses. The Project also includes minimal sidewalk areas along SR-68. Therefore, the Project is partially consistent with this policy. Mitigation measures required in the Aesthetic and Traffic and Transportation Chapters of the EIR would make the Project consistent with Policy 39.2.2.1 (T) and also consistent with the provisions of the 2008 Monterey County General Bikeways Plan.</p>	<p>Consistent</p>
<p>Policy 39.2.2.2 (T): <i>The County shall require developers to make safety improvements to Corral de Tierra Road with first priority given to pedestrian, equestrian, and bicycle uses. Road improvements such as widening or straightening which may lead to increase vehicle speeds shall be discouraged.</i></p>	<p>Road improvements along Corral de Tierra Road required by the Department of Public Works under Mitigation Measure 4.12.4 would assure compliance with this policy and with the provisions of the 2008 Monterey County Bikeways Plan.</p>	<p>Consistent</p>
<p>4.13 Utilities and Energy</p>		
<p>Policy 13.3.3 (GP): <i>Plans for major projects shall address opportunities for reducing energy used for transportation, including pedestrian and bicycle pathways, access to transit, and roadway design.</i></p>	<p>The Project provides sidewalks along the site frontage on Corral de Tierra Road and SR-68. The proposed sidewalks, along with the existing crosswalks at the SR-68/Corral de Tierra intersection, would provide access to the bus stops located at the Corral de Tierra Road/SR-68 intersection. The Project is automobile-oriented and does not include any features providing direct access to transit. Therefore, the Project is partially consistent with Policy 13.3.3. Project design changes addressed in mitigation measures in the Aesthetics and Traffic and Transportation Chapters of the EIR, which require the provision of expanded pedestrian areas, the provision of a transit stop on the site frontage on SR-68, and the provision of a bike lane on Corral de Tierra Road, would increase the</p>	<p>Consistent</p>

Policies	Summary of Consistency Analysis	Consistency
<p>Policy 53.1.4 (GP): <i>New development shall be required to connect to existing water service providers that are public utilities, where feasible.</i></p>	<p>opportunities for reduced energy used for transportation and make the project fully consistent with this policy. The Project would connect to the existing water service provider, Ambler Park Water Company, a public water system owned and operated by the California American Water Company. Therefore, the Project is consistent with Policy 53.1.4.</p>	Consistent
<p>Policy 56.1.1 (GP): <i>The County shall, when planning development, provide for utility corridor rights-of-way.</i></p>	<p>According to the Vesting Tentative Map sufficient utility easements have been provided to support the Project. Additional utility easements may be required upon submission of final development plans. Therefore, the Project is consistent with Policy 56.1.1.</p>	Consistent
<p>4.14 Global Climate Change</p>		
<p>Policy 13.3.1 (GP): <i>Lots shall be oriented so structures may maximize the energy gains from solar sources and minimize energy losses where possible.</i></p>	<p>The Site is a mostly elongated parcel located in a southwesterly-northeasterly direction along Corral de Tierra Road, with a wider area towards the intersection with SR-68 generally oriented towards the south. The buildings proposed in this part of the Site (Retail Building Nos. 1-8) located on proposed Lot Nos. 1-3, are mostly oriented towards the south with opportunity to access solar energy. The shape and orientation of the rest of the parcel does not provide an opportunity for a full southward orientation of buildings in this area. The Project would be built to current codes and standards relative to energy savings and efficiency. The final building location and design would be required to contain measures that advance the goal of energy efficiency and green building targets such as reorientation of buildings to maximize energy gains from solar sources and minimize energy losses where possible (Mitigation Measure 4.13.3). Therefore, the Project would be consistent with Policy 13.3.1.</p>	Consistent
<p>Policy 13.4.3(GP): <i>Building designs which reduce demands for artificial heating, cooling, ventilation, and lighting shall be encouraged.</i></p>	<p>While the Project would be built to current codes and standards, building designs associated with the Project do not contain features that, where possible, reduce demands for artificial heating, cooling, ventilation, and lighting beyond those code requirements. The final building location and building design would be required to contain construction measures that advance the goal of energy efficiency and green building targets, such as potential reorientation of buildings to maximize energy gains from solar sources and minimize energy losses where possible (Mitigation Measure 4.13.3). Project design changes required as mitigation measures would make the project consistent with Policy 13.4.3.</p>	Consistent

Threshold 4.8.5.3 Conflict with any applicable habitat conservation plan or natural community conservation plan

The Project and adjacent land uses are not covered by and would therefore not conflict with any habitat conservation plans or natural community conservation plans. The Project would not have a significant impact on a habitat or natural community conservation plan.

4.8.6 Cumulative Impacts

Cumulative land use impacts associated with implementation of the Project are being considered in conjunction with the development of the projects listed in the cumulative projects list (refer to Table 4.1 and Figure 4.1). Construction of the Project would occur in an area where the majority of the surrounding land use designations include the “B-8” overlay. If approved, construction of the Project would contribute to the continued drawing down of the existing water supply. Chapter 4.7 Hydrology and Water Quality concludes that the Project would result in a depletion of groundwater resources in an already overdrafted groundwater basin and that this impact is significant and unavoidable. Therefore, when considered in conjunction with several other existing and planned developments within the cumulative study area, the Project would contribute significantly to the cumulative impact on the existing water supply. The Project’s contribution to the cumulative impact on water supply is significant and cannot be mitigated. Therefore, the Project’s contribution to cumulative land use impacts associated with the supply of water in the Project area would be cumulatively significant and unavoidable.

4.8.7 Level of Significance Prior to Mitigation

No potentially significant project impacts related to the physical division of an established community or conflicts with applicable habitat conservation plans or natural community conservation plans have been identified. The Project is inconsistent or partially inconsistent with certain applicable General Plan and Toro Area Plan policies as discussed herein and summarized in Table 4.8.B. Although the Project is inconsistent or partially inconsistent with some applicable policies from these planning documents, the policy-related inconsistencies would not result in a direct, identifiable *physical* environmental impact requiring mitigation. Required compliance with these policies is a County decision. However, the development proposal for the Site is incompatible with the current “B-8” overlay zoning designation that was placed due to local water supply constraints (refer to the discussion above about the Project’s consistency with the B-8 overlay zoning designation under Section 4.8.5 Project Impacts). If approved, the proposed development would be able to draw water from the local water supply without fully replenishing it. Therefore, there are potentially significant long-term unavoidable and adverse physical environmental impacts associated with the removal of the “B-8” overlay zoning district from the Site’s overall “LC-B-8-D” zoning designation.

4.8.8 Mitigation Measures

There are no measures available to mitigate the potentially significant unavoidable and adverse physical environmental impacts associated with the development proposal’s removal of the “B-8” overlay zoning district from the Site’s current overall “LC-B-8-D” land use designation.

4.8.9 Level of Significance after Mitigation

As impacts associated with the “B-8” overlay are expected to exceed the significance criteria and no mitigation measures are available, there would be significant unavoidable and adverse physical environmental impacts associated with the rezoning of the Site to remove the “B-8” overlay zoning district from the Site’s overall “LC-B-8-D” zoning designation.

4.9 NOISE

This section describes existing noise conditions in the Site vicinity, criteria for determining the significance of noise impacts, and estimates the likely noise that would result from construction activities, vehicular traffic, and other noise sources. Where appropriate, mitigation measures are prescribed to reduce project-related noise impacts to a less than significant level.

4.9.1 Existing Environmental Setting

This section begins with an introduction to several key concepts and terms that are used in evaluating noise, and concludes with a description of current noise sources that affect the Site and the noise conditions that are experienced in the Site vicinity.

Characteristics of Sound

Noise is generally defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

To the human ear, sound has two significant characteristics: *pitch* and *loudness*. Pitch is the number of complete vibrations or cycles per second of a wave that results in the range of tone from high to low. Loudness is the strength of a sound that describes a noisy or quiet environment, and it is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound waves combined with the reception characteristics of the human ear. Sound intensity refers to how hard the sound wave strikes an object, which in turn produces the sound's effect. This characteristic of sound can be precisely measured with instruments. The analysis of a project defines the noise environment of the Site in terms of sound intensity and its effects on adjacent sensitive land uses.

Measurement of Sound

Sound is characterized by various parameters that describe the rate of oscillation (frequency) of sound waves, the distance between successive troughs or crests in the wave, the speed that it travels, and the pressure level or energy content of a given sound. The sound pressure level has become the most common descriptor used to characterize the loudness (or amplitude) of an ambient sound, and the decibel (dB) scale is used to quantify sound intensity. A decibel (dB) is a unit of measurement which indicates the relative intensity of a sound. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. Audible increases in noise levels generally refer to a change of 3 dB or more, as this level has been found to be barely perceptible to the human ear in outdoor environments.

Because sound can vary in intensity by over one million times within the range of human hearing, a logarithmic loudness scale¹ is used to keep sound intensity numbers at a convenient and manageable level. Thus, a 10 dBA increase in the level of a continuous noise represents a perceived doubling of

¹ Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale, representing points on a sharply rising curve. The logarithmic decibel scale allows an extremely wide range of acoustic energy to be characterized in a manageable notation.

loudness, while a 20 dBA increase is 100 times more intense, and a 30 dBA increase is 1,000 times more intense. As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level. Noise levels diminish or attenuate as distance from the source increases based on an inverse square rule, depending on how the noise source is physically configured. Noise level from a single-point source, such as a single piece of construction equipment at ground level, attenuates at a rate of 6 dB for each doubling of distance (between the single-point source of noise and the noise-sensitive receptor of concern). Heavily traveled roads with few gaps in traffic behave as continuous line sources and attenuate roughly at a rate of 3 dB per doubling of distance.

Since the human ear is not equally sensitive to all pitches (sound frequencies) within the entire spectrum, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity in a process called "A-weighting," expressed as "dBA." The dBA or A-weighted decibel refers to a scale of noise measurement that approximates the range of sensitivity of the human ear to sounds of different frequencies. Table 4.9.A contains a list of typical acoustical terms and definitions. Table 4.9.B shows some representative noise sources and their corresponding noise levels in dBA.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} , the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on A-weighted decibels (dBA). CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours. Typical A-weighted sound levels from various sources are described in Table 4.9.B.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level (L_{max}), which is the highest exponential time averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of maximum levels denoted by L_{max} for short-term noise impacts. L_{max} reflects peak operating conditions, and addresses the annoying aspects of intermittent noise.

Noise impacts can be described in three categories. The first is audible impacts that refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3.0 dBA or greater, since, as described earlier, this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1.0 and 3.0 dBA. This range of noise levels has been found to be noticeable only in laboratory environments. The last category is changes in noise level of less than 1.0 dBA that are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

Table 4.9.A: Definitions of Acoustical Terms

Term	Definitions
Decibel, dB	A unit of level that denotes the ratio between two quantities proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency, Hz	Of a function periodic in time, the number of times that the quantity repeats itself in one second (i.e., number of cycles per second).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted, unless reported otherwise.
L_{01} , L_{10} , L_{50} , L_{90}	The fast A-weighted noise levels equaled or exceeded by a fluctuating sound level for 1 percent, 10 percent, 50 percent, and 90 percent of a stated time period.
Equivalent Continuous Noise Level, L_{eq}	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time varying sound.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of five decibels to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
Day/Night Noise Level, L_{dn}	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
L_{max} , L_{min}	The maximum and minimum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.
Ambient Noise Level	The all encompassing noise associated with a given environment at a specified time, usually a composite of sound from many sources at many directions, near and far; no particular sound is dominant.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Harris, C.M. 1998. *Handbook of Acoustical Measurements and Noise Control*.

Table 4.9.B: Typical A-Weighted Sound Levels

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments
Near Jet Engine	140	Deafening
Civil Defense Siren	130	Threshold of pain
Hard Rock Band	120	Threshold of feeling
Accelerating Motorcycle at a Few Feet Away	110	Very loud
Pile Driver; Noisy Urban Street/Heavy City Traffic	100	Very loud
Ambulance Siren; Food Blender	95	Very loud
Garbage Disposal	90	Very loud
Freight Cars; Living Room Music	85	Loud
Pneumatic Drill; Vacuum Cleaner	80	Loud
Busy Restaurant	75	Moderately loud
Near Freeway Auto Traffic	70	Moderately loud
Average Office	60	Moderate
Suburban Street	55	Moderate
Light Traffic; Soft Radio Music in Apartment	50	Quiet
Large Transformer	45	Quiet
Average Residence Without Stereo Playing	40	Faint
Soft Whisper	30	Faint
Rustling Leaves	20	Very faint
Human Breathing	10	Very faint

Source: Compiled by LSA Associates, Inc., 2008.

Physiological Effects of Noise

According to the U.S. Department of Housing and Urban Development's 1985 Noise Guidebook, permanent physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 to 90 dBA. Exposure to high noise levels affects our entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, and thereby affecting blood pressure, functions of the ear, and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. For avoiding adverse effects on human physical and mental health in the workplace or in communities, the U.S. Department of Labor, Occupation Health and Safety Administration (OSHA) requires the protection of workers from hearing loss when the noise exposure equals or exceeds an 8-hour time-weighted average of 85 dBA (Occupational Safety & Health Administration, Regulations, Standards 29 CFR, Occupational Noise Exposure 1910.95).

Unwanted community effects of noise occur at levels much lower than those that cause hearing loss and other health effects. Annoyance to noise occurs when it interferes with sleeping, conversation, noise-sensitive work, including learning or listening to radio, television, or music. According to the World Health Organization (WHO) noise studies, during daytime hours, few people are seriously annoyed by activities with noise levels below 55 dBA, or moderately annoyed with noise levels below 50 dBA (World Health Organization, 1999).

Existing Noise Environment

The major source of noise affecting the existing noise environment at the Site is vehicular traffic on SR-68 and Corral de Tierra Road. There are no other significant noise sources that would affect the sensitive receptors because the Site is currently vacant in the Project vicinity. The existing sensitive receptors are described below after existing traffic noise.

Existing Traffic Noise Levels

Existing traffic noise levels were calculated using the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model. Traffic data used in the model was obtained from the traffic impact analysis prepared by Hexagon Transportation Consultants for this project (Hexagon, 2009). Table 4.9.C lists the calculated traffic noise levels along roadway segments in the Project vicinity under existing (2009) conditions. The traffic noise model printouts are included in Appendix H of Volume II of this EIR.

Existing traffic noise levels along roadway segments adjacent to the Site range from 65.5 dBA to 71.8 dBA L_{dn} at 50 ft from the centerline of the outermost travel lane.

Table 4.9.C: Existing Traffic Noise Levels

Roadway Segment	Average Daily Trips	Centerline to 70 dBA CNEL (feet)	Centerline to 65 dBA CNEL (feet)	Centerline to 60 dBA CNEL (feet)	CNEL (dBA) 50 Feet From Outermost Lane
Corral de Tierra Road - South of SR-68 ^a	5,600	< 50 ^b	61	130	65.5
SR-68 - Corral de Tierra Road to San Benancio Road	21,300	81	173	371	71.8
SR-68 - Laureles Grade to Corral de Tierra Road	20,500	78	168	362	72.2
Laureles Grade - South of SR-68	8,000	< 50	77	165	67.1
San Benancio Road - South of SR-68	5,100	< 50	< 50	68	61.3

Source: LSA Associates, Inc., September 2009.

^a Shaded cells represent roadway segments adjacent to the Site.

^b Traffic noise within 50 feet of roadway centerline requires site-specific analysis.

Existing Noise Sensitive Land Uses in the Project Vicinity

Land uses surrounding the Site consist of small-scale commercial to the west and north, single and multi-family residential to the east and south, and public/quasi-public land uses across SR-68 to the north. The closest sensitive receptors to the Site are the multi-family residential land uses of the Villas residential condominium community to the east and the single-family residential land uses to the south of the Site. The construction and operation of the Project could affect these surrounding land uses.

4.9.2 Regulatory Setting

The following section summarizes the regulatory framework related to noise, including federal, State and County plans, policies and standards.

U.S. Environmental Protection Agency (EPA)

In 1972 Congress enacted the Noise Control Act. This act authorized the EPA to publish descriptive data on the effects of noise and establish levels of sound “requisite to protect the public welfare with an adequate margin of safety.” These levels are separated into health (hearing loss levels) and welfare (annoyance levels), as shown in Table 4.9.D. The EPA cautions that these identified levels are not standards because they do not take into account the cost or feasibility of the levels.

Table 4.9.D: Summary of EPA Noise Levels

Effect	Level	Area
Hearing loss	Leq(24) < 70 dB	All areas.
Outdoor activity interference and annoyance	Ldn < 55 dB	Outdoors in residential areas and farms and other outdoor areas where people spend widely varying amounts of time and other places in which quiet is a basis for use.
	Leq(24) < 55 dB	Outdoor areas where people spend limited amounts of time, such as school yards, playgrounds, etc.
Indoor activity interference and annoyance	Leq < 45 dB	Indoor residential areas.
	Leq(24) < 45 dB	Other indoor areas with human activities such as schools, etc.

Source: U.S. Environmental Protection Agency, 1974. “Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety.” March.

For protection against hearing loss, 96 percent of the population would be protected if sound levels are less than or equal to an $L_{eq(24)}$ of 70 dBA. The “(24)” signifies an L_{eq} duration of 24 hours. The EPA activity and interference guidelines are designed to ensure reliable speech communication at about 5 ft in the outdoor environment. For outdoor and indoor environments, interference with activity and annoyance should not occur if levels are below 55 dBA and 45 dBA, respectively.

The noise effects associated with an outdoor L_{dn} of 55 dBA are summarized in Table 4.9.E. At 55 dBA L_{dn} , 95 percent sentence clarity (intelligibility) may be expected at 11 ft, and no community reaction. However, 1 percent of the population may complain about noise at this level and 17 percent may indicate annoyance.

Table 4.9.E: Summary of Human Effects in Areas Exposed to 55 dBA L_{dn}

Type of Effects	Magnitude of Effect
Speech – Indoors	100 percent sentence intelligibility (average) with a 5 dB margin of safety.
Speech – Outdoors	100 percent sentence intelligibility (average) at 0.35 meters. 99 percent sentence intelligibility (average) at 1.0 meters. 95 percent sentence intelligibility (average) at 3.5 meters.
Average Community Reaction	None evident; 7 dB below level of significant complaints and threats of legal action and at least 16 dB below “vigorous action.”
Complaints	1 percent dependent on attitude and other non-level related factors.
Annoyance	17 percent dependent on attitude and other non-level related factors.
Attitude Towards Area	Noise essentially the least important of various factors.

Source: U.S. Environmental Protection Agency, 1974. “Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety.” March.

State of California

The State of California has established regulations that help prevent adverse impacts to occupants of buildings located near noise sources. Referred to as the “State Noise Insulation Standard,” it requires buildings to meet performance standards through design and/or building materials that would offset any noise source in the vicinity of the receptor. State regulations include requirements for the construction of new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings that are intended to limit the extent of noise transmitted into habitable spaces. These requirements are found in the California Code of Regulations, Title 24 (known as the Building Standards Administrative Code), Part 2 (known as the California Building Code), Appendix Chapters 12 and 12A. For limiting noise transmitted between adjacent dwelling units, the noise insulation standards specify the extent to which walls, doors, and floor ceiling assemblies must block or absorb sound. For limiting noise from exterior noise sources, the noise insulation standards set an interior standard of 45 dBA CNEL in any habitable room with all doors and windows closed. In addition, the standards require preparation of an acoustical analysis demonstrating the manner in which dwelling units have been designed to meet this interior standard, where such units are proposed in an area with exterior noise levels greater than 60 dBA CNEL.

The State has also established land use compatibility guidelines for determining acceptable noise levels for specified land uses. The County has adopted the State’s land use compatibility guidelines, as discussed below.

County of Monterey

The County addresses noise in the goals and policies of the General Plan (County of Monterey, 1982) and in the noise ordinances of the Municipal Code (County of Monterey, 2009). The County’s land use compatibility standards for community noise environments are shown in Table 4.9.F. Community environments with ambient noise levels of up to 70 dBA CNEL are considered “normally acceptable” for new office building, business commercial, and professional land use development. The County requires environmental review of all proposed new development which may increase the noise level in surrounding areas or generate levels greater than those shown in Table 4.9.F.

Table 4.9.F: County Land Use Compatibility Standards for Community Noise Environments

Land Use Category	Community Noise Exposure in Decibels (CNEL) Day/Night Average Noise Level in Decibels (Ldn)						
	55	60	65	70	75	80	
Residential – Low Density Single-Family, Duplex, Mobile Homes							
Residential – Multi-Family							
Transient Lodging – Motels, Hotels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Industrial, Manufacturing, Utilities, Agriculture							

<div style="border: 1px solid black; width: 20px; height: 20px; background-color: white; margin-bottom: 10px;"></div> <p>NORMALLY ACCEPTABLE Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.</p>	<div style="border: 1px solid black; width: 20px; height: 20px; background-color: #cccccc; margin-bottom: 10px;"></div> <p>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 included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.</p>	<div style="border: 1px solid black; width: 20px; height: 20px; background-color: #666666; margin-bottom: 10px;"></div> <p>NORMALLY UNACCEPTABLE New construction or development should 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.</p>	<div style="border: 1px solid black; width: 20px; height: 20px; background-color: black; margin-bottom: 10px;"></div> <p>CLEARLY UNACCEPTABLE New construction or development should generally not be undertaken.</p>
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Source: County of Monterey, 2007. *Monterey County General Plan*, Table S-2. January 3.

The Noise Ordinance in Chapter 10.60 of the Municipal Code also prohibits the operation of noise producing machinery and equipment which would produce noise levels exceeding 85 dBA as measured at 50 ft from the device while in operation. This prohibition does not apply to any such machinery or equipment which is operated in excess of 2,500 ft from any occupied dwelling unit.

4.9.3 Methodology

Traffic noise levels were calculated for the Project using the FHWA Highway Traffic Noise Prediction Model (RD-77-108) with traffic volume data obtained from the Final Traffic Report prepared by Hexagon Transportation Consultants for this project.¹ The resultant noise levels were weighted and summed over a 24-hour period in order to determine the CNEL values. CNEL contours are derived through a series of computerized iterations to isolate the 60, 65, and 70 dBA CNEL contours for traffic noise levels in the project area. Selected roadway segments that would experience the highest percentage of project trips were analyzed. Traffic noise was evaluated using existing (2009), the background (existing traffic levels) plus project, and the cumulative plus project PM peak hour traffic volumes to calculate the average daily traffic; these scenarios and methodology for calculating the traffic volumes are described in detail in the associated traffic report in Appendix H of Volume II, Technical Appendices. The traffic noise model printouts are provided in Appendix H of Volume II, Technical Appendices.

4.9.4 Impact Significance Criteria

This section lists the criteria of significance which establish the thresholds for determining whether a project impact is significant. For the purposes of this Project, a noise impact is considered significant if the Project would:

- Threshold 4.9.1:** Expose persons to or generate noise levels in excess of standards established in the General Plan or noise ordinance, or applicable standards of other agencies;
- Threshold 4.9.2:** Expose persons to or generate excessive ground-borne vibration or ground-borne noise levels;
- Threshold 4.9.3:** Result in a substantial permanent, temporary, or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; or
- Threshold 4.9.4:** For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

¹ Hexagon Transportation Consultants, Inc., 2009. *Corral de Tierra Mixed-Use Development Final Traffic Report*. September 1.

4.9.5 Project Impacts

Threshold 4.9.1: Expose persons to or generate noise levels in excess of normally acceptable standards established in the General Plan or noise ordinance

Construction Noise Impacts

Construction activities associated with implementation of the Project could temporarily expose persons in the vicinity of the Site to noise levels in excess of acceptable standards. Two types of short-term noise impacts would occur during site preparation and project construction. The first type would result from the increase in traffic flow on local streets, associated with the transport of workers, equipment, and materials to and from the Site. Because workers and construction equipment would use existing routes, noise from passing trucks (85 dBA L_{max} at 50 ft) would be similar to existing truck-generated noise. For this reason, short-term intermittent noise from trucks would be minor when averaged over a longer time period. Therefore, short-term construction-related noise associated with worker and equipment transport to the Site would result in a less than significant impact on receptors along the access routes leading to the Site.

The second type of short-term noise impact is related to the noise generated by heavy construction equipment operating on the Site. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the Site and, therefore, the noise levels surrounding the Site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 4.9.G lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 ft between the equipment and a noise receptor.

Table 4.9.G: Typical Construction Equipment Maximum Noise Levels, L_{max}

Type of Equipment	Range of Maximum Sound Levels (dBA at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)
Pile Drivers	81 to 96	93
Rock Drills	83 to 99	96
Jackhammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Pumps	74 to 84	80
Scrapers	83 to 91	87
Haul Trucks	83 to 94	88
Cranes	79 to 86	82
Portable Generators	71 to 87	80
Rollers	75 to 82	80
Dozers	77 to 90	85
Tractors	77 to 82	80
Front-End Loaders	77 to 90	86
Hydraulic Backhoe	81 to 90	86
Hydraulic Excavators	81 to 90	86
Graders	79 to 89	86
Air Compressors	76 to 89	86
Trucks	81 to 87	86

Source: Bolt, Beranek & Newman, 1987. *Noise Control for Buildings and Manufacturing Plants*.

Construction of the Project is expected to require the use of earthmovers such as bulldozers and scrapers, loaders and graders, water trucks, and pickup trucks. As shown in Table 4.9.G, the typical maximum noise level generated by each bulldozer on the Site is assumed to be 85 dBA L_{max} at 50 ft from the operating earthmover. The maximum noise level generated by graders is approximately 86 dBA L_{max} at 50 ft. The maximum noise level generated by water and other trucks is approximately 86 dBA L_{max} at 50 ft from these vehicles. The use of pile drivers is not expected during construction of this project.

Each doubling of the sound sources with equal strength would increase the noise level by 3 dBA. Assuming each piece of construction equipment operates at some distance apart from the other equipment, the worst-case combined noise level at the nearest uses to the Site during this phase of construction would be 91 dBA L_{max} at 50 ft from the operating equipment. The closest noise sensitive land uses to the Site are the single-family residences south of the Site located approximately 90 ft from the Project boundary. At this distance and assuming a direct unobstructed line of sight, maximum noise levels from construction activities could range up to 86 dBA L_{max} at these residences when construction activities occur near the Project boundary. Adherence to the policies and codes of the County's General Plan and noise ordinance and implementation of Standard Conditions 4.9.1a through 4.9.1d would ensure that these short-term construction activities would not result in an exceedance of the weighted 24-hour averaged "normally acceptable" standard of 60 dBA CNEL for residential land uses. Therefore, there would be no significant impacts from short-term construction noise associated with the transport of workers, equipment, and materials to and from the Site or from the noise generated by heavy construction equipment operating on the Site. Construction noise impacts that could result in temporary significant increases in ambient noise levels at nearby residences are discussed further under Threshold 4.9.3.

Operational Impacts

Traffic Noise Impacts on the Site.

As outlined in the existing noise environment discussion, traffic noise is the dominant noise source in the Project vicinity. The existing traffic noise level during p.m. peak period along Corral de Tierra Road is 65.5 dBA CNEL, and along SR-68 is 71.8 dBA L_{dn} at 50 ft from the centerline of the outermost travel lane. The nearest proposed structures to SR-68 would be located approximately 180 ft from the centerline of the outermost travel lane. At this distance, traffic noise levels along SR-68 would be below 63 dBA CNEL at the proposed retail buildings following implementation of the Project. As shown in Table 4.9.H, under Background plus Project conditions traffic noise levels along Corral de Tierra Road would range up to 68.9 dBA CNEL, and up to 72.1 dBA CNEL along SR-68 at 50 ft from the centerline of the outermost travel lanes. At the closest proposed commercial/retail or office structure, traffic noise levels under Background plus Project conditions would be below 64 dBA CNEL. These traffic noise levels are all below the County's "normally acceptable" threshold of 70 dBA CNEL for new office building, business commercial, and professional land use development. Interior noise levels in the closest proposed structure would therefore also be considered acceptable. Therefore, existing and plus project traffic noise levels are compatible with the proposed land uses and impacts on proposed on-site land uses would be considered less than significant. Project generated traffic noise affecting existing sensitive land uses along SR-68 and Corral de Tierra Road are discussed in Section 4.9.3.

Table 4.9.H: Background Plus Project Traffic Noise Levels

Roadway Segment	ADT	Center-line to 70 CNEL (feet)	Center-line to 65 CNEL (feet)	Center-line to 60 CNEL (feet)	CNEL (dBA) 50 feet from Centerline of Outermost Lane	Increase from Existing Conditions
Corral de Tierra Road - South of SR-68 ^a	9,600	< 50 ^b	102	219	68.9	3.4
SR-68 - Corral de Tierra Road to San Benancio Road	25,800	93	197	422	72.1	0.3
SR-68 - Laureles Grade to Corral de Tierra Road	25,300	90	194	417	73.1	0.9
Laureles Grade - South of SR-68	8,200	< 50	78	167	67.2	0.1
San Benancio Road - South of SR-68	5,500	< 50	< 50	71	61.6	0.3

Source: LSA Associates, Inc., September 2009.

^a Shaded cells represent roadway segments adjacent to the Site.

^b Traffic noise within 50 feet of roadway centerline requires site-specific analysis.

Stationary Noise Impacts

On-site commercial and retail uses would contain stationary noise sources such as truck delivery (loading/unloading) activities and typical parking lot activities. These activities are potential point sources of noise that could affect noise-sensitive receptors in the Project vicinity. Of the on-site stationary noise sources, noise generated by delivery truck activity would generate the highest maximum noise levels. While parking activities, such as people conversing or doors slamming, would generate noise levels of approximately 60 dBA to 70 dBA L_{max} at 50 ft; delivery truck loading and unloading activities can result in maximum noise levels from 75 dBA to 85 dBA L_{max} at 50 ft.

There are generally two types of loading that would occur on the Site: small deliveries like parcels and packages, and large deliveries like office equipment, furniture, or pallets of grocery items. The former are typically made via passenger car, van, or single-unit truck. According to the traffic report, these smaller deliveries would load and unload in the drive aisles in front of the stores; the larger deliveries would occur at the loading dock facilities on the rear (northeast corner) of the proposed two-story commercial market facility (refer to Figure 3.4 Site Plan).

The closest existing noise sensitive receptors to the proposed loading docks are the single family residential properties bordering the eastern Project property line. The closest residential unit is located approximately 230 ft from the proposed loading dock facilities. However, these residences do not have a direct line of sight to the proposed loading dock area due to the intervening hill. As such, noise levels from activities at the proposed loading dock area would be expected to be reduced by an additional 5 to 10 dBA at the nearest residential land use. Therefore, these residential land uses could experience noise levels from delivery truck activities of up to 67 dBA L_{max} . These short-term, periodic delivery activities would not be expected to result in an exceedance of the weighted 24-hour averaged standard for residential land uses of 60 dBA CNEL.

Threshold 4.9.2: Expose persons to or generate excessive ground-borne vibration or noise

No permanent noise sources that would expose persons to excessive ground borne vibration or noise would be located within the Site. Therefore, implementation of the Project would not permanently expose persons within or around the Site to excessive ground borne vibration or noise.

Construction activities associated with implementation of the Project could temporarily expose persons in the vicinity of the Site to perceptible ground borne vibration or ground borne noise levels. The closest noise sensitive land uses to the Site are the single-family residential land uses south of the Site located approximately 90 ft from the Project boundary. At this distance, ground-borne vibration and noise would be barely perceptible. In addition, adherence to the policies and codes of the County's General Plan and noise ordinance and implementation of standard conditions would result in construction-related ground-borne vibration and/or noise levels that are less than significant.

Threshold 4.9.3: Result in a substantial permanent, temporary, or periodic increase in ambient noise levels in the project vicinity above levels existing without the project

Implementation of the Project would result in an increase in vehicle trips in the vicinity of the Site and potential increases in traffic noise along access roads leading to the Site (Corral de Tierra Road and SR-68 west and east of Corral de Tierra Road). Increases of 3 dBA are considered to be barely perceptible in outdoor environments; therefore, for purposes of this analysis, an increase of greater than 3 dBA would be considered a substantial permanent increase in ambient noise levels. As shown in Table 4.9.H, the Project would generate slight increases in traffic noise levels along modeled roadway segments in the Project vicinity over existing conditions. The greatest increase would occur along the portion of Corral de Tierra Road that lies just south of SR-68. Under Background plus Project conditions, this roadway segment would experience an increase of up to 3.4 dBA over existing conditions.

The closest noise sensitive receptors along this impacted roadway segment are the residential land uses located at the top of the hill on the west side of Corral de Tierra Road across from the Site. Due to the existing terrain and how the homes are set back along the ridgeline of this hill, these residential properties and their accompanying outdoor active use areas do not have a direct line of sight to Corral de Tierra Road. The closest residence is located approximately 100 ft from the centerline of the roadway. Thus, with distance attenuation and terrain shielding that would provide at least an additional reduction of 5 dBA, project-related traffic noise levels along this roadway segment would be reduced to below 57.9 dBA CNEL at the closest sensitive receptor; thus meeting the County's "normally acceptable" standard of 60 dBA CNEL for residential land use development. Therefore, project-related increases in traffic noise levels along roadway segments in the Project vicinity would be considered less than significant.

As described in the construction noise impact discussion under Threshold 4.9.1, maximum noise levels from project-related construction activities could range up to 86 dBA L_{max} at the nearest residences when construction activities occur along the nearest Project property line. These construction activities would result in temporary significant increases in ambient noise levels at nearby residences. However, these impacts would be less than significant with implementation of standard conditions 4.9.1a through 4.9.1d.

As described in the stationary noise impact discussion under Threshold 4.9.1, truck delivery (loading/unloading) activities associated with proposed commercial uses could result in noise levels at the nearest residential land uses reaching up to 67 dBA L_{max} . During daytime hours, when ambient noise levels are highest due to traffic noise, noise from delivery activities would not result in a significant increase over ambient noise conditions. However, if these activities occurred during nighttime hours when ambient noise levels are lowest, noise from delivery activities could constitute a significant periodic increase in ambient noise levels above levels existing without the Project. Implementation of either one of the following measures would reduce this noise impact to a less than significant level (refer to Mitigation Measures 4.9.2a and 4.9.2b in Section 4.9.8):

- Restrict noise producing delivery activities, such as truck loading and unloading, to daytime hours; or
- Enclose the proposed loading dock facility so that all adjacent noise sensitive land uses are completely shielded from noise producing activities at this facility.

Threshold 4.9.4: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels

The Site is located approximately 6 miles east of Monterey Peninsula Airport (the nearest airport). Due to the distance from the airport, the Site does not lie within the 55 dBA CNEL noise contours of any airport. Implementation of the Project would not expose persons residing or working in the Project area to excessive aviation-related noise levels. Therefore, noise impacts from aviation sources would be less than significant.

4.9.6 Cumulative Impacts

Table 4.9.I shows the traffic noise levels along modeled roadway segments under Cumulative (year 2034) plus Project conditions. As shown in the table, implementation of the Project would generate slight increases in traffic noise levels along modeled roadway segments in the Project vicinity over existing conditions. The greatest increase would occur along the portion of Corral de Tierra Road south of SR-68. Under the Cumulative plus Project conditions, this roadway segment would experience an increase of up to 3.9 dBA over existing conditions. For purposes of this analysis, an increase of greater than 3 dBA would be considered a substantial permanent increase in ambient noise levels.

Similar to the traffic noise impact discussion under Threshold 4.9.3, due to the existing terrain and the location of noise sensitive receptors on the hill, the closest residential properties and their accompanying outdoor active use areas do not have a direct line of sight to the Corral de Tierra Road.

Table 4.9.I: Cumulative (2034) Plus Project Traffic Noise Levels

Roadway Segment	ADT	Center-line to 70 CNEL (feet)	Center-line to 65 CNEL (feet)	Center-line to 60 CNEL (feet)	CNEL (dBA) 50 feet from Centerline of Outermost Lane	Increase from Existing Conditions
Corral de Tierra Road - South of SR-68 ^a	10,700	51	109	235	69.4	3.9
SR-68 - Corral de Tierra Road to San Benancio Road	26,800	95	202	433	72.3	0.5
SR-68 - Laureles Grade to Corral de Tierra Road	26,300	94	199	427	72.2	0.0
Laureles Grade - South of SR-68	8,700	< 50 ^b	81	174	67.4	0.3
San Benancio Road - South of SR-68	5,900	< 50	< 50	75	61.9	0.6

Source: LSA Associates, Inc., September 2009.

^a Shaded cells represent roadway segments adjacent to the Site.

^b Traffic noise within 50 feet of roadway centerline requires site-specific analysis.

The closest residence is located approximately 100 ft from the centerline of the roadway. Thus, with distance attenuation and terrain shielding that would provide at least an additional reduction of 5 dBA, project-related traffic noise levels along this roadway segment would be reduced to below 59.4 dBA CNEL at the closest sensitive receptor; thus meeting the County’s “normally acceptable” standard of 60 dBA CNEL for residential land use development. Therefore, the Project’s contribution to cumulative traffic noise impacts would be considered less than significant.

With implementation of the mitigation requirement for the stationary noise impact discussion under Threshold 4.9.3, cumulative stationary noise from delivery loading/unloading activities would be reduced to a less than significant impact.

4.9.7 Level of Significance Prior to Mitigation

Construction Noise and Vibration. Construction activities associated with implementation of the Project could temporarily expose persons in the vicinity of the Site to excessive noise levels and perceptible ground borne vibration levels but these levels would not exceed normally acceptable standards. Therefore, these impacts are less than significant and no mitigation measures are required.

Traffic Noise. Existing traffic noise levels when considered in conjunction with project-related traffic noise impacts would be considered less than significant on proposed on-site land uses due to the distance from the noise source to the nearest residences and intervening topography. Under both Background and Cumulative Plus Project conditions, project-related increases in traffic noise levels would not result in an exceedance of the County’s “normally acceptable” standards at the nearest noise sensitive receptors. Therefore, all project-related traffic noise impacts would be less than significant.

Stationary Noise and Vibration. Noise from short-term, periodic delivery activities would not be expected to result in an exceedance of the weighted 24-hour averaged standard for residential land uses of 60 dBA CNEL. However, if these activities occurred during nighttime hours when ambient noise levels are lowest, noise from delivery activities could constitute a significant periodic increase in ambient noise levels above levels existing without the Project. Therefore, mitigation would be required in order to reduce this noise impact to a less than significant level. No stationary noise sources that would expose persons to excessive ground borne vibration would be located within the Site.

Aircraft Noise. Implementation of the Project would not expose persons residing or working in the project area to excessive aviation-related noise levels. Therefore, noise impacts from aviation noise sources would be less than significant.

4.9.8 Mitigation Measures and Standard Conditions of Approval

Implementation of the following mitigation measures and standard conditions would reduce potential construction period noise impacts to less than significant levels.

Standard Condition 4.9.1a: Sound Muffling. Prior to issuance of a grading permit, the County of Monterey RMA – Planning Department shall verify that the construction plans and specifications state that all construction equipment used on-site is equipped with appropriate sound muffling equipment, is properly maintained, and is used at all times such equipment is in operation.

Standard Condition 4.9.1b: Stationary Equipment. Prior to issuance of a grading permit, the County of Monterey RMA – Planning Department shall verify that the construction plans and specifications state that the construction contractor shall place all on-site stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the Site as much as is reasonably feasible.

Standard Condition 4.9.1c: Equipment Staging Areas. Prior to issuance of a grading permit, the County of Monterey RMA – Planning Department shall verify that the construction plans and specifications state that the construction contractor shall locate equipment staging in areas that would create the greatest distance feasible between construction-related noise sources and noise-sensitive receptors nearest the Site during all project construction.

Standard Condition 4.9.1d: Construction Activity Hours. Prior to issuance of a grading permit, the County of Monterey RMA – Planning Department shall verify that the construction plans and specifications state that the construction contractor shall ensure that noise producing construction activities shall be restricted to the daytime hours of 7:00 a.m. to 7:00 p.m. Monday through Friday, 8 a.m. to 4 p.m. on Saturday, and not permitted at all on Sundays or holidays.

Implementation of the following mitigation measure would reduce potential stationary noise impacts associated with on-site delivery activities at the proposed loading dock facility to less than significant levels.

One of the following mitigation measures shall be required for loading/unloading areas located at the Site:

Mitigation Measure 4.9.2a: **Loading Dock.** Prior to issuance of the grading permit, the County of Monterey – RMA Planning Department shall review the site design to ensure that the loading dock facility is enclosed so that all adjacent noise sensitive land uses are completely shielded from a direct line of sight to the loading dock;

or

Mitigation Measure 4.9.2b: **Loading Dock.** Prior to issuance of the grading permit, the County of Monterey – RMA Planning Department shall review the site design to ensure that it includes specifications that the use of the loading dock for noise producing activities shall be restricted to the daytime hours of 7:00 a.m. to 10:00 p.m. daily.

4.9.9 Level of Significance After Mitigation

Implementation of the multi-part Standard Condition 4.9.1 would sufficiently reduce construction-related noise and ground-borne vibration impacts to a less than significant level.

Implementation of Mitigation Measure 4.9.2a or 4.9.2b would sufficiently reduce project-related stationary noise impacts associated with on-site delivery activities at the proposed loading dock facility to a less than significant level.

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4.10 POPULATION, EMPLOYMENT, AND HOUSING

This section provides the existing population, employment, and housing characteristics of the Toro Area in Monterey County and addresses potential population, employment, and housing impacts that may be caused by the Project. Sources of demographic statistics and projections consulted include the County, the Association of Monterey Bay Area Governments (AMBAG), and the United States Census Bureau (US Census Bureau).

4.10.1 Existing Conditions

The Project is located in an unincorporated part of the County known as the Toro Planning Area (Toro Area). The Toro Area is approximately 74 square miles (sq mi) and is located in the north-central portion of the County of Monterey east of the Monterey Peninsula and southwest of the City of Salinas. The Toro Area consists primarily of agricultural, public, and rural land, where approximately 80 percent of the land is farmland/grazing land and associated residential development. Most of the remaining 20 percent of land in the Toro Area is undeveloped except for the (.06%) of land used for industrial purposes and another (.04%) for isolated commercial uses.

The Site consists of two undeveloped lots totaling approximately 11 acres of land located at the three-legged intersection of Corral de Tierra Road and SR-68 in the Toro Area. The Site is approximately 10 miles east of the Monterey Peninsula and approximately seven miles southwest of the City of Salinas. The Site is currently the only remaining area zoned for commercial development along SR-68 in the Toro Area.

Population. The County of Monterey is one of three counties (Monterey, San Benito, and Santa Cruz) that comprise what is known as the Monterey Bay Region. Of these three counties, the Association of Monterey Bay Area Governments (AMBAG¹) expects the County of Monterey to see the largest share of future population growth over the next 20 years (AMBAG, 2004). Most of this growth can be attributed to the natural reproduction of the current resident population; however, some is anticipated to be the result of regional growth from the booming economies of Silicon Valley and the San Francisco Bay area (Monterey County, 2003). The population in the County of Monterey grew from 290,444 persons in 1980 to 401,762 persons in 2000 (Monterey County, 1982 and US Census Bureau, Census 2000). In 2000, the County of Monterey ranked 18th in population size out of the 58 counties in California (Monterey County, 2003). By 2020, the population of the County of Monterey is projected to grow by 125,307 persons for a total projected population of 527,069 persons, reflecting an average annual growth of 6,266 persons or a 1.56% average annual increase (AMBAG, 2004).

Salinas, a city within the County of Monterey located approximately seven miles northeast of the Site, is projected to experience the largest numerical population growth for the years 2000-2020; with an estimated 30% increase from 2000 to 2020 for a total projected population of 187,876 persons

¹ AMBAG – The Association of Monterey Bay Area Governments is a voluntary regional association of local governments organized under the California Joint Powers Authority covering Monterey, San Benito and Santa Cruz counties in California. In addition to providing regional planning services in the areas of the economy, transportation, land use, housing, air quality, and water quality, AMBAG is also the designated Regional Data Center for the U.S. Census Bureau.

(AMBAG, 2004). Growth trends indicate that population growth within the incorporated areas of the County of Monterey, such as Salinas, has continued to grow at a faster rate than in the unincorporated areas, such as the Toro Area (Monterey County, 2003). By 2020, the number of residents in the unincorporated areas of the County of Monterey, of which the Toro Area is a part, is projected to grow by 23,815 persons for a total projected population of 124,067 persons. This reflects an average annual growth of 1,191 persons or a 1.19% average annual increase (AMBAG, 2004).

The population in the unincorporated Toro Area, which is comprised of U.S. Census Tracts 107.01 and 107.02, grew from 6,423 persons in 1980 to 10,424 persons in 2000 (Monterey County, 1983 and US Census Bureau, Census 2000). The associated population density in the Toro Area increased from 87 people per square mile in 1980 to 141 people per square mile in 2000. The distribution of this population density however is not uniform. Most of the population is concentrated in subdivisions along the major roads, particularly along the SR-68 corridor between the cities of Monterey and Salinas. New Toro Area residents are expected to reside in new subdivision areas similar to those that have already been developed (Monterey County, 1983). Maximum build-out based on land use map densities would allow for a total population of 17,980 in the Toro Area. However, if build-out potential also takes into consideration plan policies and other development constraints in the Toro Area, such as water quality and availability, then the total build-out population may be closer to 15,810 residents (Monterey County, 1983).

Employment. Most of the employment opportunities within the County of Monterey are located in the cities of Monterey and Salinas, on the Monterey Peninsula and in the Greater Salinas area¹. According to the 2000 U.S. Census data, the County's median household income was \$48,305 and the unemployment rate was approximately 5.2%. In 2000, the County of Monterey's total employment was 165,100 wage and salary jobs (Monterey County, 2003). AMBAG's employment estimates, which include wage and salary jobs, military and the self-employed, are 222,441 total jobs in 2000 with projected growth to 293,381 jobs by 2020. This reflects an average annual growth of 3,547 jobs or a 1.21% average annual increase.

The County's economic base is dominated by the agriculture and tourist industries. The leading occupation industry countywide, accounting for 21 percent of the total jobs in 2000, was agriculture. Tourism, the second leading occupation industry countywide, and retail sector jobs accounted for an additional 10 percent of the total county jobs in 2000 (AMBAG, 2004). The agriculture and tourist sectors are also the primary cause of the County's employment instability due to their lack of year-round employment, (Monterey County, 1982).

Of all industry sectors, agricultural-related jobs are some of the lowest paying jobs. Traditionally, the service and retail industry sectors also have lower wage jobs, often at or slightly above the minimum wage of \$6.25 per hour (Monterey County, 2003). A report ("Preliminary Estimates of Jobs-Based Housing Demand in Monterey County: 2000-2007, September 2001) commissioned by the County projects that approximately 50 percent of new job growth in the County would be in the service sector and an additional 17 percent is expected in the retail trade sector (Monterey County, 2003). According to the 2003 Monterey Housing Element, it has been estimated that of the new jobs created,

¹ *The Greater Salinas Planning Area is bordered by the North County Planning area on the north, the Greater Monterey Peninsula and Toro Planning Areas on the west, the Central Salinas Valley Planning Area on the south, and the San Benito-Monterey County line on the east (Monterey County, 1985).*

over half are expected to be in the wage category of \$20,000-\$39,999. Where an annual wage of \$20,000 is approximately \$9.16 per hour and an annual wage of \$30,000 is approximately \$14.42 per hour. Current estimates indicate that an hourly wage of \$21.37 per hour is needed to pay the average three bedroom rent in the County (Monterey County, 2003). In addition, most employees working in the County's two largest industries, agriculture and tourism, could not afford to buy a median priced home in the County, valued at \$265,800 in 2000 (Monterey County, 2002 and US Census Bureau, Census 2000).

Similar to the County of Monterey, the majority of employment opportunities in the unincorporated Toro Area are also agricultural-related, and it is estimated that the retail job sector would experience most of the projected job growth in the area (Monterey County, 1983). There are some local service sector jobs located adjacent to SR-68 at the Toro Park Commercial Center, fire and police facilities, a few professional offices, and a number of other highway-related businesses. Additional local employment is generated by nearby golf and tennis clubs, Toro Regional Park, schools, and residential support services. Due to the limited employment opportunities available within the Toro Area, most residents travel to either the Monterey or Salinas areas for their employment, shopping, and other essential services, with a mean work commute time of 23 minutes (Monterey County, 1983 and US Census Bureau, Census 2000). In 2000, the average median household income for the Toro Area was \$91,227 and unemployment was approximately 1.6% (US Census Bureau, Census 2000).

Housing. According to U.S. Census data, there were 131,708 housing units in the County of Monterey in 2000. The County's median single-family home was valued at \$265,800, and the median rent was \$776 per month. In the unincorporated Toro Area (comprised of U.S. Census Tracts 107.01 and 107.02) there were 3,915 total housing units in 2000 (US Census Bureau, Census 2000). The Toro Area's average median single-family home was valued at \$465,550, and the average median rent was \$1,112 per month.

The majority of new housing units built in the County of Monterey are single-family residential units. For example, from 1994-1999, approximately 97% of residential building permits were issued for single-family units, while the remaining 3% were issued for multi-family dwellings (Monterey County, 2003). Many of the new units constructed are part of the recent trend of increasing residential developments in the rural unincorporated areas of the County such as the Toro Area., where planned residential land use has increased by 384% compared to the existing residential land use in 1983 (Monterey County, 1999).

The County's vacancy rate was 8% compared with a 2% vacancy rate in the Toro Area according to 2000 U.S. Census data. In addition, there were approximately 7,939 vacant lots of record in 2002 zoned for single-family residential use in the unincorporated areas of the County, with approximately 946 of these lots located in the Toro Area (Monterey County, 2003). However, available housing is generally shown through the balance between owner and rental housing stock, which ideally should be split evenly between owner and rental units (Monterey County, 1983). Approximately 55% of the units in the County are owner occupied compared with 84% throughout the Toro Area (US Census Bureau, Census 2000 and Monterey County, 1983).

4.10.2 Regulatory Setting

The main guiding documents regulating population, employment, and housing within and around the Site are:

- Monterey County General Plan (1982)
- County of Monterey Housing Element 2002-2008 (2003)
- Toro Area Plan (a part of the Monterey County General Plan) (1983)

Applicable population, housing, and employment policies from these planning documents are described below.

Monterey County General Plan. The Monterey County General Plan is a long-range, comprehensive plan addressing all aspects of future growth, development, and conservation within the County. The Monterey County General Plan was adopted by the Board of Supervisors in 1982 and subsequently has been amended on several occasions. The human resources and area development components of the General Plan encompass the current and projected demographic, social, economic, and housing characteristics of the County and provide a basis for major planning decisions and assessing the demand for housing, jobs, land, water, recreation, and transportation (Monterey County, 1982).

The following General Plan objectives generally apply to population, employment, and housing issues associated with the Project:

Objective 24.1 *Place a top priority on immediate efforts to stabilize and expand county employment in the agriculture, tourism, retail, manufacturing, and military sectors.*

Toro Area Plan. The Toro Area Plan is one of the County of Monterey's eight area plans. The policies of the Toro Area Plan are more precisely adapted to the development opportunities, constraints, natural resources, and other unique characteristics of this area than are those of the Monterey County General Plan. The Toro Area Plan focuses on balancing the area's present character with future needs, development opportunities with resource conservation, as well as the sentiments of the local community. The human resources and area development components of the Toro Area Plan encompass the demographic, social and economic characteristics of the population, and the built environment, which includes land use, zoning, housing, transportation, and public services and facilities. These components are essential to forecasting demand for housing, jobs, land, water, recreation facilities and transportation systems, and represent the major considerations in the spatial distribution of human activities and the facilities necessary to support them (Monterey County, 1983).

- A number of roadway problem areas preclude significant increases in population until funds are available for road improvements.

The Toro Area Plan specifically mentions the following regarding conditions on SR-68:

According to Caltrans traffic counts, higher traffic volumes near Salinas indicate significant commuting by Toro residents to the Salinas area on SR-68. The volume of traffic carried by Highway 68 has been increasing annually. Incremental development along this corridor, in Monterey, and in Salinas, adds to the volume of traffic. There are cumulative impacts of increased traffic, particularly during peak hours.

The only major improvement to the transportation system in Toro that is shown on the land use plan is the upgrading of Highway 68 to a four-lane divided highway. State and local funding of highway improvements may not be forthcoming in the long term. Some interim measures include the improvement of Highway 68 intersections, and the construction of bus stops, pull-outs, and shelters where needed. The Toro Area Plan also proposes safety improvements to Corral de Tierra Road with first priority given to pedestrian, equestrian, and bicycle uses.

4.10.3 Methodology

Population and housing data were considered when addressing the following impact significance criteria to assess potential project-related impacts to population, employment, and housing. Whether or not the Project, in the context of other pending planning actions and adopted plans and policies, would affect long-term growth to a degree resulting in a significant cumulative impact on the balance of population, jobs, and housing in the Toro Area would also be assessed.

4.10.4 Impact Significance Criteria

Significance criteria for evaluating potential project impacts to population, employment, and housing conditions are derived from the CEQA Guidelines Appendix G. For the purposes of this EIR, the Project would represent a significant impact to population and housing if it does one or more of the following:

- Threshold 4.10.1 Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure);**
- Threshold 4.10.2 Displace substantial numbers of existing housing, thereby necessitating the construction of replacement housing elsewhere; or**
- Threshold 4.10.3 Displace substantial numbers of people, thereby necessitating the construction of replacement housing elsewhere.**

4.10.5 Project Impacts

Threshold 4.10.1 Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)

The proposed non-residential development Project would include the construction of a gourmet grocery store, offices, and a variety of other commercial/retail businesses. The proposed Corral de Tierra Neighborhood Retail Village, totaling 126,532 sf of commercial use, would result in approximately 253¹ net new jobs increase in the Toro Area.

The majority of the potential new jobs provided by the Project would be at the minimum wage employment level. It is anticipated that based on the types of jobs and associated pay-scale provided by the Project, the majority of employment opportunities would be filled by existing residents of the Toro Area and would not draw in a significant number of new residents from elsewhere. It is possible that some key management positions may be filled by employees from outside of the Toro Area, but not a substantial number.

According to the County, there is currently a mismatch between the income levels of workers employed within lower wage service related jobs and the cost of available housing within the County of Monterey (Monterey County, 1999). The lack of affordable housing near employment centers does not enable most workers to live near their place of employment; where housing in the County as well as the Toro Area is expensive, and such prices could likely keep housing out of reach for a majority of the Projects employees. This jobs-to-housing imbalance has been identified by the County as a major issue that is likely to continue in the years to come (Monterey County, 1999). Although the Project could serve to further exacerbate the regional and local jobs-housing imbalance, it would not directly induce substantial population growth in the Toro Area.

In addition, the Project does not include the extension of roads or infrastructure other than hookups to existing utility lines located adjacent to the Site on Corral de Tierra Road and SR-68. The additional hookups would be designed to serve only the Project and would not be of a scale that could indirectly induce substantial population growth in the Toro Area. For details regarding the hookups to existing utilities, please refer to Chapter 4.13 of this EIR.

Threshold 4.10.2 Displace substantial numbers of existing housing, thereby necessitating the construction of replacement housing elsewhere

The proposed Corral de Tierra Neighborhood Retail Village would be developed on land that is currently vacant with no existing structures or residences. Therefore, the Project would not result in the displacement of any existing housing, and the construction of replacement housing would not be necessary. The Project would not have a significant impact on existing housing or require the development of replacement housing.

¹ Calculation reached assuming one employee per 500 square feet of commercial use.

Threshold 4.10.3 Displace substantial numbers of people, thereby necessitating the construction of replacement housing elsewhere

The proposed Corral de Tierra Neighborhood Retail Village would be developed on land that is currently vacant with no existing structures or residences. Therefore, the Project would not result in the displacement of people or necessitate the construction of replacement housing. The Project would not have a significant impact by displacing substantial numbers of people or requiring replacement housing to be developed elsewhere.

4.10.6 Cumulative Impacts

The Project represents a direct increase in jobs in an area of the County that currently has limited employment opportunities. It is anticipated that the majority of the jobs provided by the Project and their associated lower wage pay-scales would be filled by existing Toro Area residents. The Project could potentially draw a nominal number of new residents from elsewhere based on some of the types of employment opportunities (e.g. managerial level) that would be created. Thus, the Project could result in a nominal increase in the population of the Toro Area. Since the proposed non-residential development project is not likely to draw a significant number of new employees with housing needs, it does not represent a change in the total number of housing units in the Toro Area. Because the Project would not significantly increase the total population or housing units in the Toro Area, it would not, in conjunction with the development of other projects listed in the cumulative projects table (refer to Table 4.A), result in a significant cumulative impact on population and/or housing in the Toro Area.

As previously mentioned, the Project would increase employment opportunities in the retail sector of the Toro Area. The cumulative projects table includes one other development (i.e., East Garrison) that proposes commercial/retail uses. When considered in conjunction with East Garrison, the Project would result in a positive cumulative impact on employment opportunities both within and near the Toro Area boundaries between the cities of Monterey and Salinas.

4.10.7 Level of Significance Prior to Mitigation

There are no potentially significant impacts related to population growth directly or indirectly, existing housing, or displacement of existing housing or people. Therefore, no mitigation is required.

4.10.8 Mitigation Measures

The Project would not result in significant unanticipated population growth or cause the displacement of existing housing or people; therefore, no mitigation measures are required.

4.10.9 Level of Significance after Mitigation

As no impacts are expected to exceed the impact significance criteria pertaining to population, growth, or housing impacts and no mitigation measures are required, there are no significant impacts remaining after mitigation.

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4.11 PUBLIC SERVICES

The following section provides an analysis of potential impacts related to public services for the Project. The public services addressed in this section include fire and ambulance services, police services, educational services, public transit services, as well as park and recreation facilities. Information used for the existing setting is sourced from Monterey County's General Plan and coordination with affected public service agencies/providers.

4.11.1 Existing Environmental Setting

Fire Protection and Emergency Services. The Site is served by the Salinas Rural Fire Protection District. The Fire District employs 35 full-time and 15 volunteer firefighters capable of providing paramedic services, and staffs three fire stations. The Toro Station, Station 1, is located at 19900 Portola Drive in the Toro Park area; the Chualar Station, Station 2, is located at 24281 Washington Street on the corner of Jackson and Washington Streets in the community of Chualar; and the Laureles Station, Station 3, is located at the intersection of State Route 68 (SR-68) and Laureles Grade at 31 Laureles Grade. The Salinas Rural Fire District responds to approximately 1,300 calls per year, which include structure fires, wildland fires, emergency medical calls, hazardous material incidents and vehicle accidents.

The Laureles Station, Station 3, would be the station serving the Project. Each day at Station 3, there is an engine company staffed with a Captain, Lieutenant, and an on-duty firefighter. Station 3's total response area includes the SR-68 corridor from west of Toro Regional Park to Olmstead Road and the Laureles Grade south to the Carmel Valley side of the Laureles Summit. The Site is 1.98 miles from the Laureles Station. The fire and emergency response time from the Laureles Station to the Site is approximately two minutes.

The Site is considered to have a moderately-high level of wildland fire hazard because it is bordered by rural farmland and developed areas. Adjacent to the Site is an existing service station currently being utilized as a real estate office. The vegetation on surrounding properties, terrain, and arid climate further increases the fire hazard on the Site.

Additional emergency services such as ambulance, paramedic, and life support services are provided by Westmed Ambulance. Westmed Ambulance, located at 251 West Market Street in Salinas, is the contracted ambulance service provider for all of the County of Monterey. They respond to approximately two to three calls per week in the project area. Westmed's contracted ambulance response time to the project area is twelve minutes.

Police Protection. The Site is served by the Monterey County Sheriff's Department. The Sheriff's Patrol Division provides a full range of law enforcement and emergency response services to the unincorporated areas of the County of Monterey and operates out of three stations. The Central Station is based in the Sheriff's Public Safety Building located at 1414 Natividad Road in Salinas; the Coastal Station is based in the Monterey Courthouse located at 1200 Aguajito Road in Monterey; and the South County Station is based in King City at 250 Franciscan Way.

The Site is served by the Department's Central Patrol Station. This is the largest and busiest of the County's three patrol stations, fielding the most calls for service. Central Station patrols all of North

County which includes the Toro Area, supplying coverage over approximately 1,400 square miles. The Station's responsibilities are divided into five patrol beat areas. The Site, located within the community of Corral de Tierra, would be covered by Central Patrol Beat 4. Beat 4 is currently patrolled by a one and one-half deputy unit from 7 A.M. to 1 A.M. and a one deputy unit between 1 A.M. and 7 A.M. The approximate response time to calls within the community of Corral de Tierra is 25 minutes.

The California Highway Patrol (CHP) has jurisdiction and law enforcement on all County roads, freeways, and State highways. The Toro Area is served by the Salinas office of the CHP located on Portola Drive in the City of Salinas. The CHP assigns one vehicle to patrol SR-68 three times daily. The patrol vehicle is on call for the back road areas when an emergency arises.

Public Schools. The Site is located within the Washington Union School District and the Salinas Union High School District. Toro Park Elementary School, located at 22500 Portola Drive in Salinas, has the capacity to serve up to 420 students in grades K-3. The elementary school currently enrolls 394 students and is staffed by 21 certified teachers. Washington Union School, located at 340 Corral de Tierra Road in Salinas, has the capacity to serve 224 students in grades 4 and 5. The elementary school currently enrolls 227 students and has 10 teachers on staff. San Benancio Middle School, located at 43 San Benancio Road in Salinas, has the capacity to serve up to 361 students in grades 6 through 8. The middle school currently enrolls 344 students and is staffed by 15 certified teachers. Upon graduating San Benancio Middle School, students attend Salinas High School located at 726 South Main Street in the City of Salinas. The Salinas High School has the capacity to serve 2,503 students in grades 9 through 12. Currently, Salinas High enrolls 2,549 students and has 98 teachers on staff. In addition to the existing schools, the Toro Area Plan shows two proposed school sites in areas planned for residential development within the neighboring Spreckels Union Elementary School District. One is on the Toro Vista site, located adjacent to and southerly of SR-68 and northwest of River Road, and the other is on the Las Palmas Ranch site, located south of SR-68 and adjacent to and west of River Road (Monterey County, 1983).

Parks and Recreation. The County of Monterey Parks Department maintains stewardship over a system of county parks. Of these parks, the Laguna Seca Recreation Area and Toro Regional Park are located closest to the Site. The Laguna Seca Recreation Area, located at 1025 Monterey/Salinas Highway (SR-68) in Salinas, is approximately 2.1 miles west of the Site and approximately three minutes by vehicle. Laguna Seca Recreation Area provides RV and tent camping, an off-highway vehicle track, a rifle and pistol range, large group meeting facilities and picnic areas, and access to miles of mountain bike trails on the Fort Ord Public Lands. The recreation area is also home to Mazda Raceway Laguna Seca.

The 4,756 acre Toro Regional Park, located at 501 Monterey/Salinas Highway (SR-68) in Salinas, is approximately 2.9 miles east of the Site and approximately 3.5 minutes by vehicle. Toro Park provides an equestrian staging area and riding trails, softball fields, playgrounds, horseshoe pits, volleyball courts, mountain biking, and over 20 miles of riding and hiking trails. Additional park facilities include large-group day-use picnic areas, an organized youth group camping area, and an environmental nature center.

Transit. Monterey-Salinas Transit (MST) is the primary provider of bus transportation services to the Monterey Peninsula jurisdictions and the Salinas Valley and would serve the Site. The transit system has 37 routes that serve an estimated 352,000 people. Limited intercity service is provided via SR-68 and Highway 1 between the two urban areas of Monterey and Salinas. Service limitations are due in part to inadequate funding despite service cutbacks and rate increases over the last five years (Harvath, Hunter. November 19, 2007. Personal communication). In addition, MST has had to remove most of its service from the SR-68 corridor between Monterey and Salinas because they could no longer keep their hourly bus service running on schedule due to increased traffic congestion along the corridor and insufficient bus queue jump lanes which would allow the buses to safely pass the traffic congestion (Harvath, Hunter. November 19, 2007. Personal communication). MST transferred some of the services they removed from SR-68 to a route that takes Reservation Road via the City of Marina to connect Monterey and Salinas. The remaining bus service along SR-68 is what MST calls Life Line Service which offers several east and west-bound trips but only one round-trip per day.

There is an existing bus stop located directly across from the Site on the north side of SR-68 at Corral de Tierra Road. Passengers using MST have access to both Monterey and Salinas to and from the Site via Line 21 and Line 53. Line 21, Salinas-Monterey, offers one round trip in the morning and a single westbound trip in the evening on the weekdays. The Corral de Tierra Road bus stop that would serve the Project is not a “timepoint” stop, which means it does not have scheduled departure times. However, it is located between two timepoint stops, timepoint “D” - SR-68 & Laguna Seca and timepoint “E” - Portola & Creekside, therefore, it is assumed that departure times from the Corral de Tierra bus stop would occur between the timepoint “D” and timepoint “E” departure times specified on MST’s schedule for Line 21 (refer to Figure 4.11.1).

Line 53 operates daily with one westbound trip in the morning on the Monterey Peninsula Express, and one eastbound trip in the evening on the South County Express. Line 53 westbound makes all Line 21 stops on SR-68 between Torero Drive and York Road which includes the Corral de Tierra bus stop. Line 53 eastbound makes all Line 21 stops on SR-68 between Olmsted Road and Reservation Road which also includes the Corral de Tierra bus stop. Again, because the Corral de Tierra bus stop is not a timepoint stop, it is assumed that departure times from the Corral de Tierra bus stop would occur between the timepoint “E” and timepoint “F” departure times specified on MST’s schedule for Line 53 (refer to Figure 4.11.2). In addition, Line 20 connects Monterey and Salinas via the City of Marina every half-hour using Reservation Road and Blanco Road. Therefore, passengers could access the Site indirectly using Line 20 in conjunction with Line 21 and/or Line 53.

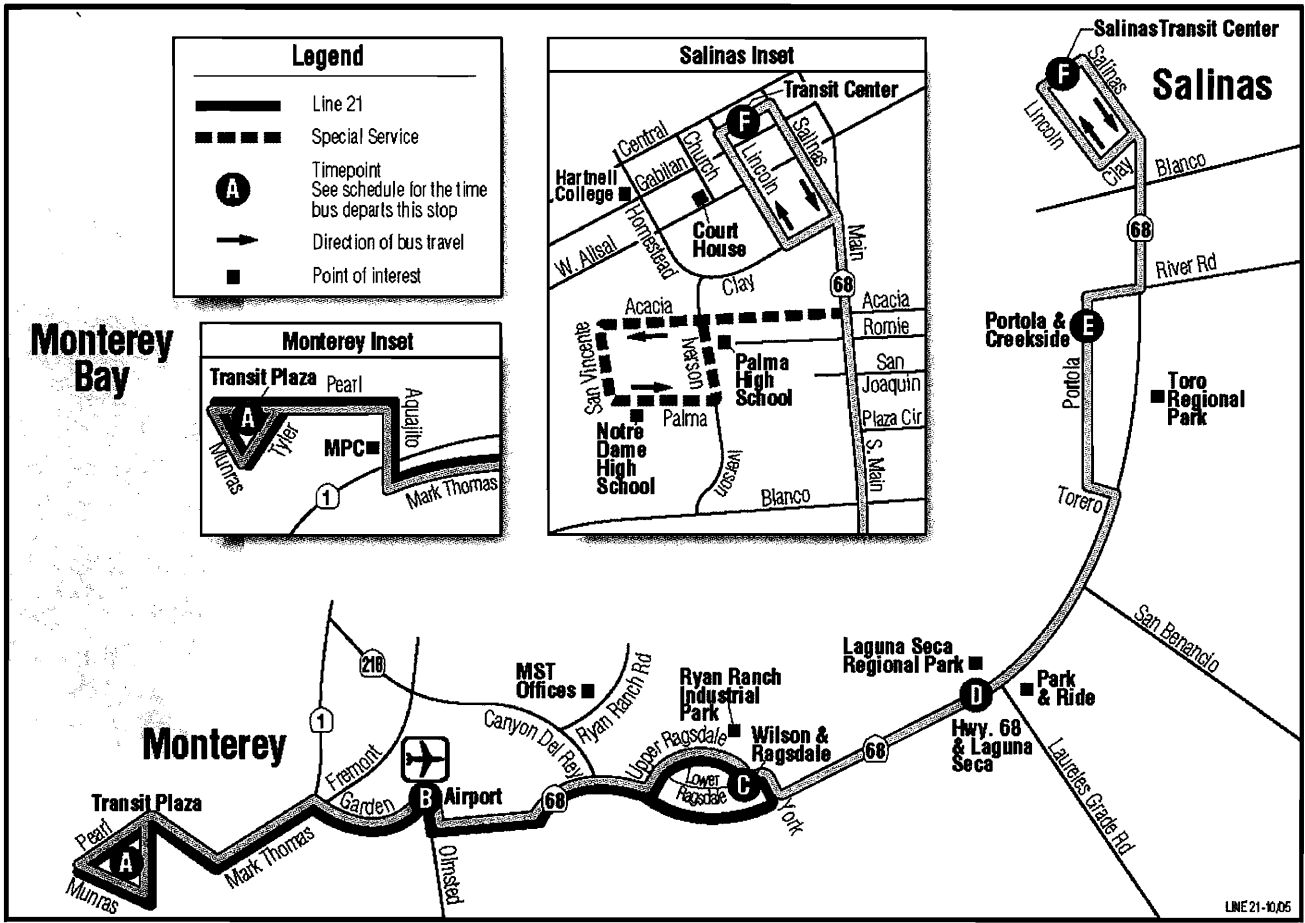
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21 Salinas						
Weekdays						
Notes	Monterey Transit Plaza	Monterey Peninsula Airport	Wilson & Ragsdale	Highway 68 Laguna Seca	Portola & Creekside	Salinas Transit Center
	A	B	C	D	E	F
A	6:55 7:15 8:15 9:15	7:07 7:26 8:26 9:26	7:17 7:35 8:35 9:35	7:23 -- -- --	7:36 -- -- --	8:01 -- -- --
B	5:10 6:00	5:21 6:11	5:30 --	5:35 --	5:46 --	-- --

21 Monterey						
Weekdays						
Notes	Salinas Transit Center	Portola & Creekside	Highway 68 Laguna Seca	Wilson & Ragsdale	Monterey Peninsula Airport	Monterey Transit Plaza
	F	E	D	C	B	A
	-- 8:15 -- --	-- 8:27 -- --	-- 8:39 -- --	-- 8:44 -- --	6:25 7:25 -- --	6:42 7:42 -- --
A	3:15 -- --	3:22 -- --	3:43 -- --	3:48 5:35 --	3:56 5:43 --	4:13 6:00 --

Notes

- A Serves Palma and Notre Dame High Schools on school days
- B Operates as Line 53 South County Express stopping at all Line 21 stops between the Airport and Reservation Road. Service to the Airport is at Olmsted Road at Garden Road. This bus does not stop at the Airport Terminal



LSA

FIGURE 4.11.1



NOT TO SCALE

SOURCE: Monterey-Salinas Transit

I:\MOC0701\GVTransit-Line 21.cdr (12/20/07)

53 Monterey Peninsula Express

Daily**

King City Mee Memorial A	Greenfield- Santa Lucia Center B	Soledad- Front & San Vicente C	Gonzales Center D	Chualar- Grant & South E	Monterey Transit Plaza F	Monterey Conference Ctr G	Inn at Spanish Bay H	Lodge at Pebble Beach J
5:45	5:59	6:10	6:23	6:30	7:15	7:17*	7:28*	7:42*

53 South County Express

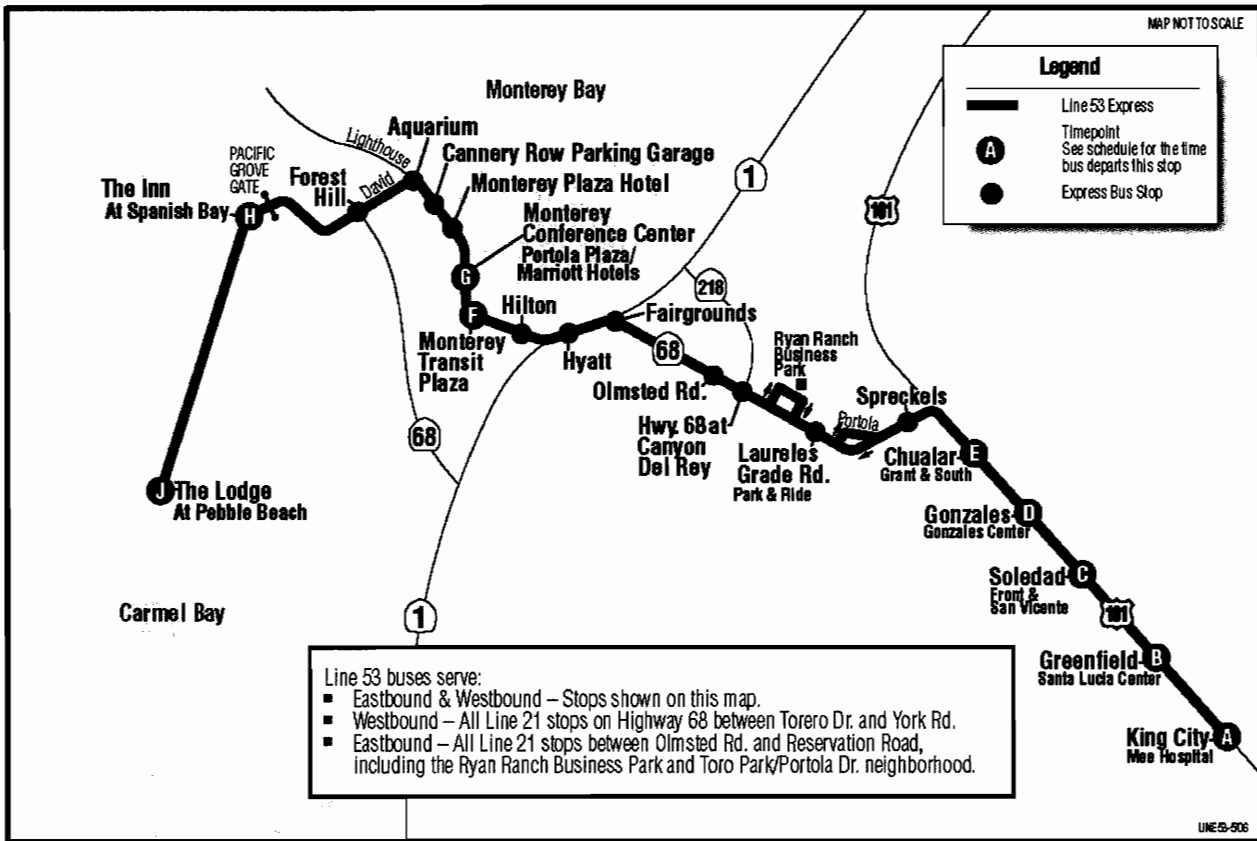
Daily**

Lodge at Pebble Beach J	Inn at Spanish Bay H	Monterey Conference Ctr G	Monterey Transit Plaza F	Chualar- Grant & South E	Gonzales Center D	Soledad- Front & San Vicente C	Greenfield- Santa Lucia Center B	King City Mee Memorial A
4:35	4:47	5:00	5:10	6:10*	6:19*	6:30*	6:40*	6:55*

* Bus may arrive or depart > timepoint ahead of schedule.

**Line 53 does not operate Thanksgiving, Christmas Day or New Year's Day.

Light Type = AM **Bold Type = PM**



Between Monterey Transit Plaza and the Lodge at Pebble Beach, Line 53 operates as Line 2X Pebble Beach Express.
 Between the Lodge at Pebble Beach and Monterey Transit Plaza, Line 53 operates as Line 2X Monterey Express.
 Supplemental service from downtown Monterey to special events in Pebble Beach is operated by MST.
 Check with MST to confirm time and days of operation: **1-888-MST-BUS1** or visit **MST Online** at www.mst.org.
 Line 53 now stops in Spreckels at Spreckels Blvd. and Hatton Ave.

LSA

FIGURE 4.11.2



NOT TO SCALE

SOURCE: Monterey-Salinas Transit

I:\MOC0701\G\Transit-Line 53.cdr (12/20/07)

4.11.2 Regulatory Setting

The main guiding documents regulating public services within and around the Site are:

- Monterey County General Plan (1982)
- Toro Area Plan (a part of the Monterey County General Plan) (1983)

Applicable public service policies from these planning documents are described below.

Monterey County General Plan. The Monterey County General Plan is a long-range, comprehensive plan addressing all aspects of future growth, development, and conservation within the County. The Monterey County General Plan was adopted by the Board of Supervisors in 1982 and subsequently has been amended on several occasions. At the countywide level, the plan designates all proposed major land uses by one of seven basic designations: residential, commercial, industrial, agricultural, resources conservation, public/quasi-public, and transportation.

The following General Plan policies, generally applicable to public services, apply to the Project:

- Policy 17.4.12** *A zone which can inhibit the spread of wildland fire shall be required of new development in fire hazard areas to protect development. Such zones should consider irrigated greenbelts, streets, and fuel modification zones in addition to other suitable methods that may be used. The County should not accept dedications of any open space lands required as part of this fire prevention zone.*
- Policy 20.1.4** *The County should concentrate commercial development in designated centers that may be more easily served by public transit.*
- Policy 41.1.2** *Developers of major traffic generating activities shall provide fixed transit facilities such as bus shelters and pullouts, consistent with the anticipated demand.*

Toro Area Plan. The Toro Area Plan is one of eight area plans for the County of Monterey. Development opportunities, constraints, and natural resources of the Toro Area are unlike those in other parts of the County; therefore, the policies for the Toro Area Plan are more precisely adapted to the characteristics of this area than those of the Monterey County General Plan. The Toro Area Plan focuses on the balancing of present character and future needs, conservation of resources and opportunities for development, and the sentiments of the local community. The area development component of the Toro Area Plan encompasses the built environment, which includes land use, zoning, housing, transportation, and public services and facilities, and which represents the major considerations in the spatial distribution of human activities and the facilities necessary to support them (Monterey County, 1983).

The following Toro Area Plan supplemental policies¹ apply to the Project:

Policy 39.1.1.1 (T) *The County shall be encouraged to work with the state, local agencies and citizens groups to alleviate traffic congestion on, and still maintain the scenic beauty of, Highway 68. With the goal of eventually constructing a scenic four-lane divided highway, the County shall support the following interim measures:*

5. construction of bus stops, pull-outs, and shelters where needed.

Policy 39.2.2.2 (T) *The County shall require developers to make safety improvements to Corral de Tierra Road with first priority given to pedestrian, equestrian, and bicycle uses. Road improvements such as widening or straightening which may lead to increased vehicle speeds shall be discouraged.*

Policy 41.2.1.1 (T) *If new sites for office employment, services, and local conveniences are found to be appropriate, such sites should incorporate designs to allow use of alternative modes of transportation.*

4.11.3 Methodology

This section addresses the potential for the Project to cause significant impacts upon the public service providers in the project area to provide adequate services for area-wide demand. To make this assessment the current levels of public services being provided within the project area were compared with the type and extent of additional services that would be necessary if the Project is implemented. This information was then applied to the impact significance criteria provided below. Current and future levels of public services were based on information found on County and service provider websites, through telephone conversations, and from questionnaires completed by service provider representatives.

4.11.4 Impact Significance Criteria

Significance criteria for evaluating potential project impacts to the condition of public services are derived from the CEQA Guidelines Appendix G. For the purposes of this EIR, the Project would represent a significant impact to public services if it does one or more of the following:

¹ *These policies are supplemental to the goals, objectives, and policies of the Monterey County General Plan; readers are reminded to use both documents when reviewing planning matters in the Toro area. In the event of conflict between the goals, objectives, and policies of the Toro Area Plan and the countywide General Plan, as adopted on September 30, 1982, the most environmentally protective goals, objectives, and policies shall prevail (Monterey County, 1983).*

- Threshold 4.11.1** Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection;
- Threshold 4.11.2** Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection;
- Threshold 4.11.3** Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for public schools;
- Threshold 4.11.4** Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for public parks; or
- Threshold 4.11.5** Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for other public facilities.

4.11.5 Project Impacts

- Threshold 4.11.1** Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection

Fire Protection. The proposed commercial retail project would increase both the number of buildings, from 2 to 13, and the number of people on the Site as well as within the Fire District's service area. This could result in an increase in the need for emergency fire and medical services. According to the Fire Chief, Mr. Mike Urquides, the Project is anticipated to create the typical range of service calls for a retail development including emergency medical and rescue services. Further,

the Project would neither affect the Salinas Rural Fire District's ability to provide adequate fire suppression and emergency medical services to the Site nor to the Toro Area as a whole (Urquides, Mike. October 29, 2007. Personal communication). The Laureles Station's existing fire protection personnel, equipment, and response times are currently adequate to address the Toro Area, of which the Project is a part (Urquides, Mike. October 29, 2007. Personal communication). Therefore, the Project would not have a significant impact on fire protection services, and would not require new or modified facilities or additional personnel.

Threshold 4.11.2 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection

Police Protection. The development of the proposed neighborhood retail village could result in an incremental but nominal increase in demand for police services. According to the County of Monterey, Sheriff Department's Central Patrol Station Commander, Mr. Tracy Brown, the Project would not affect the ability of the County of Monterey Sheriff's Department to provide police protection services to the Site or to the Toro Area as a whole (Brown, Tracy. December 6, 2007. Personal communication). In addition, the existing police personnel, equipment, and response times are currently adequate to address the Toro Area as well as the Project (Brown, Tracy. December 6, 2007. Personal communication). Therefore, the Project would not have a significant impact on police services, nor would it require new or modified department facilities or additional personnel.

Threshold 4.11.3 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for public schools

Public Schools. There is a potential for some of the employees of the Project to move to the project area from other school districts. The majority of jobs provided by the proposed commercial retail businesses developed by the Project would likely be served by local employees with some key managerial employees potentially relocating from areas served by other school districts. Similarly, the proposed office development could generate relocation of employees to the Project area school districts. However, as the Project is comprised of retail and office uses intended to serve the local Corral de Tierra Community, it is possible the Project could generate a nominal amount of new students that would need to be accommodated by either the Washington Union School District and/or the Salinas Union High School District.

According to the Washington Union School District Superintendent, Ms. Dee Baker, classroom space would be available in all three district schools for any additional students which could be generated

by the Project (Baker, Dee. January 25, 2008. Personal communication). In the Washington Union School District both the Toro Park Elementary School and the Washington Union School are currently operating at enrollment capacity, where as the San Benancio Middle School is currently operating near enrollment capacity (Baker, Dee. January 25, 2008. Personal communication). Therefore, the Project would not create a need for additional facilities or expanded staff and faculty in the Washington Union School District.

According to the Salinas Union High School District's Planning/Facilities Manager, Karen Luna, Salinas High School is currently operating over capacity by 46 students (Luna, Karen. December 17, 2007. Personal communication). Although the Salinas Union High School District does have additional student capacity available in relocatable classrooms as opposed to permanent classrooms, the infrastructures, such as; Libraries, Multipurpose Rooms, Auditoriums/Theaters, Cafeterias, Locker Rooms, Gymnasiums, and Outdoor Physical Education areas, were not built to accommodate additional students on the campuses. To support current and future student population growth, the Salinas Union High School District has recently purchased a site, located on Rogge Road between San Juan Grade Road and Natividad Road in Salinas, for the construction of a fifth high school (Luna, Karen. January 7, 2008. Personal communication). Pending available funds, construction is scheduled to begin within three years for completion within five years (Luna, Karen. January 7, 2008. Personal communication). However, any nominal student generation which results from the Project would not significantly affect the ability of either the Washington Union School District (K-8) and/or the Salinas Union High School District to adequately provide educational services to residents of the Toro Area. Therefore, the Project would not have a significant impact on the public schools serving the project area.

Threshold 4.11.4 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for public parks

Public Parks. It is possible that employees of the proposed retail/office project could add nominal use of park facilities in the project area, but not a substantial amount of use. According to the Park Manager, Mr. Richard Higgins, development of the proposed retail village would not result in a substantial increase in facility use at either Laguna Seca Recreation Area or Toro Regional Park, and therefore, would not measurably impact resources at the Laguna Seca Recreation Area or Toro Regional Park (Higgins, Richard. November 5, 2007. Personal communication). Further, the Project would not require construction of new or expanded park facilities (Higgins, Richard. November 5, 2007. Personal communication). Development of the Project would not have a significant impact on the Laguna Seca Recreation Area or Toro Park facilities, personnel, or natural areas.

Threshold 4.11.5 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for other public facilities

Other Public Facilities. There is a potential for some of the customers and employees of the proposed commercial development to utilize the Monterey-Salinas Transit (MST) public bus transportation services along the SR-68 corridor between the cities of Monterey and Salinas to access the Site. The potential for the Project to increase public transit ridership and generate more automobile traffic in the Project area could exacerbate MST's already limited bus service capabilities along the SR-68 corridor. According to MST's Director of Administration, Mr. Hunter Harvath, the addition of the proposed commercial development would increase transit ridership and require significant expansion of MST services along the SR-68 corridor between Monterey and Salinas (Harvath, Hunter. November 19, 2007. Personal communication.). Currently, a standard factor does not exist for determining if the project area would generate potential transit ridership increases. Therefore, there is no definitive data as to whether or not significant impacts to the current MST public bus transportation services along the SR-68 corridor would occur with implementation of the Project.

As required by Policy 41.2.1.1 in the Toro Area Plan, the County supports enhancing transit ridership and designing project amenities that make transit ridership more desirable as part of all new developments. As part of the implementation of the Project, the County would work closely with the applicant to add a bus stop/turn out area, with an improved pedestrian connection between the bus stop and the shopping village.

4.11.6 Cumulative Impacts

The Project in and of itself represents a minor incremental increase in the demand for fire protection, ambulance services, police protection services, transit services, educational services, and park facilities. The implementation of the Project when considered in conjunction with the projects identified in the cumulative development scenario (refer to Table 4.A and Figure 4.1) would not have any significant cumulative impacts related to fire protection, ambulance services, police protection services, transit services, educational services, and park facilities in the Toro Area.

4.11.7 Level of Significance Prior to Mitigation

There would be no potentially significant impacts related to fire protection, police protection, public schools, public parks, and MST transit services resulting from the implementation of the Project, therefore no mitigation is required for these public services.

4.11.8 Mitigation Measures

No mitigation measures are required.

4.11.9 Level of Significance after Mitigation

No mitigation measures are required.

4.12 TRAFFIC AND TRANSPORTATION

This section has been prepared to disclose the great variability in traffic data along the Highway 68 corridor while maintaining a consistent analytical baseline. The analytical baseline is based on the results of the Corral de Tierra Mixed-Use Development Final Traffic Report prepared by Hexagon Transportation Consultants, Inc. (September 1, 2009). The complete Traffic Report is contained in Appendix H. In an effort to disclose the variability in data along Highway 68, information from the Harper Canyon traffic analysis and EIR (Recirculated DEIR for the Harper Canyon (Encina Hills Subdivision) December 2009) has also been included in this discussion. The proposed Harper Canyon project will contribute traffic along the SR-68 corridor and adds to the background information available for an analysis of the Omni Project.

Specific issues addressed in this section include the following: (1) potentially significant impacts caused by vehicle trips generated by the Project on the surrounding roadway network; (2) potentially significant impacts caused by on-site circulation and access to the Project; and (3) consistency of the Project with existing and proposed alternative transportation facilities. The Traffic Impact Analysis addressed Project impacts at the following locations, which were determined in consultation with the County of Monterey, the Transportation Agency for Monterey County (TAMC) and Caltrans:

1. Olmsted Road/State Route 68 (SR-68)
2. Highway 218/SR-68
3. Ragsdale Drive/SR-68
4. York Road/SR-68
5. Pasadera Drive/SR-68
6. Laureles Grade Road/SR-68
7. Corral de Tierra Road/SR-68
8. San Benancio Road/SR-68

4.12.1 Existing Environmental Setting

Existing Roadway System. The major components of the transportation network in the vicinity of the Project are discussed below and shown on Figure 4.12.1:

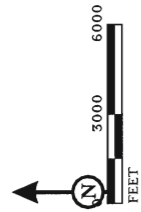
- **SR-68 (Monterey Salinas Highway)** is a major arterial in the study area providing an east-west connection between Salinas and the Monterey Peninsula. Direct access to the Project is provided via a driveway on SR-68. SR-68 is designated a State Scenic Highway and is part of the Monterey County Congestion Management Program (CMP) highway network.
- **Olmsted Road** is a rural two-lane road serving the residential community and providing access to the Monterey Peninsula Airport.

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FIGURE 4.12.1

LSA



SOURCE: StreetMap USA

Corral de Tierra Neighborhood Retail Village Project
Transportation Study Area

- **Highway 218 (Canyon Del Rey Road)-Monterra Road** is a Caltrans rural two-lane arterial extending from Highway 1 (Cabrillo Highway) in Seaside to SR-68 west of the Project.
- Ragsdale Drive is a rural two-lane road located west of the Project that serves the business park.
- **York Road** is a rural two-lane road located west of the Project that serves the business park.
- **Pasadera Drive-Boots Road** is a rural two-lane road located west of the Project that serves the residential community and provides access to the Pasadera Golf and Country Club.
- **Laureles Grade Road** is a rural two-lane road located west of the Project that provides access from SR-68 to Carmel Valley Road.
- **Corral de Tierra Road** is a rural two-lane road serving the residential community south of SR-68. Direct access to the Project is provided via driveways on this roadway.
- **San Benancio Road** is a rural two-lane road located east of the Project that serves the residential community south of SR-68.

Existing Traffic Counts. Traffic volumes for the study intersections were counted on a typical Tuesday, Wednesday or Thursday between September and November 2004. The raw count data is provided in Appendix A of the Traffic Report, which is included as Appendix H in this EIR. An effort was made to determine if this traffic information was adequate and the County looked at data from Caltrans to determine if the traffic volumes along the SR-68 corridor needed to be adjusted. Caltrans collects traffic counts for segments along SR-68. These counts are collected in Average Daily Trips (ADT) and are summarized on an annual basis and shown in the data provided in annual average daily trip traffic counts for segments along SR-68 (refer to Appendix H, Volume II of this EIR). As shown in annual average daily trip traffic counts for segments along SR-68, the traffic volume on most segments of SR-68 has not been increasing since 2004 but has been in a slight downward trend. Therefore no updated traffic counts have been required. By contrast the traffic counts for the Harper Canyon EIR were taken in August of 2006. These do show higher numbers, but this has more to do with the time of year that the counts were taken than the year. The month of August sees a large number of regional and national events in Monterey County which would account for a higher traffic volume. These numbers represent the fact that traffic along SR-68 varies throughout the year.

Existing Traffic Conditions. An analysis of the existing levels of service at study area intersections was conducted for the existing conditions. The methodology used to determine levels of service at study area intersections is discussed in section 4.12.3 below. Table 4.12.A summarizes the results of the intersection LOS analysis for existing conditions for the a.m. and p.m. peak hours.

Table 4.12.A: Existing Level of Service at Study Intersections

Intersections	Existing Conditions			
	AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS
1. Olmsted Road/SR-68	12.8	B	24.6	C
2. Highway 218/SR-68	31.0	C	25.6	C
3. Ragsdale Drive/SR-68	16.5	B	11.0	B
4. York Road/SR-68	13.7	B	26.8	C
5. Pasadera Drive/SR-68	12.5	B	8.5	A
6. Laureles Grade Road/SR-68	18.2	B	25.1	C
7. Corral de Tierra Road/SR-68	21.7	C	25.7	C
8. San Benancio Road/SR-68	26.4	C	25.8	C

LOS = level of service

sec = seconds

Shaded LOS = exceeds County of Monterey's LOS criteria.

SR-68 = State Route 68

As shown in the Table 4.12.A, above, all of the study intersections operate at LOS C or better in the existing condition. The detailed LOS calculations are contained in Appendix C of the Traffic Report, which is included as Appendix H in this EIR.

The number of vehicles and flow of traffic on SR-68 can vary widely. This is experienced by drivers and reflected in the traffic counts collected along SR-68. There are occasions when the traffic volume along SR-68 can be high, reflecting an unacceptable LOS in the existing condition, for either the AM or PM peak hour, while on other occasions the traffic counts show that SR-68 operates at an acceptable LOS. The traffic counts are the basis for any traffic study. A traffic study initially based upon lower traffic volumes will reflect a better LOS related to existing conditions, background conditions, Project impacts and cumulative conditions. Traffic studies can represent a higher or lower level of service depending upon the time frame in which the traffic counts were taken. Traffic counts can vary depending upon time of year, weather, economic conditions and drivers taking alternative routes. The County of Monterey recognizes this and looks at other comparable traffic studies to determine how different traffic studies characterize the level of service. For example, the traffic analysis for the Harper Canyon Subdivision proposed near the intersection of SR-68 and San Benancio Road reflects a lower LOS for six of the common intersections analyzed as shown in Table 4.12.B. In the Harper Canyon traffic analysis the LOS at five of the six intersections operate at an unacceptable LOS in the existing condition.

The peer review of the traffic study prepared for this Project, found that the methodology used in the report for the Project to be in keeping with accepted professional practice. This traffic study reflects a snapshot of the traffic conditions based on counts taken at a specific point in time. In an effort to provide full disclosure of the variability along SR-68, summary tables for the subject traffic study and for the Harper Canyon traffic study will be provided for the Existing Condition, Background Condition, and Cumulative Condition summary tables. The variability between traffic studies can be seen when comparing these tables. For purposes of this Project, the variability between different reports does not result in different conclusions in terms of the mitigation measures being required or the Findings of Significance for the Project as a whole, or the need to make Findings of Overriding Consideration.

Table 4.12.B Intersection Level of Service for Existing Conditions (Harper Canyon)

Intersection	AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS
1. SR-218 at SR-68	21.0	C	24.0	C
2. York Road at SR-68	63.6	E	76.3	E
3. Pasadera Drive-Boots Road at SR-68	36.8	D	29.5	C
4. Laureles Grade at SR-68	38.8	D	82.6	F
5. Corral de Tierra Road at SR-68	35.5	D	68.2	E
6. San Benancio Road at SR-68	71.7	E	116.5	F

sec = seconds

LOS = level of service

SR-68 = State Route 68

SR-218 = State Route 218

Existing Bicycle and Pedestrian Facilities. Sidewalks are located in the vicinity of the Project adjacent to the vacant service station on the corner of SR-68/Corral de Tierra Road. Crosswalks and push-button actuated pedestrian crossing phases are provided on the south and east legs of the SR-68/Corral de Tierra Road intersection. There are no existing bicycle facilities in the immediate vicinity of the site. Class II (on-road striped) bike lanes are provided on Ragsdale Drive, on Highway 218 north of SR-68, and on Olmsted Road. Northeast of the Project, Portola Drive is designated as a Class III (on-road signed) bike route from approximately Reservation Road to Toro Regional Park.

Existing Transit Service. Bus service along SR-68 between Monterey and Salinas is operated by Monterey-Salinas Transit (MST). Two bus lines pass by the Project and stop at the bus stop located at the intersection of SR-68/Corral de Tierra Road. The 21 line provides regional service between the Monterey Transit Plaza and the Salinas Transit Center. The 39 line provides local service between Laguna Seca Regional Park and the Salinas Transit Center. Both lines have approximately 60-minute headways during the weekday peak hours.

Background Setting. The background environmental setting was determined by adding the traffic from the approved, but not yet fully constructed development, to the existing traffic volumes. The trip generation estimates and trip distribution patterns for cumulative projects are included in Appendix D of the Traffic Report, which is included in Appendix H. The approved and probable future developments included in the background condition are listed below.

- **The Pasadera development (formerly known as Bishop Ranch and Rancho Monterey).** This project is located north of SR-68 and west of Laguna Seca and proposes the construction of 253 single-family residential units. Approximately 100 units are constructed and occupied, while the remaining 153 units are approved but not yet constructed.
- **The Monterra Ranch development** is located south of SR-68 near Jacks Peak Park. The Monterra Ranch Development consists of 262 single-family detached homes. Since 61 of these homes do not have direct access to SR-68, only 201 homes were included in the Monterra Ranch development in the Traffic Report. Approximately 13 homes are constructed and occupied, while the remaining 188 homes are approved but not yet constructed.

- **The Oaks Subdivision**, located on San Benancio Road south of SR-68 consists of 9 single-family detached residential units. None of these units have been constructed.
- **The Harper Canyon development** is located on San Benancio Road south of SR-68 and consists of 14 single-family detached residential units. None of these units have been constructed.
- **The Ryan Ranch Business Park** is located north of SR-68 and east of Highway 218. This is an existing development which proposes to expand to include development of the Community Hospital of Monterey Peninsula (CHOMP) (i.e., 182,000 sf) and further development of the business park (i.e., 226,000 sf).
- **The Laguna Seca Business Park** is located north of SR-68 near York Road and consists of 104 apartment/condominium units.

In addition to adding traffic volumes from approved projects to the existing traffic volumes, planned and funded geometric improvements, and one unfunded improvement identified by the SR-68 Advisory Committee, were also accounted for in the Background condition lane configurations at study intersections. The following improvements were included in the Background conditions:

SR-68/Corral de Tierra Road - Relocate the Cypress Community Church driveway to form a fourth (north) leg to the intersection at SR-68/Corral de Tierra Road with one left through and right turn lane; and an eastbound left-turn lane.

SR-68/Laureles Grade - Addition of a second westbound left-turn lane and extension of the existing eastbound right-turn lane.

SR-68/San Benancio Road - Addition of a second westbound left-turn lane.

With this information, the Background condition LOS was determined for the study area intersections and is shown in Table 4.12.C.

Table 4.12.C: Background Level of Service at Study Intersections

Intersections	Background Conditions			
	AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS
1. Olmsted Road/SR-68	21.6	C	60.5	E
2. Highway 218/SR-68	60.9	E	50.5	D
3. Ragsdale Drive/SR-68	38.2	D	17.0	B
4. York Road/SR-68	20.1	C	46.6	D
5. Pasadera Drive/SR-68	22.9	C	14.9	B
6. Laureles Grade Road/SR-68	18.9	B	31.4	C
7. Corral de Tierra Road/SR-68	26.3	C	38.3	D
8. San Benancio Road/SR-68	43.3	D	37.5	D

LOS = level of service

sec = seconds

Shaded LOS = exceeds County of Monterey's LOS criteria.

SR-68 = State Route 68

As shown in Table 4.12.C, six of the eight study intersections operate at LOS D or worse for the background condition. The detailed LOS calculations are contained in Appendix C of the Traffic Report, which is included as Appendix H in this EIR.

Table 4.12.D identifies that five of the six common intersections identified in the Harper Canyon traffic analysis operate at LOS D or worse. Comparing the tables shows that there is variation in the performance of the intersections. The Highway 218/SR-68 intersection performs at a higher LOS in the Harper study, while the Laureles Grade/SR-68 and Corral de Tierra intersections operate at a lower LOS.

A separate project for “Intersection Improvements at SR-68 and Corral de Tierra” (Monterey County Project No. 06-114065) will add a second westbound left turn lane and a second southbound receiving lane on Corral de Tierra. It is still uncertain as to when this project will proceed and is therefore not included in the background conditions.

Table 4.12.D Intersection Level of Service for Background Conditions (Harper Canyon)

Intersection	LOS Standard	AM Peak Hour		PM Peak Hour	
		Delay (Seconds)	LOS	Delay (Seconds)	LOS
1. SR-218 at SR-68	C/D	22.5	C	32.9	C
2. York Rd. at SR-68	C/D	87.5	F	81.7	F
3. Pasadera Drive/Boots Road at SR-68	C/D	73.8	E	44.4	D
4. Laureles Grade at SR-68	C/D	60.3	E	91.2	F
5. Corral de Tierra Road at SR-68	C/D	127.6	F	143.7	F
6. San Benancio Road at SR-68	C/D	82.5	F	135.2	F

LOS = level of service

sec = seconds

Shaded LOS = exceeds County of Monterey’s LOS criteria.

SR-68 = State Route 68

SR-218 = State Route 218

4.12.2 Regulatory Setting

The 1982 Monterey County General Plan contains goals, objectives, and policies for transportation. The policy that is most relevant to the Project with regard to traffic is Policy 37.2.1, which states that “Transportation demands of proposed development shall not exceed an acceptable level of service for existing transportation facilities, unless appropriate increases in capacities are provided for.” Regional improvements identified in this EIR section are also consistent with the policies of Caltrans District 5 and applicable CEQA provisions.

4.12.3 Methodology

Traffic conditions at the study intersections were evaluated in the Traffic Report using level of service (LOS). LOS is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. LOS for

study intersections were calculated using the methodology for signalized intersections described in the 2000 *Highway Capacity Manual (HCM)*.

Level of service for signalized intersections is based on average control delay per vehicle (for the entire intersection), where control delay includes initial deceleration delay, running queue delay, stopped delay, and start-up acceleration delay.

4.12.4 Impact Significance Criteria

California Environmental Quality Act Guidelines. The criteria based on Appendix G of the 2009 CEQA Guidelines for transportation/traffic are as follows:

- Threshold 4.12.4.A** **Would the project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?**
- Threshold 4.12.4.B** **Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?**
- Threshold 4.12.4.C** **Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**
- Threshold 4.12.4.D** **Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**
- Threshold 4.12.4.E** **Would the project result in inadequate emergency access?**
- Threshold 4.12.4.F** **Would the project result in inadequate parking capacity? or**
- Threshold 4.12.4.G** **Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?**

Monterey County Public Works Significant Impact Criteria. The objective set for optimum driving conditions in the 1982 Monterey County General Plan is LOS C.

Based on Monterey County Public Works guidance and professional standards, a proposed project is considered to have a significant effect on the environment if it meets the following criteria:

- **Signalized Intersections:** A significant impact would occur if an intersection operating at LOS A, B, or C degrades to D, E, or F. For intersections already operating at unacceptable LOS D and

E, a significant impact would occur if a project adds 0.01 or more to the critical movement’s volume-to-capacity (v/c) ratio. If the intersection is already operating at LOS F, any increase (i.e., one vehicle) in the critical movement’s v/c ratio is considered significant.

- **Caltrans Significant Impact Criteria.** Caltrans endeavors to maintain a target LOS at the transition between LOS “C” and LOS “D” on State highway facilities; however Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than the appropriate target LOS, the existing measure of effectiveness (MOE) should be maintained. Caltrans considers a trip to a facility that has reached capacity to be significantly impacted by that single trip. The significance of a single trip is dependent on, but not limited to, the operating, safety, and project conditions of a particular development project.

4.12.5 Direct Project Impacts

Threshold 4.12.1 **Would the project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)**

Trip Generation. Traffic generated by the Project was calculated using rates contained in the Institute of Transportation Engineer’s (ITE) *Trip Generation Manual*, 7th Edition, 2003. The trip generation was adjusted to account for pass-by trips and for existing retail trips. Pass-by trips are trips that are already on the adjacent roadway network, and are accounted for in the existing traffic counts. These trips would stop at the retail center while on their way to another destination, such as a stop at the market while on a work to home trip. Because there are no retail centers in the immediate vicinity of the Project, residents of the area must travel towards Monterey or Salinas for shopping. Existing retail trips are those trips which are currently utilizing SR-68 to travel to other retail centers, but would shop at the Corral de Tierra shopping village once the Project is completed.

The Traffic Report subtracted all Customer Local Primary Trips from the traffic generation estimates. The premise that some of the existing retail trips in the Customer Local Primary area could be redirected from other more distant retail centers, is acceptable, but Caltrans and County staff cannot accept a 100% reduction of Local Primary trips unless additional engineering data is submitted to justify this proposal. This information is not available. The assumptions of the traffic study would under state the trip generation. As a result, Table 4.12.E has been adjusted to include Customer Local Primary Trips. This will add 93 new trips in the AM Peak Hour (57 in, 36 out) and 234 trips in the PM Peak Hour (112 in, 122 out). The totals under “Net New Trips” in Table 4.12.E reflect these additions.

Table 4.12.E: Project Trip Generation

Land Use	Size [SF]	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Trip Rate per thousand square feet¹							
Shopping Center		0.90	0.58	1.48	2.87	3.11	5.98
Office		1.36	0.19	1.55	0.25	1.24	1.49
Project Trip Generation							
Shopping Center²	114,200	103	66	169	328	355	683
Customer Local Primary		57	36	93	112	122	234

Customer Regional Primary		36	23	59	72	77	149
Customer Pass-By		0	0	0	111	121	232
Employee		10	7	17	33	35	68
Office ³	12,300	17	2	19	3	15	18
Local		10	1	11	2	9	11
Regional		7	1	8	1	6	7
Total Trip Generation (at Project Site)		120	68	188	331	370	701
Net New Trips (excludes Pass-By)		120	68	188	220	249	469

¹ Trip rate referenced from the ITE *Trip Generation Manual*, 7th Edition (2003). Fitted curve equations used for shopping center, average rates used for office (due to its small size).

² AM: Pass-By = 0% of total, Primary = 90% of total, Local = 61% of Primary, Regional = 39% of Primary.

PM: Pass-By = 34% of total, Primary = 56% of total, Local = 61% of Primary, Regional = 39% of Primary.

³ Local = 61%, Regional = 39%.

PM: Pass-By = 34% of total, Primary = 56% of total, Local = 61% of Primary, Regional = 39% of Primary.

The proposed shopping center and office would generate approximately 188 new trips during the a.m. peak hour (120 in, 68 out) and 469 new trips during the p.m. peak hour (220 in, 249 out). Table 4.12.E shows the project trip generation detail for the Project. Detailed discussion of the methodology used to determine local primary trips, regional primary trips, and pass-by trips are explained in detail in the Traffic Report. It should be noted that the difference between the Total Trip Generation and the Net New Trip in the PM Peak Hour is the credit given for customer pass by trips.

Trip Distribution. Different trip distributions were used for local, regional, and pass-by trips. The local trip distribution was applied to the shopping center local primary customer trips, the shopping center employee trips, and the local office trips. These trips were distributed in the following manner: 14 percent are destined north on Highway 218, Ragsdale Drive, York Road, and Pasadera Drive via SR-68; 81 percent are destined south on Laureles Grade Road, Corral de Tierra Road, and San Benancio Road; and 5 percent are destined north/south on River Road-Reservation Road via SR-68.

The regional trip distribution was applied to the shopping center regional primary customer trips and the regional office trips in the following manner: 22 percent are destined to the north on Highway 218, 28 percent are destined to the west on SR-68, and 50 percent are destined to the east on SR-68.

Background Plus Project Traffic Conditions – Intersection Analysis Results. The results of the level of service analysis under project conditions show that 7 of the 8 study intersections would operate at an unacceptable LOS D or worse (refer to Table 4.12.F) during at least one of the peak hours under project conditions. Based on the County of Monterey Significance Criteria, three study intersections would be impacted by the Project:

- SR-68 and Laureles Grade
- SR-68 and Corral de Tierra Road
- SR-68 and San Benancio Road

Discussion with Caltrans has indicated that the agency would not support two driveways for this Project on SR-68, but would support one driveway, with right-turn-only ingress/egress, located at the proposed east driveway location. The result of this driveway configuration would be to increase the

number of Project trips making left turns at the intersection of Corral de Tierra Road and SR-68. This intersection was evaluated for level of service with this increase in Project trips. The results show that the intersection would operate at LOS E with a 77.3 second average delay during the PM peak hour.

The intersection level of service was also calculated for SR-68/Corral de Tierra Road with the second westbound left-turn lane in place. The results showed that the intersection would still operate at an unacceptable LOS D or worse during the PM peak hour. The planned operational improvement is not designed to mitigate the Project impact of the proposed development.

The detailed LOS calculations are contained in Appendix C of the Traffic Report, which is included as Appendix H of this EIR. Recommended mitigation measures for the significant impact at Corral de Tierra Road/SR-68 are provided in Section 4.12.8 Mitigation Measures. Even with the mitigation provided, this would still be considered a significant impact.

Table 4.12.F: Background Plus Project Level of Service at Study Intersections

Intersections	Background Conditions				Background plus Project Conditions				Increase in Critical V/C	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak	PM Peak
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS		
1. Olmsted Rd/SR-68	21.6	C	60.5	E	21.2	C	58.1	E	-0.005	-0.011
2. Hwy 218/SR-68	60.9	E	50.5	D	60.0	E	48.7	D	-0.004	-0.012
3. Ragsdale Dr/SR-68	38.2	D	17.0	B	37.8	D	17.0	B	-0.003	-0.003
4. York Rd/SR-68	20.1	C	46.6	D	20.3	C	46.9	D	0.002	0.004
5. Pasadera Dr/SR-68	22.9	C	14.9	B	23.3	C	15.2	B	0.002	0.004
6. Laureles Grade Rd/SR-68	18.9	B	31.4	C	19.1	B	37.4	D	0.002	0.042
7. Corral de Tierra Rd/SR-68	26.3	C	38.3	D	29.0	C	65.8	E	0.014	0.118
8. San Benancio Rd/SR-68	43.3	D	37.5	D	47.0	D	44.6	D	0.007	0.038

LOS = level of service

sec = seconds

Shaded LOS = exceeds County of Monterey's LOS criteria. Outline/Italic indicates significant project impact.

SR-68 = State Route 68

The Harper Canyon background numbers have been provided for reference in Table 4.12.D. A qualitative review of the Background condition would indicate that even a single vehicle being added to the intersections of York Road/SR-68, Laureles Grade/SR-68, Corral de Tierra/SR-68 or San Benancio/SR-68 would result in a significant impact using the County's and Caltrans' criteria of adding one additional trip through an intersection already operating at LOS F.

Direct Project Traffic Impacts. Existing case law prohibits requiring new development projects to remedy existing deficiencies. Any measures that are proposed to mitigate project impacts must (a) be reasonable proportional to the impacts of the project, and (b) prevent a worsening of the existing or "background" condition.

Without mitigation, the Project would cause significant impact on traffic conditions at three study intersections, as described below.

- **SR-68 and Laureles Grade:** The PM peak-hour level of service at the intersection of SR-68 and Laureles Grade would be an acceptable LOS C under background conditions but the addition of Project trips would cause intersection operations to degrade to an unacceptable LOS D. This constitutes a significant impact by Monterey County standard.
- **SR-68 and Corral de Tierra Road:** The PM peak-hour level of service at the intersection of SR-68 and Corral de Tierra Road would be unacceptable LOS D under background conditions and the Project trips would cause intersection operations to degrade to an unacceptable LOS E. This constitutes a significant impact by Monterey County standards.
- **SR-68 and San Benancio Road:** The PM peak-hour level of service at the intersection of SR-68 and San Benancio Road would be an unacceptable LOS D under background conditions and the addition of Project trips would cause the critical-movement volume-to-capacity ratio (V/C) to increase by .01 or more. This constitutes a significant impact by Monterey County standards.

Implementation of Mitigation Measure 4.12.1 would require the Project Applicant to participate in TAMC's regional development impact fee program and associated improvement project (described below) to address Project-related impacts at SR-68/San Benancio Road, SR-68/Corral de Tierra Road, and SR-68/Laureles Grade. Payment of the TAMC fee would constitute fair-share mitigation of the Project impact. The Project would be subject to these fees.

Effect of SR-68 Widening

TAMC has adopted a regional development impact fee program to fund improvements to State and regional County roadways, including SR-68 (refer to Appendix H).

The recent TAMC Regional Impact Fee Nexus Study Update – Draft Report (March 26, 2008) (refer to Appendix H) includes a project that would widen SR-68 to four lanes for distances of 2.3 miles beginning at the existing four-lane segment at Toro Park and ending at Corral de Tierra Road. This improvement would mitigate the Project impacts at San Benancio Road and at Corral de Tierra Road. In addition, this improvement would result in a travel time reduction in the corridor.

A portion of the roadway segment targeted for improvement has been analyzed for the net reduction in travel time that a widening improvement would provide. The SR-68 segment studied was the 1.1-mile two-lane segment from the current end of the four-lane highways to the west end of Toro Park Estates. The study found that the combined eastbound and westbound traffic during both AM and PM peak hours over the 1.1-mile segment would incur a net reduction in travel time of approximately 286 seconds (Wang Subdivision Traffic Impact Analysis, Higgins Associates, March 9, 2007).

The TAMC-planned widening improvement of 2.3 miles of SR-68 is twice as long as the length of the highway improvement that the previous study analyzed. Thus, the resulting travel time reduction from this improvement is estimated to be much greater than 286 seconds. Although the roadway segment planned for widening would not extend to Laureles Grade, the increases in delay at the study intersections due to Project traffic would be more than offset by the travel time savings that would result from the implementation of the planned widening of SR-68. The Project shall pay a fair share contribution toward the implementation of this improvement.

Existing Plus Project Intersection Level of Service Analysis

For informational purposes only, Project trips were added to existing conditions, and the results of this analysis are included in Table 4.12.G. This shows that with the proposed improvements, the Project would not adversely affect 7 of the 8 study intersections. The Project would add .01 or more to the Corral de Tierra/SR-68 volume-to-capacity ratio and would degrade the intersection from LOS C to LOS D. This would be considered a significant impact.

Table 4.12.G: Existing Plus Project Level of Service at Study Intersections With SR-68 Improvements.

Intersections	Existing Conditions				Existing plus Project (with SR-68 Widening)s				Increase in Critical V/C	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak	PM Peak
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS		
1. Olmsted Rd/SR-68	12.8	B	24.6	C	12.8	B	23.6	C	-0.005	-0.011
2. Hwy 218/SR-68	31.0	C	25.6	C	30.7	C	25.2	C	-0.004	-0.012
3. Ragsdale Dr/SR-68	16.5	B	11.0	B	16.5	B	11.0	B	-0.002	0.000
4. York Rd/SR-68	13.7	B	26.8	C	13.8	B	27.0	C	0.002	0.004
5. Pasadera Dr/SR-68	12.5	B	8.5	A	12.2	B	8.2	A	-0.001	0.006
6. Laureles Grade Rd/SR-68	18.2	B	25.1	C	18.3	B	27.5	C	0.002	0.030
7. Corral de Tierra Rd/SR-68	21.7	C	25.7	C	23.0	C	23.5	D	0.012	0.118
8. San Benancio Rd/SR-68	26.4	C	25.8	C	28.8	C	29.1	C	0.022	0.038

LOS = level of service

sec = seconds

Shaded LOS = exceeds County of Monterey's LOS criteria. Outline/Italic indicates significant project impact.

SR-68 = State Route 68

Vehicle Miles Traveled Analysis

The net daily vehicle miles traveled generated by the Project is a measure of the project's impact on regional travel. Vehicle miles traveled (VMT) is calculated by multiplying the number of trips generated by the Project by the trip lengths. The Project would provide employment and shopping to an area where it previously was unavailable. Trips can be classified into three types: customers specifically coming to the center (primary trips), customers shopping at the center while on the way to somewhere else (pass-by trips), and employees. To the extent that customers are local residents formerly shopping in Monterey, Seaside, or Salinas, the Project could reduce total traffic in the area. Local Project trips which include customer primary, employee, and office trips - that would have been made to Seaside, Monterey, or Salinas, with the Project, would be shorter by an average of approximately 10 miles. Pass-by trips would already be on the road in the vicinity of the Project, and so would not affect the net VMT change.

Local Project trips (286 PM peak hour trips) that would have been made to Monterey, Seaside, or Salinas would, with the Project, result in an estimated reduction of 2,231 vehicle miles traveled, Regional trips from Seaside, Monterey, or Salinas to the Project (183 PM peak hour trips) would result in an estimated increase of 1,884 VMT during the PM peak hour. Therefore, the Project would result in a net reduction of 347 VMT during the PM peak hour. Using the standard industry practice

multiplying peak hour trips by 10 to derive the total number of daily trips, this corresponds to an estimated savings of about 3,470 VMT daily. The net VMT savings would equate to a net time savings for motorists. This time savings would be further increased by the mitigation improvements to the intersections as noted in the preceding sections, under mitigated Project conditions, the study intersections would have reductions or very small increases in delay, resulting in an overall reduction in delay in the SR-68 corridor. This reduced delay time would be time saved for motorists. The resulting reduction in Greenhouse Gas emissions associated with the reduction in VMT's constitutes a public benefit.

Project Impacts on Traffic Operations at SR-68 & Corral de Tierra Intersection

An operational analysis was performed for the Project-trip turning movements at the intersection of SR-68 and Corral de Tierra Road- Per industry practices, the operational analysis consists of assessing the adequacy of the existing or planned storage capacity to accommodate the estimated 95th – percentile maximum vehicle queues for the turning movements: in this case, the eastbound right-turn, the northbound left and right turns, and the westbound left turn. The results of the analysis are shown in Table 7 of the traffic study which is included as Appendix H.

The background lane geometry differs from the existing lane geometry due to the relocation of the Cypress Community Church driveway to this intersection. The church driveway relocation would not alter the eastbound right turn channelization (it would remain a single right-turn lane), the westbound left turn channelization (it would remain a single left-turn lane), or the northbound left-turn channelization (it would remain a single left-turn lane). What would change is the channelization for the northbound right turn which would become a northbound shared through-right-turn lane based on the geometrics recommended by staff. This lane would extend the entire length of the Project frontage and would therefore have effectively unlimited storage length. For this analysis, the distance back to the main site driveway (510 ft, as shown on the Site plan) was deemed the applicable storage length.

The queuing and storage summary table (Table 7 of Appendix H) shows that sufficient storage exists to accommodate the estimated 95th-percentile vehicle queues under Project conditions.

Threshold 4.12.2 **Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways**

Threshold 4.12.4.B is not applicable to this project as no congestion management facilities are a part of the study area boundary.

Threshold 4.12.3 **Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks**

Threshold 4.12.4.C is not applicable to this project as air traffic patterns would not be affected by the Project.

Threshold 4.12.4 Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)

As discussed in the Project Description, the Project proposes three driveways on Corral de Tierra Road and two driveways on SR-68. The driveways on SR-68 are located approximately 150 and 335 ft east of Corral de Tierra Road. Because there is no median along SR-68, vehicles could make illegal left turns into the shopping center driveway from SR-68. The main driveway to the site is proposed to be located on Corral de Tierra Road approximately 510 ft south of SR-68. Two secondary driveways on Corral de Tierra Road are proposed, one would be adjacent to the property line of the existing service station and the other would be located approximately 150 ft north of the southern property line. Left turns would be allowed into and out of the main driveway and the southernmost driveway. The driveway adjacent to the service station would be right turn only ingress/egress as left turning movements into and out of the driveway adjacent to the service station would be blocked by a median on Corral de Tierra Road.

The Traffic Report analyzed the main driveway on Corral de Tierra Road to determine whether the driveway would be adequate to support the anticipated inbound and outbound traffic volumes. The analysis indicates that the main driveway would operate at LOS B during both the a.m. and p.m. peak hours. The main driveway was evaluated using the Peak-Hour Volume Warrant from the 2003 MUTCD, Chapter 4C. The peak hour traffic generated by the Project would not result in the need for a traffic signal at the main driveway on Corral de Tierra Road. In addition, the distance between the main driveway and SR-68 was examined to ensure that vehicles queued on Corral de Tierra road at SR-68 would not spill back and block the main driveway. The queuing analysis shows that the 510 ft provided between the two intersections is adequate and queues would not block the driveway. Likewise, queuing of southbound left turning vehicles at the main driveway was examined to ensure that these vehicles would not spill back to SR-68. While County staff disagrees with the Traffic Report assertion that the maximum southbound left turn queue is anticipated to be one vehicle, operational traffic modeling confirms adequate queuing space is available for both the northbound left at SR-68 and the southbound left at the main entrance. In the unlikely event that these queues did begin to backup, southbound trips would inevitably divert to the next entrance to avoid delay and would therefore not affect SR-68.

The throat length of a driveway is defined as the distance from the roadway to the first intersecting drive aisle or parking stall. The Traffic Report recommends a 40' Minimum Required Throat Depth for the driveways on Corral de Tierra. Because of the relatively high speeds on SR-68 there is greater potential for serious collisions if the throat length is inadequate. For this reason, the Traffic Report recommends that a minimum throat depth of 60 ft be provided for the driveways on SR-68. The eastern driveway on SR-68 provides a throat depth 40 ft so an additional 20 foot depth will be needed to comply with the recommendations of the Traffic Report. As discussed above, the westernmost driveway on SR-68 provides a depth of 33 ft, but Caltrans has directed that this driveway be eliminated. Both driveways on Corral de Tierra provide the recommended 40', but as discussed below additional lane improvements are required which will result in a decrease in the throat depth to less than 40 ft. This will result in a need to modify the site plan to accommodate the required throat depth for all driveways.

The parcel on the corner of SR-68 and Corral de Tierra poses a concern for the safe circulation of the site, SR-68 and Corral de Tierra Road. It is currently a separate parcel and not a part of this

development. The property owner would like to keep two driveways on this parcel in addition to the driveways proposed as part of the subject development. Caltrans has stated that this poses too much of a safety risk to SR-68 and will not approve any additional driveways for SR-68 beyond the proposed eastern most driveway of the subject development.

In order to optimize operations of the intersection of SR-68 and Corral de Tierra, the northernmost driveway on Coral de Tierra in the Project either needs to be eliminated or the driveways on the corner parcel need to be eliminated and consolidated with the proposed driveway used to provide access to the corner parcel. These modifications will mitigate the potential safety impacts associated with having too many driveways on SR-68 and on Corral de Tierra Road.

The Project will result in a significant increase in additional turning movements throughout the Project frontage. In order to safely accommodate these turning movements, additional Project improvements will need to be installed as listed below. These improvements on Corral de Tierra Road would provide appropriate storage and merge space and segregate pedestrian and bicycle traffic.

- A. Extend the twelve-foot southbound merge lane to the main entrance;
- B. Stripe an eleven-foot southbound through lane;
- C. Construct an eleven-foot southbound turn lane;
- D. Construct a raised center divide to prevent left turning movements;
- E. Restripe an eleven-foot northbound through/left turn lane;
- F. Construct a twelve-foot northbound right turn lane;
- G. Construct a northbound four-foot Class II bicycle lane;
- H. Construct a five-foot sidewalk on east side of Corral de Tierra Road;
- I. Provide a three-foot foot utility, traffic sign, and public facilities easement behind back of walk;
- J. Redesign the site plan to provide a 60 foot deep driveway throat on the eastern most driveway on SR-68;
- K. Eliminate the westernmost driveway on SR-68.
- L. Redesign the site plan to provide a minimum 40 foot throat depth for all driveways on Corral de Tierra Road; and
- M. Eliminate the northernmost driveway on Corral de Tierra Road.

Finally, the southernmost entrance on Corral de Tierra should be widened to accommodate the large turning radius of large delivery trucks which should be directed to use this entrance.

Threshold 4.12.5 Would the project result in inadequate emergency access

The Project driveways would be built to all applicable County standards; therefore, no impacts to emergency vehicle access are anticipated. The implementation of frontage improvements, and the spacing between driveways and other intersections will create orderly traffic flow such that traffic congestion will not interfere with emergency response vehicles.

Threshold 4.12.6 Would the project result in inadequate parking capacity

The County of Monterey Zoning Ordinance Title 21, Section 58, requires one parking space per 250 sf of retail space (4.0 spaces per 1,000 sf) for the shopping center. Application of the required parking rates to the Project results in a total parking requirement of 507 parking spaces. The Project proposes 508 parking spaces, which meets the requirement of the Zoning Ordinance. However, as discussed above under circulation improvements, there will be a need to redesign the circulation in order to provide for the minimum throat depths. This may affect the number of parking spaces and may result in a required decrease in the building square footage.

Threshold 4.12.7 Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)

The Project plans to provide sidewalks along the site frontage on Corral de Tierra Road and SR-68. On site, the Project includes clear and safe pedestrian pathways to the sidewalks. These pathways connect directly and conveniently to the major destination areas on site so that people with disabilities would be able to access shops and offices without difficulty. These sidewalks, together with the existing crosswalks at the SR-68 and Corral de Tierra intersection, would provide the Site with access to the local and regional transit system.

The Project does not currently provide bikeways. The 2008 Monterey County General Bikeways Plan proposes a Class II Bikeway along Corral de Tierra Road. This is consistent with the General Plan policy 37.4.1 and Toro Area Plan policy 39.2.2.2. The Project will be conditioned to provide the appropriate north bound bike trail.

Adopted Policies Relating to Operational Impacts/Project Access on SR-68

Because of relatively high speeds on SR-68, there is greater potential for serious collisions if there are too many points of access onto the highway, and if the throat depths of the driveways along SR-68 are inadequate. The operational analysis for the Project trip turning movements was analyzed to assess the adequacy of the existing or planned storage capacity to accommodate vehicles queues for turning movements. The Project currently proposes two proposed driveways onto SR-68. The analysis indicated that the western most driveway would need to be eliminated. Also, the throat depth of the proposed eastern driveway on SR-68 would not meet the minimum of 60 ft recommended in the traffic report and will need to be modified. Accordingly, prior to mitigation, project-related impacts associated with access along SR-68 is significant.

4.12.6 Cumulative Impacts

Cumulative Setting. The cumulative environmental setting was determined by adding the traffic from the probable future developments to the background traffic volumes. The trip generation estimates and trip distribution patterns for cumulative projects are included in Appendix D of the Traffic Report, which is included in Appendix H. The approved and probable future developments included in the Cumulative condition are listed below:

- **The Wang Subdivision** consists of 23 single-family detached residential units and 6 inclusionary housing units. This project is located on Boots Road across from the Pasadera development.
- **The Miller Property** is located near the Monterey Peninsula Airport and proposes a 32,500 square foot office park and 32,500 sf of light industrial development.
- **Corral de Tierra Convenience Market and Service Station** is located on the southeast corner of SR-68/Corral de Tierra Road, directly adjacent to the Project. This project proposes a 3,600 square foot convenience market and service station.
- **Cypress Community Church**, located north of SR-68, east of Corral de Tierra Road, proposes to expand the existing church facilities to add a preschool and cemetery on the church property.

As discussed in section 4.12.5, background conditions were determined by adding traffic that will be generated by approved but not constructed and probably future projects to the existing traffic volumes. To determine the cumulative impact of the Project on the study area intersections, Project trips were added to the background conditions. The Cumulative and Cumulative plus Project LOS at study intersections is shown in Table 4.12.H.

As shown in Table 4.12.H, seven of the eight study intersections are forecast to operate at LOS D or worse for the cumulative plus project conditions. Recommended mitigation measures for the significant impact at the three impacted locations are provided in Section 4.1.8 Mitigation Measures. The detailed LOS calculations are contained in Appendix C of the Traffic Study, which is included as Appendix H in this EIR.

Table 4.12.I is the cumulative summary table from the Harper Canyon EIR. This shows all six common intersections operating at a less than acceptable LOS.

Cumulative Adverse Impact on Level of Service

Implementation of the Project would contribute to a cumulative increase in traffic volumes that would result in or exacerbate unacceptable levels of service on the regional roadway network. This would be considered a **significant cumulative impact**.

A number of other projects have been proposed within the geographic study area that have not yet been approved or even formally submitted for evaluation. This list of cumulative projects relevant to this traffic study was developed in consultation with County staff and is included in the Traffic Report in Appendix H of Volume II of this EIR. The geographic reach of the Projects considered with the cumulative analysis encompasses a regional area, including growth from several Monterey County cities as well Project in the unincorporated area. The Project plus cumulative growth would impact several intersections on SR-68 as described below.

SR-68/San Benancio Road. In the cumulative scenario, the intersection operates at unsatisfactory LOS during both peak hours. The addition of Project traffic would increase the v/c ratio by more than 0.01, which is considered a significant Project impact per County of Monterey Significance level of service guidelines.

SR-68/Corral de Tierra Road. In the cumulative scenario, the intersection operates at unsatisfactory LOS during both peak hours. The addition of Project traffic would increase the v/c ratio by 0.01 or more and the intersection would degrade from LOS E to LOS F. Addition of Project traffic causes a significant Project impact per County of Monterey Significance level of service guidelines.

SR-68/Laureles Grade. In the cumulative scenario, the intersection operates at unsatisfactory LOS during the p.m. peak hour. The addition of Project traffic would increase the v/c ratio by more than 0.01, which is considered a significant Project impact per County of Monterey Significance level of service guidelines.

Table 4.12.H: Cumulative Plus Project Level of Service at Study Intersections

Intersections	Cumulative Conditions				Cumulative plus Project Conditions				With Regional Projects			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1. Olmsted Rd/SR-68	23.0	C	70.6	E	22.5	C	68.1	E	-0.011			
2. Hwy 218/SR-68	65.5	E	51.8	D	64.5	E	49.9	D	-0.004		31.6	C
3. Ragsdale Dr/SR-68	42.2	D	16.9	B	41.7	D	16.9	B	-0.004			
4. York Rd/SR-68	22.0	C	50.3	B	22.2	C	50.6	D	0.004		124.4	F
5. Pasadera Dr/SR-68	28.2	C	16.3	B	28.5	C	17.0	B	0.009		123.3	F
6. Laureles Grade Rd/SR-68	20.0	C	37.4	D	20.3	C	44.9	D	0.043		107	F
7. Corral de Tierra Rd/SR-68	44.8	D	68.7	E	48.8	D	98.7	F	0.118		197.5	F
8. San Benancio Rd/SR-68	53.5	D	43.5	D	57.7	E	51.5	D	0.039		159.8	F

LOS = level of service

sec = seconds

Shaded LOS = exceeds County of Monterey's LOS criteria. Outline/Italic indicates significant project impact.

SR-68 = State Route 68

(1) Not analyzed in Harper Canyon/Encina Hills Traffic Study.

Table 4.12.I: Cumulative Project Conditions Level of Service (Harper Canyon)

Intersections	LOS Standard	Cumulative Conditions			
		AM Peak Hour Delay (sec)	LOS	PM Peak Hour Delay (sec)	LOS
1. Highway 218/SR-68	CD	63.9	F	111.4	F
2. York Road/SR-68	CD	178.5	F	180.5	F
3. Pasadera Drive/SR-68	CD	189.9	F	184.6	F
4. Laureles Grade Road/SR-68	CD	173.0	F	226.5	F
5. Corral de Tierra Road/SR-68	CD	>300	F	>300	F
6. San Benancio Road/SR-68	CD	264.1	F	>300	F

LOS = level of service

sec = seconds

SR-68 = State Route 68

With implementation of Mitigation Measure 4.12.4, requiring the Project Applicant to participate in TAMC's regional development impact fee program and associated improvement project to address cumulative impacts at SR-68/San Benancio Road, SR-68/Corral de Tierra Road, and SR-68/Laureles Grade, the Project's cumulative impact on traffic operations under Cumulative conditions would be reduced to a less than significant level.

4.12.7 Level of Significance Prior to Mitigation

Prior to implementation of Mitigation Measures, implementation of the Project would result in significant impacts to:

1. Project-Level Impacts to Level of Service

The intersection analysis results provided in Table 4.12.F (Background Plus Project Level of Service at Study Intersections) shows that three intersections on SR-68 would be impacted by implementation of the Project. At these three intersections, traffic will increase to unacceptable levels including an increase in v/c levels. These three intersections are:

- SR-68/San Benancio Road;
- SR-68 Corral de Tierra Road; and
- SR-68/Laureles Grade

2. Cumulative Adverse Impact on Level of Service

Implementation of the Project would contribute to a cumulative increase in traffic volumes at the intersections listed below, which would result in or exacerbate unacceptable levels of service on the regional roadway network.

- SR-68/San Benancio Road;
- SR-68 Corral de Tierra Road; and
- SR-68/Laureles Grade

3. Street Frontages on SR-68 and Corral de Tierra Road and accessways

4. Adopted Plans, Policies and programs supporting alternative transportation

4.12.8 Mitigation Measures and Standard Conditions of Approval

Mitigation Measure 4.12.1: Impact Fee for Project Impacts at SR-68/San Benancio Road; SR-68/Corral de Tierra Road; and SR-68/Laureles Grade. Prior to the issuance of building permits, the Project applicant shall comply with one of the following actions to address Project level impacts to intersections along SR-68:

1. Upon issuance of each building permit for proposed development on the Site, the applicant shall contribute the proportionate fair share, as calculated by the County, towards the “State Route 68 Commuter Improvements” through payment of the TAMC Regional Development Impact Fee (RDIF) in effect at that time. The TAMC RDIF payment will be earmarked for completion of the Caltrans Project Study Report (PSR) for the 2.3 miles “State Route 68 Commuter Improvements” project identified with the TAMC RDIF; or
2. Prior to the issuance of the first building permit for proposed development on the Site, the applicant shall pay the entire fair share for the proposed development toward the “State Route 68 Commuter Improvements” through payment of the TAMC RDIF or;
3. The Project applicant shall fund, initiate and complete a Caltrans Project Study Report for the 2.3 mile “State Route 68 Commuter Improvements” project identified in the TAMC RDIF. The PSR process will identify the total roadway improvement costs, as well as each project applicant’s proportionate fair share of those costs. If costs of the PSR exceeds the Project’s proportionate fair share of the TAMC RDIF obligation, the applicant shall be reimbursed the amount in excess of the proportionate fair share. Monterey County will enter into a reimbursement agreement with the Project applicant to refund the costs in excess of the proportionate fair share of the TAMC RDIF as additional fees are collected from other applicants and sources.

Mitigation Measure 4.12.2: Street Frontage and Accessways. In order to mitigate the potentially hazardous situations created by inadequate street frontage and access improvements, prior to the issuance of grading permits, the Project applicant shall modify the Project Site Plan to the satisfaction of the County of Monterey departments of Public Works and Planning to provide the following design features on Corral de Tierra Road and SR-68:

- A. Extend the twelve-foot southbound merge lane to the main entrance;
- B. Stripe an eleven-foot southbound through lane;
- C. Construct an eleven-foot southbound turn lane;
- D. Construct a raised center divide to prevent left turning movements;
- E. Restripe an eleven-foot northbound through/left turn lane;
- F. Construct a twelve-foot northbound right turn lane;
- G. Construct a northbound four-foot Class II bicycle lane;
- H. Construct a five-foot sidewalk on east side of Corral de Tierra Road;

- I. Provide a three-foot utility, traffic sign, and public facilities easement behind back of walk;
- J. Redesign the site plan to provide a minimum 40 foot throat depth for all driveways on Corral de Tierra Road; and
- K. Eliminate the northernmost driveway on Corral de Tierra Road.

Additionally the following modifications are required on SR-68:

- L. Redesign the site plan to provide a 60 foot deep driveway throat on the eastern most driveway on SR-68;
- M. Eliminate the westernmost driveway on SR-68;

Mitigation Measure 4.12.3: Class II Bikeway. In order to maintain consistency with the General Plan policy 37.4.1 and Toro Area Plan policy 39.2.2.2, the applicant shall install a Class II Bikeway along the Project frontage on Corral de Tierra Road.

Mitigation Measure 4.12.4: Impact Fee for Cumulative Traffic Impacts at SR-68/San Benancio Road; SR-68/Corral de Tierra Road; and SR-68/Laureles Grade. Prior to the issuance of building permits, the Project applicant shall comply with one of the following actions to address cumulative impacts to intersections along SR-68:

1. Upon issuance of each building permit for proposed development on the Site, the applicant shall contribute his proportionate fair share, as calculated by the County, towards the "State Route 68 Commuter Improvements" through payment of the TAMC Regional Development Impact Fee (RDIF) in effect at that time. The TAMC RDIF payment will be earmarked for completion of the Cal Trans Project Study Report (PSR) for the 2.3 miles "State Route 68 Commuter Improvements" project identified with the TAMC RDIF; or
2. Prior to the issuance of the first building permit for proposed development on the Site, the applicant shall pay the entire fair share for the proposed development toward the "State route 68 Commuter Improvements" through payment of the TAMC RDIF or;
3. The Project applicant shall fund, initiate and complete a Caltrans Project Study Report for the 2.3 mile "State Route 68 Commuter Improvements" project, identify the total roadway improvement costs, as well as each Project applicant's proportionate fair share of those costs. If costs of the PSR exceed the Project's proportionate fair share of the TAMC RDIF obligation, the applicant shall be reimbursed the amount in excess of the proportionate fair share. Monterey County will enter into a reimbursement agreement with the Project applicant to refund

the costs in excess of the proportionate fair share of the TAMC RDIF as additional fees are collected from other applicants and sources.

4.12.9 Level of Significance After Mitigation

Implementation of Mitigation Measure 4.12.1 would ensure that the Project applicant contributes his fair share to the planned “State Route 68 Commuter Improvements”. Once the “State Route 68 Commuter Improvements” are constructed, these improvements would shorten the travel time on SR-68 in both directions, improve intersection operations, improve intersection operations at SR-68/San Benancio Road from unacceptable to an acceptable level and improve safety along SR-68.

Implementation of the “State Route 68 Improvements” project, a component of the TAMC RDIF, would effectively mitigate Project impacts at SR-68/San Benancio Road. Therefore, the Project level impacts would be mitigated to a level that is **less than significant**.

The intersection at SR-68/Corral de Tierra Road is currently in the RDIF. However, because of the proposed increase in traffic that would result from the Project at this intersection and the nature of the proposed channelization improvements, it is likely that the level of service at this intersection would remain significant. Therefore the Project level impacts at this intersection would remain a **significant unavoidable impact** of the Project.

The intersection at SR-68/Laureles Grade is currently not included in the RDIF and this would remain impacted. Therefore the Project level impacts at this intersection would remain a **significant unavoidable impact** of the Project.

With implementation of Mitigation Measure 4.12.2 and Mitigation Measure 4.12.3 all significant adverse impacts related to adopted policies, plans, or programs supporting alternative transportation would be mitigated to a **less than significant level**.

Through payment of the regional traffic impact fees through either of the options identified in Mitigation Measure 4.12.4, the Project would directly contribute to future improvements, which would help off-set any cumulative traffic impacts on regional roadways caused by increased trip volumes associated with the Project. Payment of the TAMC RDIF will reduce the Project’s cumulative traffic impacts to the regional roadway network to a less than significant level. Therefore, with implementation of Mitigation Measure 4.12.4, the Project’s cumulative impact on traffic operations under Cumulative conditions would be reduced to a less than significant level.

4.13 UTILITIES

This section provides a description of existing utilities and service systems available to the Project, including gas and electric, telephone and cable, wastewater, and water supply infrastructure and an analysis of the effects that additional demand from the Project would place upon these systems. For a discussion of all other water-related issues, such as groundwater supply, water quality, surface water runoff/storm water detention, and storm water treatment, refer to Chapter 4.7, Hydrology and Water Quality. For a more expanded discussion of energy as it relates to greenhouse gas emissions and global climate change, refer to Chapter 4.14. Documents reviewed and incorporated as part of this analysis include:

- Staal, Gardner & Dunne Inc. August 1991. Hydrogeologic Update, El Toro Area, Monterey County California. Report prepared for Monterey County Water Resources Agency.
- Fugro West, Inc. February 1996. Additional Hydrogeologic Update, El Toro Area, Monterey County California. Report prepared for Monterey County Water Resources Agency.
- Kenneth D. Schmidt and Associates. May 2001. Review of Reports on Groundwater Conditions. Letter report prepared for Monterey County Environmental Health Division.
- Yates, Feeney, and Rosenburg. November 2002. Laguna Seca Subarea, Phase III Hydrogeologic Update. Report prepared for Monterey County Water Management District.
- Kleinfelder, Inc. February 2004. Project-Specific Hydrogeologic Investigation, Omni Enterprises Property (PLN 010252), Corral de Tierra Area, Monterey County, California. Report prepared for Monterey County Health Department, Environmental Health Division.
- Geosyntec. 2007. El Toro Groundwater Study, Monterey County, California. A report prepared for: Monterey County Resource Management Agency, Salinas, California.
- Finegan, B. 2007. Letter of November 20, 2007 to Luis Osorio, Monterey County Resource Management Agency-Planning Department, Salinas, CA.
- Komex, April 2004. EIR for Corral de Tierra Neighborhood Retail Village, Monterey County California, Technical Peer Review Memorandum.
- California Energy Commission, 2005. Nonresidential Compliance Manual for California's 2005 Building Energy Efficiency Standards.

4.13.1 Existing Conditions

Telephone and Cable. AT&T provides local telephone communication services to the County of Monterey, including the Site.

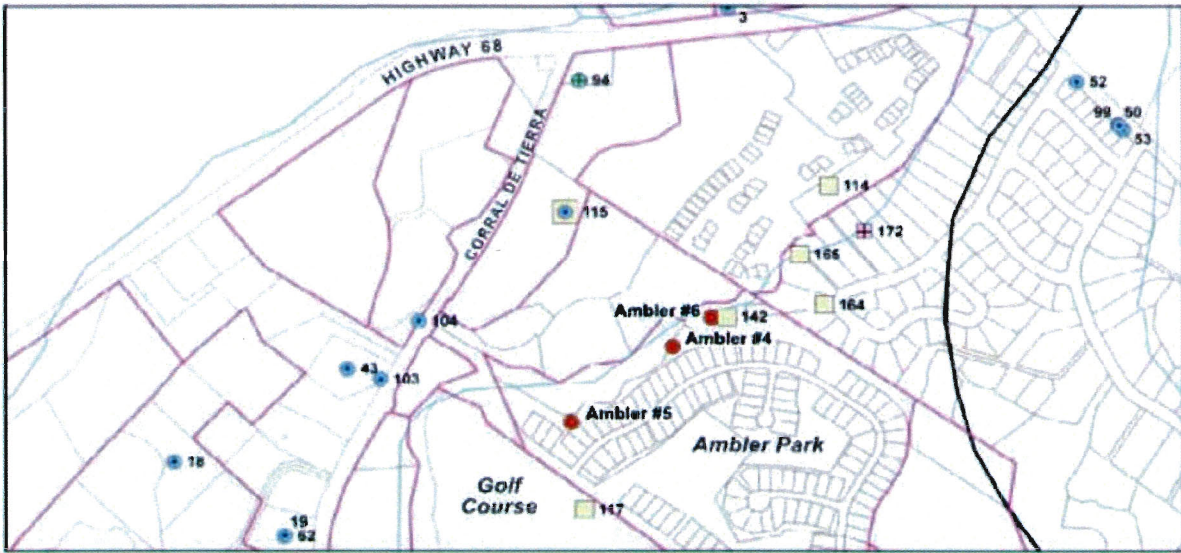
Supply, Treatment, and Distribution of Water. The Site is currently undeveloped and is within the Ambler Park Water System service area. The Ambler Park Water System is a public water system owned and operated by the California American Water Company (Cal-Am) (Geosyntec, 2007). Cal-Am is responsible for ensuring that water supplies meet water demand and that State and federal water quality standards are achieved within the Ambler Park Water System service area.

The Ambler Park Water System serves Ambler Park, Paseo Pravado, Harper Canyon, and Rimrock subdivisions in the northern Corral de Tierra and northwestern San Benancio Subarea (Geosyntec, 2007). The water supply is distributed for residential and commercial use. The Ambler Park Water System includes approximately 250,000 gallons of aboveground tank storage and a water treatment plant that was constructed in 1974 to remove iron and manganese, and has recently been modified to remove arsenic (Jordan, 2008). The water treatment plant also conducts chlorination and pH adjustments. The maximum flow-through capacity of this treatment system is approximately 967 afy.

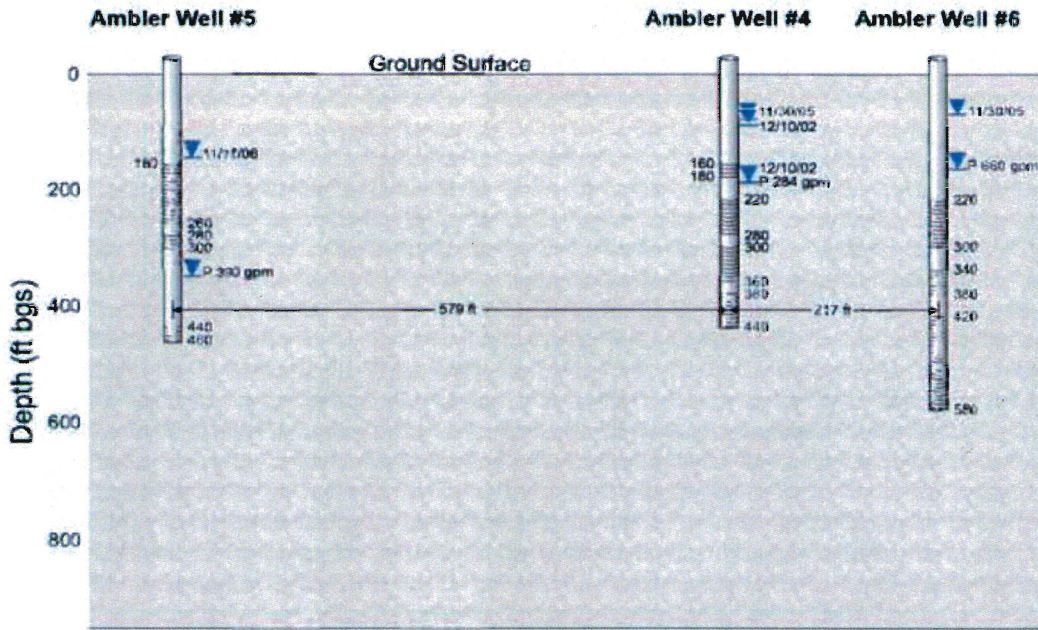
Water supply for the Ambler Park Water System is provided from three water supply wells (Ambler Park Wells #4, #5, and #6) located approximately 500 feet southeast of the Site. Figure 4.13.1 illustrates the location and construction details for the Ambler Park water supply wells. Ambler Park Well #4 is completed to a depth of approximately 440 feet below ground surface (bgs); Ambler Park Well #5 is completed to approximately 480 feet bgs, and Ambler Park Well #6 is completed to approximately 580 feet bgs (Geosyntec, 2007). The Ambler Park water supply wells are located within the Corral de Tierra subarea, which is one of five subareas in the water shed-based El Toro Planning Area located in the north-central portion of the County of Monterey in the Salinas Valley Groundwater Basin. WorleyParsons Komex projected the Ambler Park Wells on cross section D-D' prepared by Geosyntec (2007) and cross section A-A' prepared by Kleinfelder (2004). The Geosyntec (2007) and the Kleinfelder (2004) cross sections are shown in Figures 4.13.2 and 4.13.3, respectively. According to these cross sections, the Ambler Park water supply wells are screened or perforated intervals are entirely within the continental deposits (commonly called the "Aromas-Paso Robles"), which is one of the units that comprises the El Toro Primary Aquifer System as defined by Geosyntec (2007). Refer to Chapter 4.7 Hydrology and Water Quality for a detailed discussion of the hydrostratigraphy near the Site. The amount of water obtained from this source varies from year to year and is primarily dependent on weather conditions and demand.

The pumping capacities of Ambler Park Wells #5 and #6 are approximately 400 and 600 gallons per minute (gpm), respectively; and the capacity of Ambler Park Well #4 is less than 50 gpm (Geosyntec, 2007). Based on these reported pumping capacities, the theoretical maximum production capacity of the Ambler Park Water System is approximately 1,500 gpm or 2,418 AF/Y. However, the current maximum treatment system capacity is approximately 967 AF/Y, so this quantity is likely the maximum annual production capacity for the Amber Park Water System, assuming there is sufficient groundwater to supply this production rate. The maximum production capacity of the Ambler Park Water System was not reported in any of the sources reviewed for this analysis or provided by Cal-Am. Since 2000, production has been primarily from Well #5 and annual production rates for the Ambler Park Water System have increased from 250 AF/Y in 2001 to nearly 300 AF/Y in 2005 (Geosyntec, 2007). Production rates for the Ambler Park Water System have steadily increased at a rate of approximately 10 AF/Y since 2001 as illustrated on Figure 4.13.4 and Geosyntec (2007) projected this increase in production rate through 2010. Based on this analysis, the annual production rate in 2010 would reach approximately 325 AF/Y (Geosyntec, 2007). Annual production for the Ambler Park Water System in 2006 and 2007 was not reported in the sources reviewed for this evaluation or provided by Cal-Am.

Ambler Park Well Locations



Ambler Park Well Screens



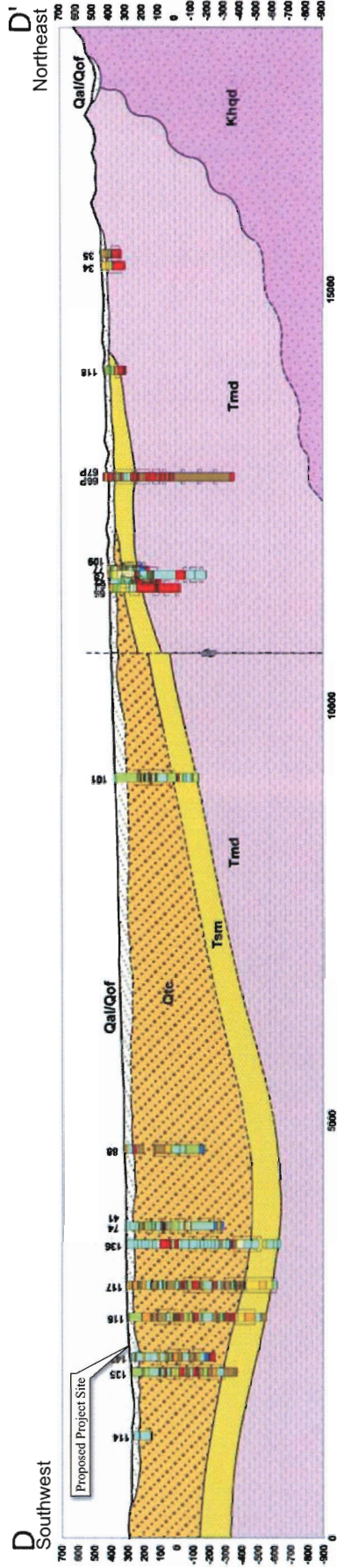
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FIGURE 4.13.1

Corral de Tierra Neighborhood Retail Village Project
 Ambler Park Well Locations
 and Screened Intervals

SOURCE: Geosyntec Consultants, June 2007

I:\MOC0701\G\Ambler Park Well Locations.cdr (5/11/08)



NOTES:
 Adapted from Clark et al. (2000), and well logs.
 This figure was originally produced in color. Reproduction in black and white may result in loss of information.



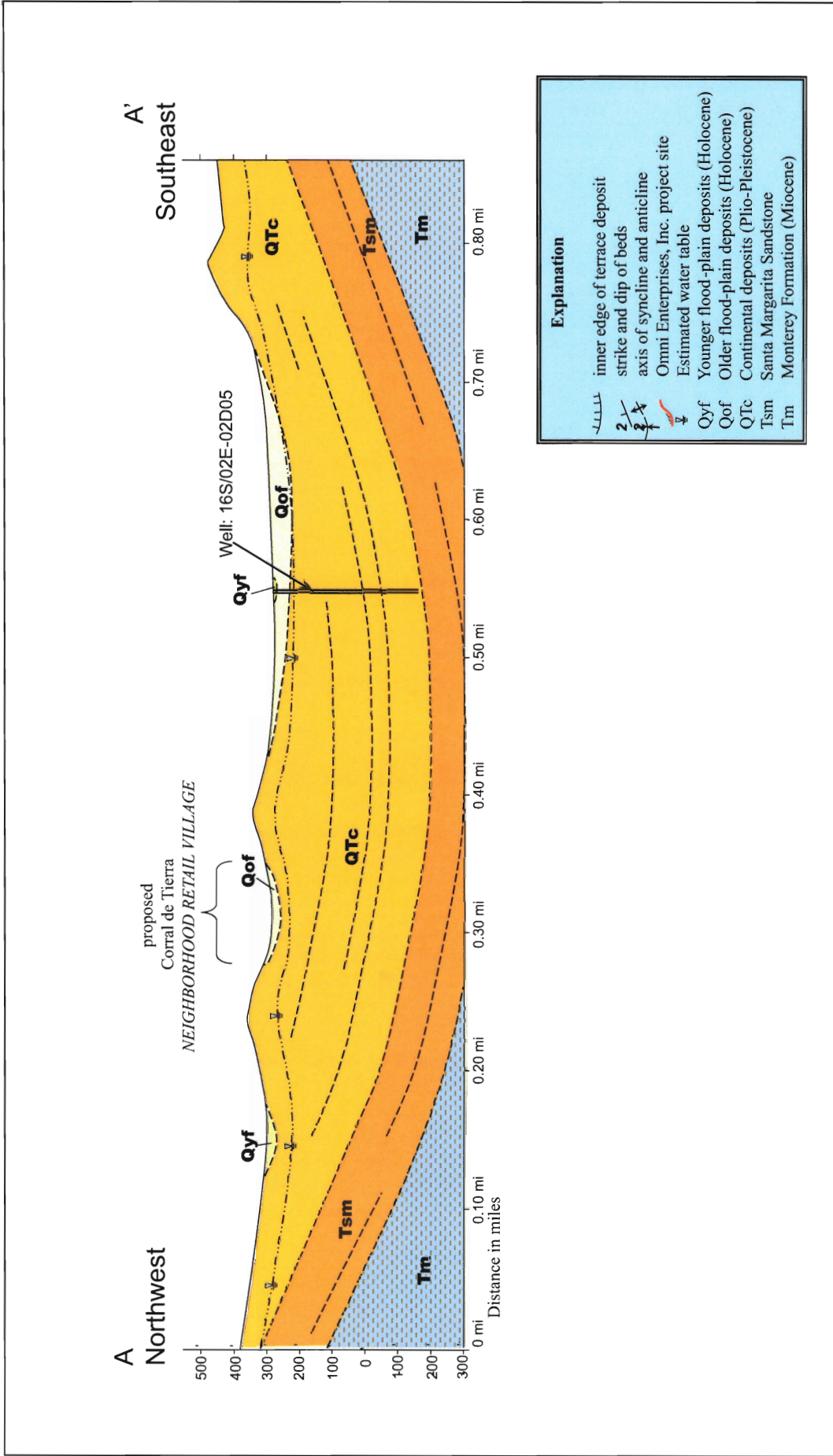
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SOURCE: Geosynce Consultants, June 2007

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FIGURE 4.13.2



LSA

FIGURE 4.13.3

Corral de Tierra Neighborhood Retail Village Project
 Hydrogeologic Cross Section A-A'

SOURCE: Geosyntec Consultants, June 2007

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Toro Water Service & Ambler Park Annual Pumping

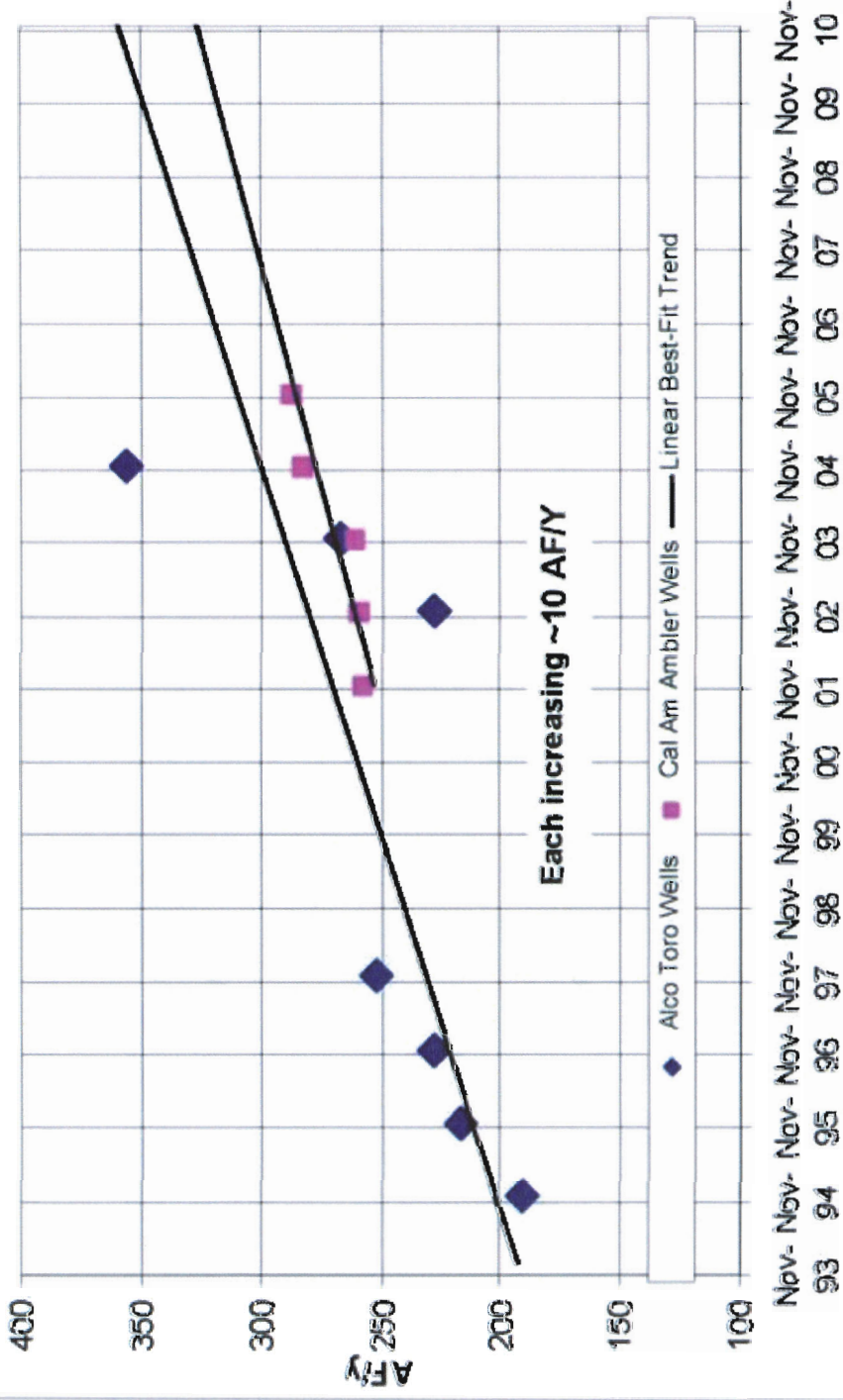


FIGURE 4.13.4

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All infrastructure, including wells, tanks, treatment plants and access easements associated with the Ambler Park Water System, is located off-site. According to Finegan (2007), “there are three fire hydrants on the property and an 8” water line is stubbed to the Site as shown on the Vesting Tentative Map.” These hydrants are regularly tested by the Salinas Rural Fire District (Finegan, 2007). In addition to the public water supply currently available to the Site, the property has one existing well (Finegan, 2007). This well (State Well ID 16S/02E-03A01) is a small water system well (presumably used for irrigation), and was installed between 1950 and 1959 to a depth of less than 200 ft bgs (Geosyntec, 2007). This well is located in the center portion of the Site and is shown as well 115 on Figure 4.13.5. According to Geosyntec (2007) the well has a historical pumping rate ranging between 10 and 24 gpm. The well is not currently being used, and use of the well as a water supply is not proposed for this Project. Build-out demand for the Corral de Tierra subarea is 582 AF/Y and 781 AF/Y, respectively (Fugro, 1996). No current updates on population or dwelling units were available for the study conducted by Geosyntec in 2007; therefore, the most recent estimates of water demand are from the Fugro (1996) report.

Wastewater Treatment. Two methods of wastewater treatment and disposal are commonly used in the County of Monterey: sewerage and septic systems. Sewerage systems are comprised of interdependent assemblage of pipes, conduits, and physical facilities employed in the collection, transport, treatment, and disposal of wastewater. Septic systems are underground wastewater systems used to treat domestic wastes on individual sites.

Wastewater treatment for properties within the Project area is by sewerage provided by California Utilities Service, Inc. (CUS). A wastewater treatment plant operated by CUS that would serve the Site is located north of Reservation Road, east of the intersection of Reservation Road and SR-68 (refer to Figure 4.13.6) and has been in operation since 1965. As of February 2007, the facility provides wastewater collection and treatment services to 1,114 connections of light commercial and residential areas in the Toro area along SR-68 south of Reservation Road. Light commercial facilities include an elementary school, the Corral de Tierra Country Club, the Cypress Church, and a number of small business parks and office buildings (CRWQWB, 2007).

Wastewater is transported from residences and commercial facilities within the vicinity of the Project to the treatment plant via a 12-inch sewer line that was installed in 1975. This existing sewer line, which runs under Corral de Tierra Road on the west side of the Site, would serve the Project (Finegan, 2007). The treatment facility consists of an emergency influent basin, lift station, influent screen, two sequencing batch reactor tanks, chlorine contact tanks, effluent pump station, effluent storage pond, aerobic sludge digester, sludge drying beds, and a dewatered sludge storage area (CRWQCB, 2007). The facility is designed to handle an average daily flow of 300,000 gallons per day (gpd) and a peak daily flow of up to 450,000 gpd. The emergency influent storage pond has a capacity of approximately 3.23 million gallons; the effluent storage pond has a capacity of approximately 7.8 million gallons. After secondary treatment, the water is discharged via land application using overhead sprinklers, into alluvial sediments adjacent to the Salinas River (CRWQCB, 2007). Biosolids are disposed off-site at Monterey Regional Landfill.

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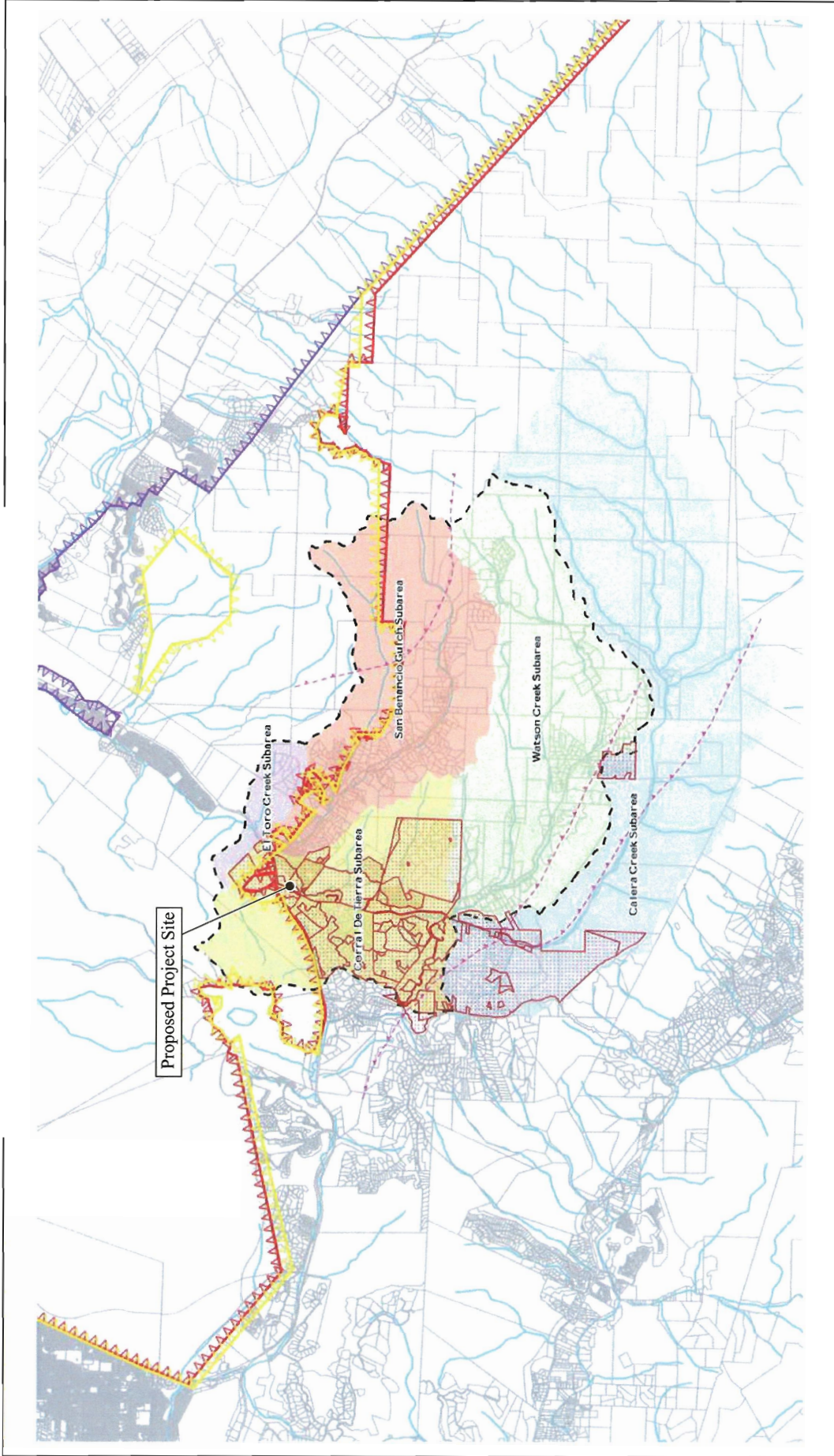


FIGURE 4.13.5

LSA

Legend

- El Toro Area Subareas
- Calera Creek Subarea
- Corral de Tierra Subarea
- El Toro Creek Subarea
- San Benancio Gulch Subarea
- Watson Creek Subarea

- B-8 Zoning
- Parcel Boundary
- Proposed Hydrogeologic Unit
- Faults (SGD, 1991)
- Streams

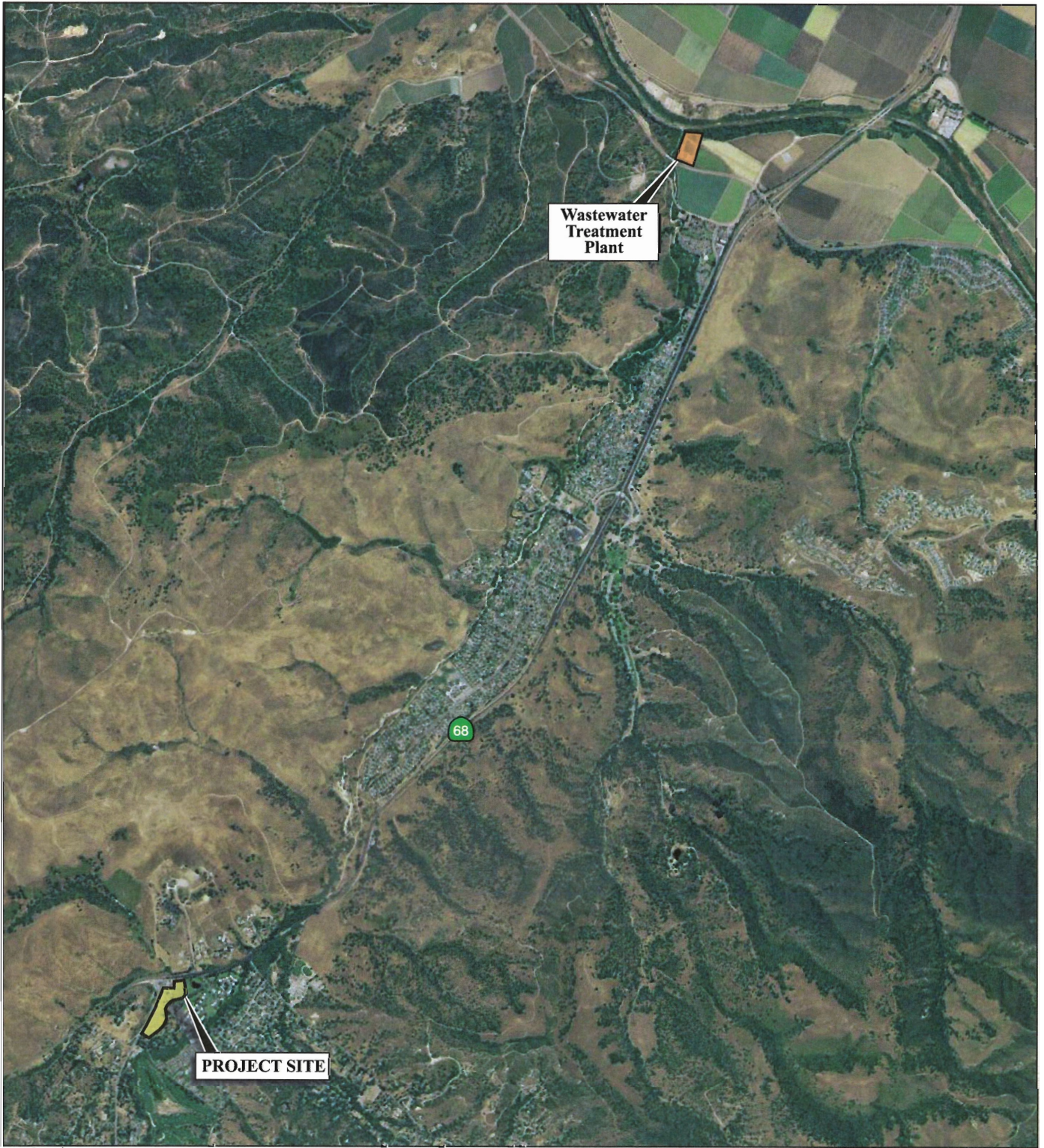
- Zone 2
- Zone 2A
- Zone 2C

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MILES

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Corral de Tierra Neighborhood Retail Village Project
B-8 Zoning Overlay Areas

SOURCE: Monterey County Water Resources Agency, 6/23/2008
I:\MOC0901\GB-8 Zoning.cdr (5/11/10)



L S A

FIGURE 4.13.6



0 1300 2600
FEET

AERIAL SOURCE: Mapquest

I:\MOC0701\GWT Plant Location.cdr (5/11/10)

Corral de Tierra Neighborhood Retail Village Project
Wastewater Treatment Plant Location

CUS waste discharge requirements were updated effective February 9, 2007 (Order No. R3-2007-0008; discussed in more detail in the Regulatory Setting section). Until that time, the facility was required to comply with the previous Order No. 95-23 that was issued in February 1995. The purpose of the new Order was to update monitoring requirements associated with CUS's wastewater treatment facility and to make requirements consistent with other similar facilities in the Salinas River basin (CRWQCB, 2007). A summary of changes to effluent contaminant and nutrient limitations and monitoring requirements is provided in the Regulatory Setting section. The updates included implementation of effluent limitations and management plans, as well as updating monitoring reporting requirements, including discontinuing those that were considered by CUS as the discharger to be obsolete (e.g., treatment system disinfectant requirement and the total coliform and chlorine residual monitoring requirement; CRWQCB, 2007).

Under the new Order, and according to the facility's design capacity, CUS is allowed a maximum discharge of 300,000 gallons per day (gpd) and a peak daily flow of up to 450,000 gpd. CUS has estimated its current average monthly flow rate to be 220,000 gpd; thus, there is the capacity for an average flow of approximately 80,000 gpd of additional wastewater to be treated from new or expanded facilities within the service area (CRWQCB, 2007).

Solid Waste Disposal. Waste Management, Inc., a private waste disposal company, provides solid waste disposal services to the Toro Area including the Site. The Project is serviced by the Waste Management, Inc.'s main office located in Castroville. The Castroville franchise of Waste Management, Inc. provides solid waste service to the County of Monterey and the Toro Area excluding the City of Monterey and the City Salinas. Depending on the types of land use it is serving, Waste Management, Inc. collects waste one to seven times per week. The solid waste is then transported to the Marina Sanitary Landfill, which is serviced by the Monterey Regional Waste Management District. The district's facilities are located on its 475 acre property, approximately 3.88 miles from the Site and approximately two miles north of the Marina Sanitary Landfill. The district covers a total of 853 square miles. The population currently served is about 170,000. During Fiscal Year 2004-2005, the Landfill & Recycling Facility received 369,389 tons of solid waste, including 186,010 tons from the franchised garbage companies; 123,805 tons of commercial and industrial waste, including 35,181 tons of dewatered sewage sludge; 59,575 tons of waste from small businesses and individuals who haul their own trash; and 5,087 tons of liquid waste. Of the total solid waste received at the Site, 142,425 tons were recycled or diverted from the landfill. This represents a diversion rate of 39 percent. In accordance with the Monterey Regional Waste Management District's Landfill Site Master Plan (<http://www.mrwmd.org/about-us.htm>), the remaining solid waste capacity of the Marina Sanitary Landfill is approximately 40 million tons or 74 million cubic yards. Based on the currently permitted waste capacity, and if the District continues to achieve the "AB 939" State-mandated 50 percent recycling rate, the landfill would continue to serve the present service area through the year 2107 (www.mrwmd.org).

Energy. Energy usage is typically quantified using the British Thermal Unit (BTU). BTUs can be used to reflect energy consumed in both electrical and natural gas forms. As points of reference, the approximate amount of energy contained in a kilowatt hour (kWh) of electricity and a cubic foot of natural gas are 3,400 BTUs, and 1,000 BTUs respectively.

California's total energy consumption in 2005 was approximately 8,359 trillion BTUs (the most recent year for which this specific data is available)¹. Of California's total energy consumption in 2005, the consumption breakdown by end-use sector was 1,516 trillion BTU for residential uses, 1,551 trillion BTU for commercial uses, 2,001 trillion BTU for industrial uses, and 3,291 trillion BTU for the transportation sector. Of the commercial sector consumption total, approximately 401 trillion BTU can be attributed to electricity, 237.5 trillion to natural gas, and 13 trillion to alternative energy sources including hydroelectric power, biomass and geothermal. Small amounts of photovoltaic and solar thermal energy are also being used in the commercial sector. However, because of the way the information is collected, the commercial use cannot be distinguished from the residential use. Therefore, the 13 trillion BTUs attributed to alternative energy sources in the commercial sector do not include photovoltaic and solar thermal energy sources.

The majority of the commercial sector's energy use can be attributed to heating and cooling, electricity consumption, and transportation. These energy uses are also the major sources of GHG emissions. GHGs are defined to include but are not limited to carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, perfluorocarbons, and chloroflourocarbons. A balance of GHGs is essential to maintaining the temperature of the earth, where an excess of GHGs can raise the temperature of the planet making them a major factor in Climate Change/Global Warming trends (refer to Chapter 4.14 Global Climate Change).

Because energy use is so closely tied to GHG emissions, the passage of California climate change laws and policies, such as Assembly Bill 32 (AB 32), which established a legally binding 2020 GHG emission reduction target, have set the stage for State, regional and local planners to incorporate energy considerations into the planning process. Utilities also play an important role in collaborative planning efforts with local governments to reduce energy consumption and subsequently GHG emissions. In an effort to promote the use of alternative energy sources with the goal of reducing GHG emissions, there are various federal, State, and utility rebate/tax credit programs available to the commercial sector for the installation of renewable energy systems and/or the use of energy efficient designs and technologies.²

Electricity. All public electrical energy for the County of Monterey is generated outside the County and supplied via transmission lines. The principal supplier of electricity in the County is the Pacific Gas and Electric Company (PG&E). Pacific Gas and Electric Company is one of the largest combination electric and natural gas utilities in the United States. PG&E is based in San Francisco and provides electric and natural gas services to approximately 15 million people throughout a 70,000 square-mile service area in northern and central California. The service area of PG&E stretches from Eureka (north) to Bakersfield (south) and from the Pacific Ocean (west) to the Sierra Nevada Mountains (east).

PG&E produces or buys its power from a mix of conventional and renewable generation sources which travel through electric transmission and distribution systems. The electricity is carried over the bulk electric grid, a "network" of high-voltage transmission lines that connect power plants to

¹ U.S. Department of Energy's Energy Information Administration – State Energy Data 2005: Consumption.
² See the DSIRE website (www.dsireusa.org) for details about incentives applicable to the commercial sector.

substations and link systems together. Individual services or “drops” connect the distribution system to the customer. PG&E maintains 123,054 circuit miles of electric distribution lines interconnected with 18,610 circuit miles of transmission lines.

Electricity consumption for differing land uses varies substantially by the type of uses in a building, type of construction material used in a building, the efficiency of all electricity-consuming devices within a building, and the building’s climate zone location. According to the Energy Information Administration (Official Energy Statistics from the U.S. Government), the national average annual electricity consumption rate is approximately 15 kWh/square foot for all commercial buildings. There is currently no electrical demand associated with the undeveloped Site.

Natural Gas. California has seven gas utilities that serve approximately 10 million customers and meet approximately 83 percent of the State’s total gas demand. Natural gas resources are drawn upon at naturally occurring reservoirs primarily located outside of California and delivered via high-pressure transmission lines. California has three primary regional access points where interstate pipelines deliver natural gas into the State. Gas destined for Central and Northern California is accessed at a series of market hubs, with interconnections to PG&E and the Southern California Gas Company. As the gas is transported to its destination, the pressure is maintained with the assistance of compressors. The gas is then received at a storage field (i.e., underground storage tanks) and redistributed through another series of transmission lines. PG&E also provides natural gas services to the Toro Area including the Site vicinity.

Natural gas consumption for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, the efficiency of all gas consuming devices within a building, and the building’s climate zone location. According to the Energy Information Administration (Official Energy Statistics from the U.S. Government), the national average annual consumption of natural gas is approximately 43 cubic feet/square foot for commercial buildings. There is currently no demand for natural gas associated with the undeveloped Site.

4.13.2 Regulatory Setting

California Public Utilities Commission. The California Public Utilities Commission (PUC) is a State Public Utilities Commission which regulates privately-owned utilities in the State of California, including electric power, telecommunications, natural gas, water, and transportation companies. The California Utilities Service, Inc. (CUS) is a public utility wastewater treatment company that operates under the jurisdiction of the California Public Utilities Commission. The PUC determines the discharge volumes that are allowed by CUS and if CUS has the capacity to treat additional wastewater discharges (CUS, 2007).

California Integrated Waste Management Act of 1989 (State Assembly Bill 939). The California Integrated Waste Management Act of 1989 (AB 939) requires all cities and counties to develop a Source Reduction and Recycling Element for diverting 50 percent of their solid waste from landfills

by the year 2000. City and County governments throughout the State of California have responded by adopting waste diversion programs to meet the requirements of AB 939.

Database of State Incentives for Renewables and Efficiency (DSIRE). DSIRE is a comprehensive source of information on State, local, utility, and federal incentives that promote renewable energy and energy efficiency. Established in 1995, DSIRE is an ongoing project of the North Carolina Solar Center and the Interstate Renewable Energy Council (IREC) funded by the U.S. Department of Energy (www.desireuas.org). DSIRE provides information on financial incentives including those related to green building, leasing/lease purchasing, local grant programs, local loan programs, personal deductions, production incentives, property tax exemptions, State loan programs, State rebate programs, utility grant programs, utility loan programs, and utility rebate programs. DSIRE also provides rules, regulations, and policies applicable to each federal, State, local, and utility incentive.

EnergyStar™ Program. EnergyStar™ is a joint program between the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy created to help protect the environment through the promotion of energy efficient products and practices. In 1992, the EPA introduced EnergyStar™ as a voluntary labeling program designed to identify and promote energy efficient products to reduce greenhouse gas emissions. Office equipment, such as computers and monitors were some of the first products to be labeled. In 1996, the EPA joined forces with the U.S. Department of Energy for specific product categories. Today the EnergyStar™ label can be found on major appliances, office equipment, lighting, home electronics, and even new homes and commercial and industrial buildings.

Flex Your Power Program. Initiated in 2001, Flex Your Power is California's statewide energy efficiency marketing and outreach campaign. The campaign includes a comprehensive website, an electronic newsletter and blog, and educational materials. Primary funding for the campaign comes from the Public Goods Charge as approved by the California Public Utilities Commission (CPUC), as well as contributing Municipalities and Partner organizations and companies. Flex Your Power has created partnerships among California's utilities, residents, businesses, institutions, government agencies, and nonprofit organizations all working to save energy.

Assembly Bill 32. California enacted the Global Warming Solutions Act of 2006 (AB 32), effective as of January 1, 2007, in an effort to control GHG emissions as a means of addressing global climate change. This legislative program aims to reduce GHG emissions in California to 1990 levels by 2020 and 80 percent below 1990 levels by 2050. AB 32 charges the California Air Resources Board (CARB) to monitor and regulate all sources of emissions of GHGs – defined to include carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, perfluorocarbons, and chloroflourocarbons. CARB would establish standards and baselines for emissions reduction targets, as well as develop the framework governing industry reporting and verification of GHG emissions. It is also expected that CARB would institute a carbon cap and trade system that would allow companies to sell carbon emission credits where they would be able to achieve reductions below pre-determined emissions baselines. As law, AB 32 gives CARB the authority to begin enforcing these

regulations beginning in 2012. Every business in California that emits GHGs is potentially affected by this far-reaching legislation.

California Code of Regulations, Title 24. The California Code of Regulations (CCR), Title 24, is also known as the California Building Standards Code. Title 24 combines building standards from three different sources including building standards that have been adopted by State agencies without change from building standards contained in national model codes; building standards that have been adopted and adapted from national model code standards to meet California conditions; and building standards that constitute extensive additions not covered by the model codes that have been adopted to address specific California conditions. Title 24 consists of 12 parts such as the California electrical code, mechanical code, plumbing code, fire code, and the energy code which sets forth energy standards for buildings.

Nonresidential Compliance Manual for California's 2005 Building Energy Efficiency Standards. The 2005 California Energy Efficiency Standards for Nonresidential Buildings, issued by the California Energy Commission, took effect October 1, 2005, and is on a three-year code change cycle. This compliance manual was created specifically to help builders, designers, inspectors, examiners, owners, and energy consultants comply with and enforce California's energy efficiency standards for nonresidential buildings. The manual was designed as both a reference and an instructional guide for anyone that is directly or indirectly involved in the construction and/or design of energy efficient nonresidential buildings. Energy efficient nonresidential buildings reduce energy costs for owners, increase reliability and availability of electricity for the State, improve building occupant comfort, and reduce environmental impact.

Monterey County General Plan. The Monterey County General Plan is a long-range, comprehensive plan addressing all aspects of future growth, development, and conservation within the County. The Monterey County General Plan was adopted by the Board of Supervisors in 1982 and subsequently has been amended on several occasions. At the countywide level, the plan designates all proposed major land uses by one of seven basic designations: residential, commercial, industrial, agricultural, resources conservation, public/quasi-public, and transportation.

The following General Plan objectives, generally applicable to utilities, apply to the Project:

- Objective 13.2** *Incorporate energy efficiency into land use planning.*
- Objective 13.3** *Incorporate energy efficiency into the design and location of development projects.*
- Objective 13.4** *Incorporate energy efficiency into new buildings and encourage existing buildings to be retrofitted where feasible.*
- Objective 14.2** *Encourage, where appropriate, the use of solar and other renewable resources for residential, commercial, industrial, and public building applications.*
- Objective 56.2** *Ensure the aesthetic placement of utility lines, including sewer pipelines*

The following General Plan policies apply to the Project:

- Policy 13.3.1** *Lots shall be oriented so structures may maximize the energy gains from solar sources and minimize energy losses where possible.*
- Policy 13.3.3** *Plans for major projects shall address opportunities for reducing energy used for transportation, including pedestrian and bicycle pathways, access to transit, and roadway design.*
- Policy 13.4.3** *Building designs which reduce demands for artificial heating cooling, ventilation, and lighting shall be encouraged.*
- Policy 17.3.4:** *The County shall require all new development to have adequate water available for fire suppression. Water availability can be provided from a conventional water system; from an approved alternative water system if within 300 feet of a habitable structure; by the fire fighting equipment of the fire district within which the property is located; or by an individual water storage facility- -water tank, swimming pool, etc. - -on the property itself. The fire and planning departments shall determine the adequacy and location of individual water storage to be provided.*
- Policy 53.1.4** *New development shall be required to connect to existing water service providers that are public utilities, where feasible.*
- Policy 56.1.1** *The County shall, when planning development, provide for utility corridor rights-of-way.*

Monterey County Ordinance Title 15, Chapter 15.20, Section 15.20.040 A&B: *If within 200 ft of an existing sewer line, new facilities are required to connect with this line.*

Monterey County Water Conservation Regulations. Ordinance No. 3932 of the County of Monterey Water Resources Agency pertains to mandatory water conservation regulations for new construction and requires, among other things, the following.

- All toilets shall be ultra-low flush toilets with a maximum tank size or flush capacity of 1.6 gallons, all shower heads shall have a maximum flow capacity of 2.5 gpm, and all hot water faucets that have more than 10 ft of pipe between the faucet and the hot water heater serving such faucet shall be equipped with a hot water recirculating system.
- Landscape plans shall apply xeriscape principles, including such techniques and materials as native or low water use plants and low precipitation sprinkler heads, bubblers, drip irrigation systems and timing devices.
- A notice shall be recorded on the deed for each lot stating: "All new construction shall incorporate the use of low water use plumbing fixtures and drought tolerant landscaping, in accordance with County Water Resources Agency Ordinance No. 3932." Prior to recordation of the final map, a copy of the completed notice shall be provided to the Water Resources Agency for approval.

4.13.3 Methodology

Supply, Treatment, and Distribution of Water. The assessment of potential impacts related to the water resources available to the Project at the Site were based on the review of available documents pertaining to the Ambler Park Water System and various water-related technical reports, which were listed and discussed as part of Chapter 4.7 Hydrology and Water Quality.

Wastewater Treatment. An assessment of wastewater issues is based on services required to treat the volumes of wastewater expected from the Project and whether there is sufficient capacity to treat project wastewater within the existing permit requirements for the wastewater treatment plant that would serve the Project (CUS, 2007). The capacity of CUS to treat wastewater from the Project is specified in a letter dated September 20, 2007 from CUS to Eric Phelps, Omni Resources LLP (Finegan, 2007). The wastewater assessment also is based on an evaluation of the existing 12 inch sewer line and whether it is sufficient for the volume of wastewater that is specified for the Project in addition to other approved planned future development in the area according to the County's information and the planning horizon.

Solid Waste Disposal. The assessment of potential impacts related to solid waste disposal for the Project were based on the review of available electronic documents, as well as direct communication with the Monterey Regional Waste Management District and Waste Management, Inc.

Energy. The assessment of potential impacts related to electricity and natural gas for the Project were based on energy consumption factors provided by the U.S. Department of Energy's Energy Information Administration, as commercial energy consumption factors for Monterey County specifically were not available. These factors were used as a basis for determining the amount of energy that would be consumed by the Project. Feasible methods to reduce and conserve energy are prescribed. These include, but are not limited to, automatic temperature, time switch, and lighting controls, passive solar design techniques, and photovoltaic systems.

4.13.4 Impact Significance Criteria

Criteria for determining the significance of impacts related to utilities and service systems are based upon criteria contained in Appendix G of the State CEQA Guidelines. Currently no specific quantitative significance thresholds exist for electricity or natural gas consumption. Therefore the significance of the Project's energy impacts with respect to CEQA cannot be definitively concluded.

The Project would have a significant impact on utilities and service systems if it would:

Threshold 4.13.1 Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;

Threshold 4.13.2 Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

- Threshold 4.13.3** Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Threshold 4.13.4** Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed (this topic is addressed in Chapter 4.7, Hydrology and Water Quality);
- Threshold 4.13.5** Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Threshold 4.13.6** Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Threshold 4.13.7** Comply with federal, state, and local statutes and regulations related to solid waste.

4.13.5 Project Impacts

Threshold 4.13.1 Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board

According to the Waste Discharge Requirements that were issued by CRWQCB (2007) through Order No. R3-2007-008, the CUS permitted discharge is 300,000 gallons per day (gpd) at the treatment plant. The 30-day average wastewater flow rate for CUS is designated as 220,000 gpd. Therefore, the excess capacity was designated by CUS to be 80,000 gpd (CUS, 2007) pending any other project approvals. The treatment requirements for the Project were estimated by the applicant to be 34,161 gpd (38.3 afy) (Finnegan, 2007), as approved by the County. Kleinfelder (2004), in an earlier analysis, had estimated the wastewater amount generated by the Project to be 16,962 gpd (19.0 afy). The greater estimate cited by Finnegan (2007) is based on standard County demand numbers. In either case, the Project is not expected to exceed the excess capacity of the CUS treatment facility (80,000 gpd). This capacity was available at the time a "can and would serve" letter was issued to the applicant by CUS in September 2007. If other developments also require wastewater treatment, the wastewater treatment capacity of the facility would change and would need to be reassessed by CUS.

As of September 2007, the needs of the Project would not exceed the wastewater treatment requirements of the Regional Water Quality Control Board as set forth in Order No. R3-2007-008 and so stated in a "can and will serve" Letter to the applicant from CUS dated September 20, 2007. Therefore, the Project would not result in significant impacts associated with wastewater treatment requirements of the California Regional Water Quality Control Board. Cumulative impacts of wastewater treatment demand in consideration of approved or likely to be approved projects in the CUS service area are addressed in Section 4.13.6.

Threshold 4.13.2 Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects

Water Facilities. The total occupancy of lessees for the Project would result in a water demand of approximately 13.5 AF/Y, or 12,078 gallons per day (gpd) (Finegan, 2007). Water consumption for the Project was estimated based on the area of each proposed land use multiplied by factors used by the Monterey Peninsula Water Management District, *Commercial Industrial and Government Projects*, and this calculated usage was included as part of the application for the Project (Finegan, 2007). This estimate is lower than the water demand estimate reported by Kleinfelder (2004); however, a review of both estimates determined that the estimate presented in the Finegan (2007) letter is more appropriate, as water factors developed by the Monterey Peninsula Water Management District were used for the calculations.

The theoretical maximum pumping capacities of the three Ambler Park water supply wells are 1,500 gpm or 2,418 AF/Y; however, the maximum treatment system capacity is approximately 967 AF/Y, thus this amount is likely the maximum annual production capacity for the Amber Park Water System, assuming there is sufficient groundwater to supply this production rate. The Project's water demand is 1.3 percent of the estimated production capacity of the Ambler Park Water System. In 2005, the production rate of the Ambler Park Water System was nearly 300 AF/Y, which is approximately 32 percent of the water system's estimated capacity. The Project's water supply is 4.5 percent of the annual production from 2005.

Based on this analysis, the Ambler Park Water System currently has sufficient capacity to support the addition of the Project's water demand without expansion. However, due to environmental restrictions related to the B-8 zoning overlay, as discussed under Threshold 4.13.4, Cal-Am would not be permitted by Monterey County to meet the water demand of the Project. As such, serving the Project would therefore require construction of new water supply facilities to bring in water from a new source outside the restrictions of the B-8 ordinance to meet the Project's proposed water demand. Alternate water supplies or new entitlements may not be available for the Project, and if available, their use also could entail significant impacts.

The water demand for the Project would not require the construction or expansion of the existing Ambler Park water treatment plant. An addition of 13.5 AF/Y to the water treatment plant is only 1.4 percent of the total flow-through capacity of the treatment plant and currently the treatment plant is only at approximately 30% of the total treatment capacity. Therefore, treating the additional water supply required for the Project would not require expansion of the facilities, and a less than significant impact would result.

Wastewater Facilities. The Project is not expected to exceed the capacity of the existing CUS wastewater treatment facility of 300,000 gpd (refer to discussion in Threshold 4.13.1 above).

Furthermore, as discussed in Section 4.13.1, there is currently a 12-inch sewer pipeline, built in 1975, that serves the Project area (Finegan, 2007). The capacity of this pipeline has been determined to be 850,000 gpd. This capacity was calculated using the following assumptions (CSPWA, 1999):

1. That the 12-in pipeline is installed at a minimum slope of 0.002 (the required minimum slope for a liquid flow velocity of 2 ft per second).
2. A required flow velocity of 2 ft per second when the pipeline is full.
3. A Manning roughness coefficient (n)¹ of 0.013.

Flow data indicates the sewer pipeline carries an average of 214,000 gpd (CUS 2007). Estimated wastewater volume from full build-out of the Project is 34,161 gpd. Thus the total amount of wastewater to be carried by the 12-inch pipeline if the Project is implemented would be 248,161 gpd; this is well within the pipeline capacity of 850,000 gpd. Therefore, the existing 12-inch sewer line would have the capacity to serve the Project in addition to its existing service area, as well as the capacity to serve other development that may occur in the service area in the near future.

The Project could be serviced by both the existing wastewater treatment facility and the existing infrastructure used to carry wastewater to the existing wastewater treatment facility. Therefore, implementation of the Project would not require the construction of a new wastewater treatment facility or expansion of the existing facility and/or pipeline and no significant impacts would occur to these facilities.

Threshold 4.13.3 Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects

Refer to discussion under Threshold 4.7.5 in Chapter 4.7, Hydrology and Water Quality.

Threshold 4.13.4 Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed

Refer to discussion under Threshold 4.7.2 in Chapter 4.7, Hydrology and Water Quality.

Threshold 4.13.5 Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments

As addressed in threshold 4.13.1, the Project would not exceed the capacity of the existing CUS treatment facilities. The capacity of the CUS facilities was estimated in September 2007 to have 86,000 gpd excess, and therefore an excess of approximately 51,539 gpd beyond what is estimated to be required for the Project (based on 34,161 gpd wastewater generation by the Project). As discussed in Threshold 4.13.2, the CUS wastewater facilities would be able to serve its existing commitments in the service area as well as those of the Project. As of September 2007, the needs of the Project would not exceed the wastewater treatment requirements of the Regional Water Quality Control Board as set

¹ The Manning roughness coefficient is a friction factor used for calculating flow rates. For example, the Manning roughness coefficient was used to calculate the minimum slope for the 12-inch pipeline serving the Site based on a desired flow velocity of two feet per second when the pipe was flowing full.

forth in Order No. R3-2007-008 and so stated in a “can and would serve” letter to the applicant from CUS dated September 20, 2007. However, any changes to the demand from additional or new development would require CUS to reassess the available treatment capacity. However, at this time, the capacity of the treatment facility is as stated. Therefore, implementation of the Project would not result in significant impacts associated with the wastewater treatment provider.

Threshold 4.13.6 Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs

The Project is within the service area of the Monterey Regional Waste Management District. In accordance with the Monterey Regional Waste Management District's Landfill Site Master Plan (www.mrwmd.org), the remaining solid waste capacity of the Marina Sanitary Landfill is approximately 40 million tons or 74 million cubic yards. The remaining landfill site life assumes a maximum site elevation of 284 ft amsl, the use of alternate daily cover (ADC), and an airspace utilization density of 1,080 pounds per cubic yard. The use of tarps for landfill cover and the export of surplus fills create additional airspace and increase the waste capacity of the landfill. Based on the currently permitted waste capacity, and if the District continues to achieve the "AB 939" State-mandated 50 percent recycling rate, the landfill would continue to serve the present service area through the year 2107 (www.mrwmd.org).

Monterey Regional Waste Management District does not provide solid waste generation rates for commercial developments due to the diversity of businesses within commercial retail centers and their individual waste generation (www.mrwmd.org) so the total amount of solid waste that the Project is likely to generate was not able to be determined. Completion of a waste assessment for the Project would determine the estimated quantity of solid waste generated, the ratio of recyclable waste verses solid waste generated, the quantity of recycling and trash receptacles needed, estimated receptacle pick-ups, etc. (Smith, Elaina. February 22, 2008. Personal communication). Regardless, Waste Management, Inc. is required to service all projects which are located within each franchise area despite the projects size or quantity of solid waste generated (Smith, Elaina. February 22, 2008. Personal communication). Additionally, because the Project is consistent with general plan zoning and land use, the Project is within the regional plans which Monterey Regional Waste Management District’s facilities are designed to serve. Because the Waste Management Company is required to service all projects located within each franchise area despite the projects size or quantity of solid waste generated, the Project would not result in significant impacts associated with solid-waste.

Threshold 4.13.7 Comply with federal, state, and local statutes and regulations related to solid waste

There are no current federal or local statutes or regulations that establish thresholds associated with the generation of solid waste. The California Integrated Waste Management Act of 1989 (AB 939) pertains to activities associated with project construction and demolition but not to solid waste (i.e., domestic trash) generated by commercial developments. The County is currently developing an ordinance to address project-related thresholds associated with solid waste generated by project construction and demolition but the ordinance has not yet been adopted. Therefore, the Project complies with existing federal, State, and local statutes and regulations related to solid waste.

Waste Management, Inc. is required to service all projects which are located within each franchise area despite the projects size or quantity of solid waste generated (Smith, Elaina. February 22, 2008. Personal communication). Waste Management, Inc. is responsible for contracting landfill sites through the Monterey Regional Waste Management District to dispose of the solid waste. The Project would not affect the ability of the Castroville franchise of Waste management, Inc. to provide solid waste services to the County, therefore, the Project's impacts associated with solid waste would be less than significant.

Energy. The established consumption factor of 15 kilowatt-hours (kWh)/square foot from the Energy Information Administration was used to calculate the annual electrical demand associated with development of the proposed 126,523 square foot commercial project. It was estimated that the Project would consume approximately 1,897,980 kWh per year of electricity or approximately 6,453 million BTUs.

The established consumption factor of 43 cubic feet (ft³)/square foot from the Energy Information Administration was used to calculate the annual natural gas demand associated with development of the 126,523 square foot Project. It was estimated that the Project would consume approximately 5,440,489 (ft³) per year of natural gas or approximately 5,440 million BTUs

The Project involves the conversion of an undeveloped site with no current demands for electricity or natural gas to a proposed commercial center with potentially high energy demands. Although there are no CEQA significance criteria that address specific consumption limits of electricity and natural gas, the differences in energy demands from an undeveloped to a developed site are substantial. Nevertheless, there are sufficient energy resources and systems in place to serve the projects energy demands. Therefore, the potential consumption of electricity and natural gas is potentially significant when compared to existing conditions but less than significant with respect to the existing energy supply. Additionally, because the Project is consistent with the existing general plan zoning and land use, it would have been a considered as a part of PG&E's long-term service needs; therefore the potential project-related impacts associated with the consumption of electricity and natural gas would be less than significant.

In order to reduce the Project's energy demand with regards to the consumption of electricity and natural gas, as well as other natural resources, the use of energy efficient design practices, systems, and appliances, as described in Mitigation Measures 4.13.1 through 4.13.5 would be required. In addition, the achievement of a Leadership in Energy and Environmental Design (LEED) certification is recommended by County staff, as described in Mitigation Measure 4.13.6.

4.13.6 Cumulative Impacts

Supply, Treatment, and Distribution of Water. Assessing the cumulative impacts associated with treatment and distribution of water to the Project (refer to Chapter 4.7 Hydrology and Water Quality for a discussion of water supply) is based on whether or not the infrastructure of the Ambler Park Water System is capable of treating and delivering water to the Project in conjunction with other existing and reasonably foreseeable projects, which are listed in Table 4.A.

The theoretical maximum production capacity of the Ambler Park Water System is approximately 1,500 gpm or 2,418 AF/Y. However, the current maximum treatment capacity is approximately 967 AF/Y, so this figure is being used as the maximum annual production capacity for the Ambler Park Water System, assuming there is sufficient groundwater to supply this production rate (refer to Chapter 4.7 Hydrology and Water Quality for a discussion of groundwater supply).

Annual production rates for the Ambler Park Water System were approximately 250 AF/Y in 2001 and nearly 300 AF/Y in 2005 (Geosyntec, 2007) projected that production rates for the Ambler Park Water System would steadily increase at a rate of 10 AF/Y. Given that the current maximum treatment capacity for the Ambler Park Water System is 967 AF/Y, it appears as if the Ambler Park Water System has sufficient infrastructural capacity to provide water to the Project in addition to existing and future projects within the Ambler Park Water System Service Area. Cumulative impacts associated with infrastructure to provide water to the Project would be less than significant.

Wastewater. The study area for cumulative impact assessment for wastewater is that of the CUS service area. The CUS service area includes the Site, which is part of an area that was annexed by CUS in 1987, and extends south from the intersection of Corral de Tierra Road and SR-68 and east of Corral de Tierra Road to Calera Canyon Road. The older part of the service area includes the Toro Hills area that is north of the Site and on the west side of SR-68, which continues to encompass a narrow area along the highway to the Salinas River (Adcock, 2008). Based on the current permit Order, CUS permitted discharge is 300,000 gpd (CRWQCB, 2007; CUS, 2007). The monthly average flow rate for CUS in February 2007, at the time the Order was rendered effective, was 220,000 gpd; therefore the excess capacity was 80,000 gpd. The treatment requirements for the Project are estimated to be 34,161 gpd (Finegan, 2007), therefore, in addition to the Project the CUS would be able to accommodate an approximate additional 45,800 gpd of wastewater from other facilities that are planned for the service area.

One new residential development, the Oaks Subdivision, has been approved within the CUS service area, and two additional residential developments, the Harper Canyon Subdivision and the Ferrini Ranch Subdivision, are being proposed within the CUS service area. The wastewater discharge requirements estimated for each of these developments are 2,700 gpd, 5,200 gpd, and 63,300 gpd respectively. As shown in Table 4.13.A, if all of the proposed projects, including the subject Project, are approved, demand for wastewater treatment would exceed CUS's permitted discharge of 300,000 gpd by about 10%. This would be considered a significant adverse cumulative impact. In this case, CUS would need to expand the wastewater treatment facility. This would need to be accomplished prior to occupancy of the projects if they were to all develop simultaneously. CUS would be responsible for completing this expansion. This potentially significant environmental impact can be mitigated to a less than significant level by implementing Mitigation Measure 4.13.7 which would require the applicant to coordinate their construction schedule with CUS to insure that adequate capacity is available to provide for the Project.

Table 4.13.A: California Utilities Service Estimated Wastewater Flow

	Gallons per Day (GPD)
CUS Existing Connections	220,000
Oaks Subdivision (Approved)	2,700
Harper Canyon Subdivision (Proposed)	5,200
Ferrini Ranch Subdivision (Proposed)	63,300
Corral De Tierra Neighborhood Retail Village (Subject Project)	34,161
Approximate Total	325,361

Solid Waste Disposal. The Site is zoned commercial and therefore a commercial retail development was anticipated for the Site in County of Monterey’s long term assessment of solid waste disposal needs. Furthermore, Marina Sanitary Landfill has approximately 40 million tons of solid waste capacity and would adequately be able to see the Project’s long-term needs. Therefore, the Project’s contributions to the cumulative impact on solid waste disposal in the Toro Area of the County would be less than significant.

Energy. The potential development of the Project would increase the consumption of electricity and natural gas at the Site compared to existing conditions. When considered in conjunction with the cumulative scenario detailed in Table 4.A, the Project could potentially cause a considerable increase in the cumulative consumption of electricity and natural gas. The energy supply and utility service for the Project and future planned development is anticipated to be available from the regional service provider. Therefore, the Project’s contribution to cumulative energy demand would be less than significant. Nevertheless, the incremental additional consumption of energy associated with the Project may cause impacts to life sustaining resources such as air and water (refer to Chapters 4.2, Air Quality and 4.14 Global Climate Change). As such, any reduction in the use of electricity and natural gas would reduce impacts associated with greenhouse gas emissions and the consumption of non-renewable resources. The Project’s contribution to cumulative energy-related impacts would be reduced through implementation of Mitigation Measures 4.13.1 through 4.13.6.

4.13.7 Level of Significance Prior to Mitigation

Supply, Treatment, and Distribution of Water. Impacts from the Project on water supply (Thresholds 4.13.2 and 4.13.4) would be significant. Refer to discussion in Chapter 4.7, Hydrology and Water Quality. The Project is not expected to require additional water treatment or distribution infrastructure to serve the proposed commercial uses.

Wastewater. Based on the current permitted wastewater capacity of the CUS and the estimated treatment requirements of the Project, there would be no significant impacts upon CUS wastewater facilities or the ability of CUS to meet wastewater treatment demands of current discharges and those of the Project. According to Monterey County General Plan, Policy 53.1.4, the sewer facilities of the Project would connect to the existing 12-inch line adjacent to the Site. Moreover, sewage disposal

would need to follow the requirements to be connected to a County-approved sanitary septic or sewage treatment facility (Monterey County Planning Ordinance Title 15, Public Services, Chapter 15.20 Sewage Disposal). Therefore, no mitigation measures are required.

Solid Waste Disposal. There would be no significant project-related impacts associated with solid-waste disposal.

Energy. Although there are no specific CEQA significance criteria that address consumption limits of electricity and natural gas, the Project would cause a considerable increase in the consumption of electricity and natural gas on an undeveloped site with no associated energy demand. Implementation of measures to reduce energy consumption would minimize the Project's energy use and subsequent GHG emissions (Mitigation Measures 4.13.1 through 4.13.6).

4.13.8 Mitigation Measures and Standard Conditions of Approval

The following mitigation measures are prescribed to reduce the Project's consumption of electricity and natural gas:

Mitigation Measure 4.13.1 **Passive Solar Design Elements.** Prior to final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a building plan which incorporates the following passive solar design elements to the extent feasible:

- Building orientation that maximizes energy gain from the sun, shade, and wind.
- Thermal mass materials, such as tile or brick, used in flooring or walls, especially south-facing walls, to store the sun's heat during the day and release it back into the building at night or when the temperature drops.
- Insulation of both the ceilings and walls.
- Passive solar design techniques such as large south and west-facing windows with proper window overhangs and/or reflective window film to improve heating and cooling of the building naturally, reducing the need for artificial heating or cooling mechanisms.
- A daylighting system to effectively integrate daylight with electrical lighting systems to reduce electricity consumption when sufficient daylight is present within the building.

Mitigation Measure 4.13.2 **Energy Efficient Building Equipment and Design Elements.** Prior to the final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a building plan which incorporates the

following energy efficient building equipment and design elements to the extent feasible:

- Water heating equipment which includes integral automatic temperature controls and circulating service water system controls such as geothermal heat pumps - Geothermal heat pumps provide heating, cooling, and hot water, and are generally more efficient and less expensive to operate and maintain than conventional systems.
- The installation of lighting systems with automatic time switch controls, occupant-sensing devices such as motion detectors, automatic daylighting controls, dimmers, indoor photosensors, and efficient security, street, and parking lot lighting (e.g. high pressure low sodium fixtures).
- The use of alternative energy sources such as photovoltaic (i.e., solar electric) systems on all building rooftops to reduce the Project's electrical energy consumption.
- The use of alternative building materials that contain post-consumer recycled materials to the greatest extent possible.

Mitigation Measure 4.13.3

Energy Management Design Systems. Prior to final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a building plan which incorporates energy management systems to control space conditioning or heating, ventilating, or air conditioning (HVAC) systems including operating hours, set point, scheduling of chillers, etc.

Mitigation Measure 4.13.4

Landscape Design Plan. Prior to final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a landscape design plan which integrates heat island minimization, xeriscape principals, and native drought-tolerant plants.

Mitigation Measure 4.13.5

Alternative Transportation Design. Prior to final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a site plan which increases the potential for the use of alternative transportation to access the Site. The plan shall include a transit stop on SR-68 as recommended and approved by Caltrans and Monterey-Salinas Transit, and an improved pedestrian area connecting the transit stop to the shopping village (refer to mitigation measures in Section 4.1.8 of the EIR).

Mitigation Measure 4.13.6 **LEED Compliance.** As defined by the LEED Program of the United States Green Building Council, the project design shall comply with the requirements that are consistent with a “LEED Certified” designation. As part of the application for building permits, the applicant shall provide evidence to the County of Monterey RMA-Planning Department that the Project has received a LEED Certified designation or evidence that the Project design includes sufficient elements that demonstrate consistency with the LEED Certified designation.

Mitigation Measure 4.13.7 **Capacity of Wastewater Treatment Facility.** Prior to approval of any building permits, the applicant shall verify that there is sufficient capacity in the California Utilities Service, Inc. (CUS) wastewater treatment facility to address the wastewater needs of the Project. If the CUS facility has exceeded 60% of its existing capacity or the Project would cause the facility to exceed its permitted capacity, then the County of Monterey would not issue a building permit until such time as the CUS has attained a revised permit from the Regional Water Quality Control Board.

4.13.9 Level of Significance after Mitigation

Supply, Treatment, and Distribution of Water. The Project would have no significant impacts related to the treatment or the distribution of water. The Project would have a significant unavoidable impact on the supply of water.

Wastewater. The Project would have no significant impacts related to wastewater conveyance and treatment.

Solid Waste Disposal. The Project would have no significant impacts related to solid waste.

Energy. Implementation of Mitigation Measures 4.13.1 through 4.13.6 would reduce the Project’s net energy consumption and would therefore reduce the Project’s associated energy impacts.

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4.14 GLOBAL CLIMATE CHANGE

This section includes a discussion of global climate change, its causes and the contribution of human activities, as well as a summary of existing greenhouse gas (GHG) emissions. The section describes the criteria for determining the significance of climate change impacts, and estimates the likely GHG emissions that would result from construction activities, vehicular traffic, energy consumption and other emission sources. Where appropriate, mitigation measures are recommended to reduce project-related impacts to a less than significant level.

4.14.1 Existing Environmental Setting

Global climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other significant changes in climate (such as precipitation or wind) that last for an extended period of time. The term "global climate change" is often used interchangeably with the term "global warming," but "global climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures. Global surface temperatures have risen by $1.33^{\circ}\text{F} \pm 0.32^{\circ}\text{F}$ over the last 100 years (1906 to 2005). The rate of warming over the last 50 years is almost double that over the last 100 years.¹ The prevailing scientific opinion on climate change is that most of the warming observed over the last 50 years is attributable to human activities. The increased amounts of carbon dioxide (CO₂) and other GHGs are the primary causes of the human-induced component of warming. GHGs are released by the burning of fossil fuels, land clearing, agriculture, and other activities, and lead to an increase in the greenhouse effect.²

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:³

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur Hexafluoride (SF₆)

¹ Intergovernmental Panel on Climate Change (IPCC), 2007. *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the IPCC.*

² The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse lets heat from sunlight in and reduce the amount of heat that escapes, greenhouse gases like carbon dioxide, methane, and nitrous oxide in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, although an excess of greenhouse gas results in global warming, the *naturally occurring* greenhouse effect is necessary to keep our planet at a comfortable temperature.

³ The greenhouse gases listed are consistent with the definition in Assembly Bill (AB) 32 (Government Code 38505), as discussed later in this section.

Over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally-occurring GHGs such as CO₂, methane, and N₂O, some gases, like HFCs, PFCs, and SF₆ are completely new to the atmosphere.

Certain other gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation. For the purposes of this EIR, the term “GHGs” will refer collectively to the gases listed above only.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere (“atmospheric lifetime”). The GWP of each gas is measured relative to carbon dioxide, the most abundant GHG. The definition of GWP for a particular greenhouse gas is the ratio of heat trapped by one unit mass of the greenhouse gas to the ratio of heat trapped by one unit mass of CO₂ over a specified time period. GHG emissions are typically measured in terms of pounds or tons of “CO₂ equivalents” (CO₂eq). Table 4.14.A shows the GWPs for each type of GHG. For example, sulfur hexafluoride is 22,800 times more potent at contributing to global warming than carbon dioxide. The following discussion summarizes the characteristics of the six primary GHGs.

Table 4.14.A: Global Warming Potential of Greenhouse Gases

Gas	Atmospheric Lifetime (Years)	Global Warming Potential (100-year Time Horizon)
Carbon Dioxide	50-200	1
Methane	12	25
Nitrous Oxide	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC: Tetrafluoromethane (CF ₄)	50,000	7,390
PFC: Hexafluoromethane (C ₂ F ₆)	10,000	12,200
Sulfur Hexafluoride (SF ₆)	3,200	22,800

Source: IPCC, 2007. *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the IPCC.

Carbon Dioxide (CO₂). In the atmosphere, carbon generally exists in its oxidized form, as CO₂. Natural sources of CO₂ include the respiration (breathing) of humans, animals and plants, volcanic outgassing, decomposition of organic matter and evaporation from the oceans. Human-caused sources of CO₂ include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. The Earth maintains a natural carbon balance and when concentrations of CO₂ are upset, the system gradually returns to its natural state through the natural processes. Natural changes to the carbon cycle work slowly, especially compared to the rapid rate at which humans are adding CO₂ to the atmosphere. Natural removal processes, such as photosynthesis by land- and ocean-

dwelling plant species, cannot keep pace with this extra input of man-made CO₂, and consequently, the gas is building up in the atmosphere. The concentration of CO₂ in the atmosphere has risen about 30 percent since the late 1800s.¹

In 2002, CO₂ emissions from fossil fuel combustion accounted for approximately 98 percent of man-made CO₂ emissions and approximately 84 percent of California's overall GHG emissions (CO₂eq). The transportation sector accounted for California's largest portion of CO₂ emissions, with gasoline consumption making up the greatest portion of these emissions. Electricity generation was California's second largest category of GHG emissions.

Methane (CH₄). Methane is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites, and oceans. Anthropogenic sources include rice cultivation, livestock, landfills and waste treatment, biomass burning, and fossil fuel combustion (burning of coal, oil, natural gas, etc.). Decomposition occurring in landfills accounts for the majority of human-generated CH₄ emissions in California, followed by enteric fermentation (emissions from the digestive processes of livestock).² Agricultural processes such as manure management and rice cultivation are also significant sources of manmade CH₄ in California. Methane accounted for approximately 6 percent of gross climate change emissions (CO₂eq) in California in 2002.³ It is estimated that over 60 percent of global methane emissions are related to human-related activities.⁴ As with CO₂, the major removal process of atmospheric methane – a chemical breakdown in the atmosphere – cannot keep pace with source emissions, and methane concentrations in the atmosphere are increasing.

Nitrous Oxide (N₂O). Nitrous oxide is produced naturally by a wide variety of biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. Nitrous oxide is a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion emit N₂O, and the quantity emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human-generated N₂O emissions in California. Nitrous oxide emissions accounted for nearly 7 percent of man-made GHG emissions (CO₂eq) in California in 2002.

¹ California Environmental Protection Agency. 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. March.

² California Air Resources Board, Greenhouse Gas Inventory Data - 1990 to 2004. <http://www.arb.ca.gov/cc/inventory/data/data.htm>. Accessed November 2008.

³ Ibid.

⁴ IPCC, 2007. *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the IPCC.

Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulfur Hexafluoride (SF₆). HFCs are primarily used as substitutes for ozone-depleting substances regulated under the Montreal Protocol.¹ PFCs and SF₆ are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no aluminum or magnesium production in California; however, the rapid growth in the semiconductor industry, which is active in California, leads to greater use of PFCs. HFCs, PFCs, and SF₆ accounted for about 3.5 percent of man-made GHG emissions (CO₂eq) in California in 2002.²

Temperature Increase. The latest projections, based on state-of-the art climate models, indicate that temperatures in California are expected to rise 3 to 10.5°F by the end of the century.³ Because GHGs persist for a long time in the atmosphere (refer to Table 4-14.A), accumulate over time, and are generally well-mixed, their impact on the atmosphere cannot be tied to a specific point of emission.

Climate change refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer). Climate change may result from:

- Natural factors, such as changes in the sun's intensity or slow changes in the Earth's orbit around the sun;
- Natural processes within the climate system (e.g., changes in ocean circulation and reduction in sunlight from the addition of GHGs and other gases to the atmosphere from volcanic eruptions); and/or
- Human activities that change the atmosphere's composition (e.g., through burning fossil fuels) and the land surface (e.g., from deforestation, reforestation, urbanization, and desertification).

The primary effect of global climate change has been a rise in the average global tropospheric⁴ temperature of 0.36°F per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling shows that further warming could occur, which would induce additional changes in the global climate system during the current century. Changes to the global climate system, ecosystems, and the environment of California could include, but are not limited to:

- The loss of Arctic sea ice and mountain snow pack, resulting in higher sea levels and higher sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures;
- Rise in global average sea level primarily due to thermal expansion and melting of glaciers and ice caps in the Greenland and Antarctic ice sheets;

¹ The Montreal Protocol is an international treaty that was approved on January 1, 1989, and was designated to protect the ozone layer by phasing out the production of several groups of halogenated hydrocarbons believed to be responsible for ozone depletion.

² California Environmental Protection Agency. 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. March.

³ California Climate Change Center, 2006. *Our Changing Climate. Assessing the Risks to California*. July.

⁴ The troposphere is the zone of the atmosphere characterized by water vapor, weather, winds, and decreasing temperature with increasing altitude.

- Changes in weather that include widespread changes in precipitation, ocean salinity, and wind patterns, and more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones;
- Decline of the Sierra Nevada snowpack, which accounts for a significant amount of the surface water storage in California, by 70 percent to as much as 90 percent over the next 100 years;
- Increase in the number of days conducive to ozone formation by 25 to 85 percent (depending on the future temperature scenario) in high ozone areas of Los Angeles and the San Joaquin Valley by the end of the 21st century; and
- High potential for erosion of California's coastlines and seawater intrusion into the Delta and levee systems due to the rise in sea level.

Emissions Sources and Inventories

An emissions inventory that identifies and quantifies the primary human-generated sources and sinks of GHGs is a well-recognized and useful tool for addressing climate change. This section summarizes the latest information on global, United States, California, and local GHG emission inventories.

Global Emissions

Worldwide emissions of GHGs in 2004 were 27 billion metric tons of CO₂eq per year.¹ Global estimates are based on country inventories developed as part of programs of the United Nations Framework Convention on Climate Change (UNFCCC).

U.S. Emissions

In 2004, the United States emitted about 7.3 billion metric tons of CO₂eq or about 25 tons per year per person. Of the four major sectors nationwide – residential, commercial, industrial and transportation – transportation accounts for the highest amount of GHG emissions (approximately 35 to 40 percent); these emissions are entirely generated from direct fossil fuel combustion. Between 1990 and 2006, total U.S. GHG emissions rose approximately 14.7 percent.²

State of California Emissions

According to California Air Resources Board (ARB) emission inventory estimates, California emitted approximately 480 million metric tons³ of CO₂eq emissions in 2004.⁴ This large number is due primarily to the sheer size of California compared to other States. By contrast, California has the

¹ Combined total of Annex I and Non-Annex I Country CO₂eq emissions. United Nations Framework Convention on Climate Change (UNFCCC), 2007. *Greenhouse Gas Inventory Data*. Information available at http://unfccc.int/ghg_data/ghg_data_unfccc/time_series_annex_i/items/3814.php and http://maindb.unfccc.int/library/view_pdf.pl?url=http://unfccc.int/resource/docs/2005/sbi/eng/18a02.pdf.

² U.S. Environmental Protection Agency (EPA). 2008. *The U.S. Greenhouse Gas Emissions and Sinks: Fast Facts*. http://www.epa.gov/climatechange/emissions/downloads/2008_GHG_Fast_Facts.pdf.

³ A metric ton is equivalent to approximately 1.1 tons.

⁴ California Air Resources Board, *Greenhouse Gas Inventory Data - 1990 to 2004*. <http://www.arb.ca.gov/cc/inventory/data/data.htm>. Accessed November 2008.

fourth lowest per-capita carbon dioxide emission rate from fossil fuel combustion in the country, due to the success of its energy efficiency and renewable energy programs and commitments that have lowered the State's GHG emissions rate of growth by more than half of what it would have been otherwise.¹

The California Environmental Protection Agency (EPA) Climate Action Team stated in its March 2006 report that the composition of gross climate change pollutant emissions in California in 2002 (expressed in terms of CO₂eq) was as follows:

- Carbon dioxide (CO₂) accounted for 83.3 percent;
- Methane (CH₄) accounted for 6.4 percent;
- Nitrous oxide (N₂O) accounted for 6.8 percent; and
- Fluorinated gases (HFCs, PFC, and SF₆) accounted for 3.5 percent.²

The ARB estimates that transportation is the source of approximately 38 percent of the State's GHG emissions in 2004, followed by electricity generation (both in-State and out-of-State) at 23 percent, and industrial sources at 20 percent. The remaining sources of GHG emissions are residential and commercial activities at 9 percent, agriculture at 6 percent, high global warming potential gases at 3 percent, and recycling and waste at one percent.³

ARB is responsible for developing the California Greenhouse Gas Emission Inventory. This inventory estimates the amount of GHGs emitted to and removed from the atmosphere by human activities within the State of California and supports the AB 32 Climate Change Program. ARB's current GHG emission inventory covers the years 1990-2004 and is based on fuel use, equipment activity, industrial processes, and other relevant data (e.g., housing, landfill activity, agricultural lands). The emission inventory estimates are based on the actual amount of all fuels combusted in the State, which accounts for over 85 percent of the GHG emissions within California.

ARB staff has projected statewide unregulated GHG emissions for the year 2020, which represent the emissions that would be expected to occur in the absence of any GHG reduction actions, would be 596 million metric tons (MMT) of CO₂eq. GHG emissions from the transportation and electricity sectors as a whole are expected to increase, but remain at approximately 38 percent and 23 percent of total CO₂eq emissions, respectively. The industrial sector consists of large stationary sources of GHG emissions and the percentage of the total 2020 emissions is projected to be 17 percent of total CO₂eq emissions. The remaining sources of GHG emissions in 2020 are high global warming potential gases at 8 percent, residential and commercial activities at 8 percent, agriculture at 5 percent, and recycling and waste at one percent.⁴

¹ California Energy Commission (CEC), 2007. Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004 - Final Staff Report, publication # CEC-600-2006-013-SF, Sacramento, CA, December 22, 2006; and January 23, 2007 update to that report.

² California Environmental Protection Agency. 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. March.

³ California Air Resources Board (ARB), 2008. <http://www.climatechange.ca.gov/inventory/index.html>. September.

⁴ California Air Resources Board (ARB), 2008. <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>. September.

County of Monterey Emissions.

The County of Monterey is in the process of updating the 1982 General Plan. The Draft EIR for the 2007 General Plan included an estimate of existing and future GHG emissions in the County. Table 4.14.B shows the 2006 estimates of GHG emissions from residential, commercial, industrial, institutional and agricultural uses in the County. GHG emissions under business-as-usual conditions are projected to increase to 1,538,853 metric tons of CO₂eq in 2020.

Table 4.14.B: County of Monterey 2006 GHG Emissions

Category	GHG Emissions (CO ₂ eq metric tons)	Percentage of Total
Vehicle Emissions	647,175	46
Natural Gas	190,848	14
Electricity Consumption	209,103	15
Industrial Processes	201,290	14
Landfill Emissions	32,829	2
Agricultural Equipment Fuel Use	113,159	8
Total	1,394,404	100

Source: ICF Jones & Stokes, 2008. 2007 Monterey County General Plan Draft Environmental Impact Report. September.

4.14.2 Regulatory Setting

The regulatory framework and other governmental activities addressing GHG emissions and global climate change are discussed in this section.

Federal Regulations

There are no adopted federal regulations for GHG emissions. In February 2002, the United States government announced a comprehensive strategy to reduce the GHG intensity¹ of the American economy by 18 percent over the 10-year period from 2002 to 2012. This strategy has three basic components: (1) slowing the growth of emissions, (2) strengthening science, technology and institutions, and (3) enhancing international cooperation.²

To meet this goal, the federal multiagency Climate Change Science Program (CCSP) was established to investigate natural and human-induced changes in the Earth's global environmental system; to monitor, understand, and predict global change; and to provide a sound scientific basis for national and international decision-making. The federal government established the multi-agency Climate Change Technology Program (CCTP) to accelerate the development and deployment of key technologies which offer great promise to reduce GHG emissions. The CCTP works closely with CCSP to make further progress in understanding and addressing global climate change. The U.S.

¹ GHG intensity measures the ratio of GHG emissions to economic output.

² Environmental Protection Agency. 2008. Climate Change: Basic Information. www.epa.gov/climatechange/basicinfo.html.

EPA's primary role in CCSP is evaluating the potential consequences of climate variability and the effects on air quality, water quality, ecosystems, and human health in the United States.

Currently there are no adopted federal regulations to control global climate change. However, recent court cases may change the voluntary approach to address global climate change and greenhouse gas emissions. On April 2, 2007, the United States Supreme Court ruled that the EPA has the authority to regulate CO₂ emissions under the federal Clean Air Act (CAA).

Over a decade ago, most countries joined an international treaty, the UNFCCC, to begin to consider what can be done to reduce global warming and to cope with the physical and socioeconomic effects of climate change. More recently, a number of nations have ratified an amendment to the treaty: the Kyoto Protocol, which has a more powerful effect on its signatories. Because the Kyoto Protocol will affect virtually all major sectors of the economy, it is considered to be the most far-reaching agreement on the environment and sustainable development ever adopted. Most of the world's countries eventually agreed to the Protocol, but some nations (including the United States) chose not to ratify it.

As of July 2008, 182 countries have ratified the Kyoto Protocol. Participating nations are separated into Annex 1 countries (i.e., industrialized nations) and Non-Annex 1 countries (i.e., developing nations) that have different requirements for GHG reductions. The goal of the Protocol is to achieve overall emissions reduction targets for six GHGs by 2012. The six GHGs regulated under the Protocol are CO₂, CH₄, N₂O, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons. Each nation must reduce GHG emissions by a certain percentage below 1990 levels (e.g., 8 percent reduction for the European Union, 6 percent reduction for Japan). The average reduction target for nations participating in the Kyoto Protocol is approximately 5 percent below 1990 levels.

State Regulations

In 1967, the California Legislature passed the Mulford-Carrell Act, which combined two Department of Health bureaus, the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board, to establish the ARB. Since its formation, the ARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems.

In a response to the transportation sector's significant contribution to California's CO₂ emissions, Assembly Bill 1493 (AB 1493, Pavley) was enacted on July 22, 2002. AB 1493 requires ARB to set GHG emission standards for passenger vehicles and light duty trucks (and other vehicles whose primary use is noncommercial personal transportation in the State) manufactured in 2009 and all subsequent model years. In setting these standards, the ARB considered cost effectiveness, technological feasibility, and economic impacts. ARB adopted the standards in September 2004. When fully phased-in, the near-term (2009 to 2012) standards would result in a reduction in GHG emissions of approximately 22 percent compared to the emissions from the 2002 fleet, while the mid-term (2013 to 2016) standards would result in a reduction of approximately 30 percent. To set its own GHG emissions limits on motor vehicles, California must receive a waiver from the EPA. However, in December 2007, the EPA denied the request from California for the waiver. In January 2008, the California Attorney General filed a petition for review of the EPA's decision in the Ninth Circuit Court of Appeals; however, no decision on that petition has been published as of January 2009. On January 26, 2009, the President issued an Executive Memorandum directing the EPA to reassess its

decision to deny the waiver and to initiate any appropriate action.¹ On June 30, 2009, EPA granted the waiver of Clean Air Act preemption to California for its greenhouse gas emission standards for motor vehicles beginning with the 2009 model year. Notice of the decision was published in the Federal Register on July 8, 2009.

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The Executive Order established the following goals for the State of California: GHG emissions should be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80 percent below 1990 levels by 2050.

California's major initiative for reducing GHG emissions is outlined in Assembly Bill 32 (AB 32), the "Global Warming Solutions Act," passed by the California State legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 levels by 2020. The ARB has established the level of GHG emissions in 1990 at 427 million metric tons (MMT) of CO₂eq. The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires ARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The Scoping Plan was approved by ARB on December 11, 2008, and includes measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures.² Emission reductions that are projected to result from the recommended measures in the Scoping Plan are expected to total 174 MMT of CO₂eq, which would allow California to attain the emissions goal of 427 MMT of CO₂eq by 2020. The Scoping Plan includes a range of GHG reduction actions that may include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. The Scoping Plan, even after Board approval, remains a recommendation. The measures in the Scoping Plan would not be binding until after they are adopted through the normal rulemaking process. The ARB rulemaking process includes preparation and release of each of the draft measures, public input through workshops and a public comment period, followed by an ARB Board hearing and rule adoption.

In addition to reducing GHG emissions to 1990 levels by 2020, AB 32 directed ARB and the newly created Climate Action Team (CAT)³ to identify a list of "discrete early action GHG reduction measures" that can be adopted and made enforceable by January 1, 2010. On January 18, 2007, Governor Schwarzenegger signed Executive Order S-1-07, further solidifying California's dedication to reducing GHGs by setting a new Low Carbon Fuel Standard. The Executive Order sets a target to reduce the carbon intensity of California transportation fuels by at least 10 percent by 2020 and directs ARB to consider the Low Carbon Fuel Standard as a discrete early action measure.

¹ Obama, President Barack. 2009. Memorandum for the Administrator of the Environmental Protection Agency. State of California Request for Waiver Under 42 U.S.C. 7543(b), the Clean Air Act. January 26.

² California Air Resources Board. 2008. *Climate Change Proposed Scoping Plan: a framework for change*. October.

³ CAT is a consortium of representatives from State agencies who have been charged with coordinating and implementing GHG emission reduction programs that fall outside of ARB's jurisdiction.

In June 2007 ARB approved a list of 37 early action measures, including three discrete early action measures (Low Carbon Fuel Standard, Restrictions on High Global Warming Potential Refrigerants, and Landfill Methane Capture).¹ Discrete early action measures are measures that are required to be adopted as regulations and made effective no later than January 1, 2010, the date established by Health and Safety Code (HSC) Section 38560.5. The ARB adopted additional early action measures in October 2007 that tripled the number of discrete early action measures. These measures relate to truck efficiency, port electrification, reduction of perfluorocarbons from the semiconductor industry, reduction of propellants in consumer products, proper tire inflation, and sulfur hexafluoride (SF₆) reductions from the non-electricity sector. The combination of early action measures is estimated to reduce statewide GHG emissions by nearly 16 MMT.²

To assist public agencies in the mitigation of GHG emissions or analyzing the effects of GHGs under CEQA, including the effects associated with transportation and energy consumption, Senate Bill 97 (Chapter 185, 2007) requires the Governor's Office of Planning and Research (OPR) to develop CEQA guidelines on how to minimize and mitigate a project's GHG emissions. OPR is required to prepare, develop, and transmit these guidelines on or before July 1, 2009 and the Resources Agency is required to certify and adopt them by January 1, 2010. Preliminary guidance released by OPR in June 2008 suggests that global climate change analyses in CEQA documents should be conducted for all projects that release GHGs, and that mitigation measures to reduce emissions should be incorporated into projects, to the extent feasible. On April 13, 2009, OPR submitted proposed CEQA guideline amendments to the Natural Resources Agency, which may be refined through a public process currently underway at the time this document was drafted. The proposed amendments encourage lead agencies to consider many factors in performing a CEQA analysis, but preserve the discretion granted by CEQA to lead agencies in making their own determinations.

SB 375, signed into law on October 1, 2008, is intended to enhance ARB's ability to reach AB 32 goals by directing ARB to develop regional GHG emissions reduction targets to be achieved within the automobile and light truck sectors for 2020 and 2035. ARB will work with California's 18 metropolitan planning organizations to align their regional transportation, housing, and land use plans and prepare a "Sustainable Communities Strategy" to reduce the number of vehicle miles traveled in their respective regions and demonstrate the region's ability to attain its greenhouse gas reduction targets.

Local Policies

The following 1982 General Plan objectives and policies related to the reduction of air pollutant emissions, including greenhouse gases, apply to the Project:

Objective 13.2 *Incorporate energy efficiency into land use planning.*

Objective 13.3 *Incorporate energy efficiency into the design and location of development projects.*

¹ California Air Resources Board. 2007. *Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration*. October.

² California Air Resources Board. 2007. "ARB approves tripling of early action measures required under AB 32". News Release 07-46. <http://www.arb.ca.gov/newsrel/nr102507.htm>. October 25.

- Objective 13.4** *Incorporate energy efficiency into new buildings and encourage existing buildings to be retrofitted where feasible.*
- Objective 14.2** *Encourage, where appropriate, the use of solar and other renewable resources for residential, commercial, industrial, and public building applications.*
- Objective 20.2** *Improve the air quality of Monterey County by regulating all sources of air pollutants and by adopting programs to improve the County's air quality by 1984.*
- Policy 13.3.1** *Lots shall be oriented so structures may maximize the energy gains from solar sources and minimize energy losses where possible.*
- Policy 13.3.3** *Plans for major projects shall address opportunities for reducing energy used for transportation, including pedestrian and bicycle pathways, access to transit, and roadway design.*
- Policy 13.4.3** *Building designs which reduce demands for artificial heating cooling, ventilation, and lighting shall be encouraged.*
- Policy 20.1.2** *The County should encourage the use of mass transit, bicycles and pedestrian modes of transportation as an alternative to automobiles in its land use plans.*
- Policy 20.1.4** *The County should concentrate commercial development in designated centers that may be more easily served by public transit.*
- Policy 20.1.5** *The County shall adopt a land use plan which promotes mixed land uses to reduce the need for vehicular travel.*
- Policy 20.2.1** *The County shall condition approval of all new industrial and commercial development, including major modifications as defined by the Uniform Building Code, on meeting, as a minimum, federal and state ambient air quality standards and the rules and regulations of the Monterey Bay Unified Air Pollution Control District.*
- Policy 20.2.3** *The County shall continue to support air quality monitoring and air pollution control strategies and enforcement by the Monterey Bay Unified Air Pollution Control District.*
- Policy 20.2.5** *The County shall encourage the use of the best available control technology as defined in the most current Monterey Bay Unified Air Pollution Control District rules and regulations in reducing air pollution emissions.*

4.14.3 Methodology

Development associated with the Project would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the Project's operation (as opposed to its construction). GHG emissions associated with the Project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. There would also be long-term regional emissions associated with project-related vehicular trips and other sources related to building operations. Recognizing that the field of global climate change

analysis is rapidly evolving, the approaches advocated most recently indicate that lead agencies should calculate, or estimate, emissions from construction activities, vehicular traffic, energy consumption, water conveyance and treatment, and solid waste generation and disposal.

GHG emissions generated by the Project would predominantly consist of CO₂. In comparison to criteria air pollutants, such as ozone and PM₁₀, CO₂ emissions persist in the atmosphere for a substantially longer period of time. While emissions of other GHGs, such as CH₄, are important with respect to global climate change, emission levels of other GHGs are less dependent on the land use and circulation patterns associated with the proposed land use development project than are levels of CO₂. URBEMIS 2007 was used to estimate the total project construction-related CO₂ emissions and CO₂eq emissions related to vehicle trips; CH₄ and N₂O emissions were estimated using trip generation data and EPA emission factors. Greenhouse gas emissions related to electricity consumption were calculated based on data provided by the Energy Information Administration. To determine the net GHG emissions from solid waste disposal and landfilling, the CO₂eq emissions from CH₄ generation, carbon storage (treated as negative emissions), and transportation CO₂ emissions were considered.

4.14.4 Impact Significance Criteria

Criteria for determining the significance of impacts related to greenhouse gas emissions are based upon criteria contained in Appendix G of the State CEQA Guidelines. For the purposes of this EIR, the Project would have a significant impact on greenhouse gas emissions if it would:

Threshold 4.14.1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

Threshold 4.14.2: Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

4.14.5 Project Impacts

Threshold 4.14.1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment

Bearing in mind that CEQA does not require “perfection” but instead “adequacy, completeness, and a good faith effort at full disclosure,” the analysis below is based on methodologies and information available at the time this EIR was prepared. Estimation of GHG emissions in the future does not account for all changes in technology that may reduce such emissions; therefore, the estimates are based on past performance and represent a scenario that is believed to be worse than that which is likely to be encountered (after energy-efficient technologies have been implemented).

Construction Activities. Construction activities, such as site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the Site, asphalt paving, and motor vehicles transporting the construction crew would produce combustion emissions from various sources. During construction of the Project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically

use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO₂, CH₄, and N₂O. Furthermore, CH₄ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

Project construction is anticipated to commence in 2010 and be complete by 2011. Precise construction timelines are not known, and a development timeline calculator was used to estimate the timeline of each of the individual construction phases.¹ Based on the results of the URBEMIS 2007 model, it is estimated that the total project construction emissions would be approximately 317 metric tons of CO₂. Mitigation Measure 4.14.1 would reduce GHG emissions during the construction period.

Motor Vehicle Use. Transportation associated with the Project would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips. Mobile sources (vehicle trips and associated miles traveled) would be the largest emission source of GHGs associated with the Project. Transportation is also the largest source of GHG emissions in California and represents approximately 38 percent of annual CO₂ emissions generated in the State. For land use development projects, vehicle miles traveled (VMT) and vehicle trips are the most direct indicators of GHG emissions associated with the Project. The Project would generate 3,790 metric tons of CO₂eq vehicle-related emissions per year.

Energy Use. Buildings represent 39 percent of U.S. primary energy use and 70 percent of electricity consumption.² The Project would increase the demand for electricity and natural gas; annual consumption was estimated using information from the Energy Information Administration. Natural gas use results in the emissions of two GHGs: CH₄ (the major component of natural gas) and CO₂ from the combustion of natural gas. Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. The Project would generate 1,050 metric tons of CO₂eq energy-related emissions per year.

Water Use. Water-related energy use consumes 19 percent of California's electricity every year.³ Energy use and related GHG emissions are based on water supply and conveyance, water treatment, water distribution, and wastewater treatment. Therefore, GHG emissions related to water usage are accounted for under the "Electricity Production" emission source listed below in Table 4.14.C.

Solid Waste Disposal. Solid waste generated by the Project could contribute to GHG emissions in a variety of ways. Average waste generation rates from a variety of sources are available from the California Integrated Waste Management Board (CIWMB).⁴ Landfilling and other methods of

¹ San Joaquin Valley Air Pollution Control District, 2008. Development Timeline Calculator. Available at <http://www.valleyair.org/ISR/ISRResources.htm>. While the calculator was developed for the Indirect Source Review program in the San Joaquin Valley, it is not location-specific and is applicable to projects located in other areas. Outputs are designed to be used in URBEMIS 2007.

² United States Department of Energy. 2003. *Buildings Energy Data Book*.

³ California, State of, 2005. California Energy Commission. California's Water-Energy Relationship. November.

⁴ California Integrated Waste Management Board, 2009. *Estimated Solid Waste Generation Rates*. <http://www.ciwmb.ca.gov/wastechar/wastegenrates/>.

disposal use energy for transporting and managing the waste and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH₄ from the anaerobic decomposition of organic materials. CH₄ is 25 times more potent a GHG than CO₂. However, landfill CH₄ can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere. The Project would generate 890 metric tons of CO₂eq emissions per year.

Other GHG Sources. At present, there is a federal ban on CFCs; therefore, it is assumed the Project would not generate emissions of CFCs. The Project may emit a small amount of HFC emissions from leakage and service of refrigeration and air conditioning equipment and from disposal at the end of the life of the equipment. However, the details regarding refrigerants to be used within the Site are unknown at this time. PFCs and sulfur hexafluoride are typically used in industrial applications, none of which is anticipated to be used within the Site. Therefore, it is not anticipated that the Project would contribute significant emissions of these additional GHGs.

As shown in Table 4.14.C, the Project would generate up to 5,730 metric tons of CO₂eq per year of new emissions over existing conditions. Motor vehicle emissions are the largest source of GHG emissions at approximately 66 percent of the total project emissions. Energy use, including electricity and natural gas, are the next largest category at a combined 19 percent of CO₂eq emissions. Solid waste generation and disposal is the remaining source of GHG emissions and comprise 16 percent of the total.

Table 4.14.C: Corral de Tierra Project-Related GHG Emissions

Emission Source	Emissions (Metric Tons Per Year)				Percent of Total
	CO ₂	CH ₄	N ₂ O	CO ₂ eq	
Vehicles	3,700	0.180	0.300	3,790	66
Electricity Production	890	0.0097	0.005	890	16
Natural Gas Combustion	160	0.0031	0.003	160	3
Solid Waste	--	--	--	890	16
Other Area Sources		--	--		
Total Annual Emissions	4,800	0.190	0.310	5,730	100

Source: LSA Associates, Inc., September 2009.

Note: Column totals may vary slightly due to independent rounding of input data.

-- Estimates not available for this pollutant and/or category.

The Project would result in increased GHG emissions compared to existing vacant Site use. These impacts are significant and mitigation would be required to reduce this impact to a less than significant level.

Threshold 4.14.2: Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases

The California Environmental Protection Agency Climate Action Team (CAT) and the ARB have developed several reports to achieve the Governor's GHG targets that rely on voluntary actions of

California businesses, local government and community groups, and State incentive and regulatory programs. These include the CAT's 2006 "Report to Governor Schwarzenegger and the Legislature," ARB's 2007 "Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California", and ARB's "Climate Change Proposed Scoping Plan: a Framework for Change." The reports identify strategies to reduce California's emissions to the levels proposed in Executive Order S-3-05 and AB 32. Table 4.14.D summarizes those strategies that may be applicable to the Project and assesses how the Project or County efforts comply with those strategies.

Table 4.14.D: Project Compliance with Greenhouse Gas Emission Reduction Strategies

Strategy	Project Compliance
Energy Efficiency Measures	
<p>Energy Efficiency Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).</p> <p>Renewables Portfolio Standard Achieve a 33 percent renewable energy mix statewide.</p> <p>Green Building Strategy Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.</p>	<p>Compliant with Mitigation Incorporated. The Project would be required to comply with the updated Title 24 standards for building construction. In addition, the Project would be required to comply with the mitigation measures listed in Chapter 4.13, including 4.13.1, 4.13.2, 4.13.3, and 4.13.6.</p>
Water Conservation and Efficiency Measures	
<p>Water Use Efficiency Continue efficiency programs and use cleaner energy sources to move and treat water. Approximately 19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions.</p>	<p>Compliant with Mitigation Incorporated. The Project would be required to comply with Mitigation Measures 4.14.2 and 4.13.4, including measures to increase water use efficiency.</p>
Solid Waste Reduction Measures	
<p>Increase Waste Diversion, Composting, and Commercial Recycling, and Move Toward Zero-Waste Increase waste diversion from landfills beyond the 50 percent mandate to provide for additional recovery of recyclable materials. Composting and commercial recycling could have substantial GHG reduction benefits. In the long term, zero-waste policies that would require manufacturers to design products to be fully recyclable may be necessary.</p>	<p>Compliant. Preliminary data available from the California Integrated Waste Management Board (CIWMB) indicates that the County of Monterey has met the 50 percent diversion rate since 2003. The most recent year of available data (2006) indicates that County of Monterey has achieved a 54 percent diversion rate.</p>
Transportation and Motor Vehicle Measures	
<p>Vehicle Climate Change Standards. AB 1493 (Pavley) required the State to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles and light duty trucks. Regulations were adopted by the ARB in September 2004.</p> <p>Light-Duty Vehicle Efficiency Measures. Implement additional measures that could reduce light-duty</p>	<p>Compliant. The Project does not involve the manufacture, sale, or purchase of vehicles. However, vehicles that operate within and access the Site would comply with any vehicle and fuel standards that the ARB adopts.</p>

Strategy	Project Compliance
<p>GHG emissions. For example, measures to ensure that tires are properly inflated can both reduce GHG emissions and improve fuel efficiency.</p> <p>Adopt Heavy- and Medium-Duty Fuel and Engine Efficiency Measures. Regulations to require retrofits to improve the fuel efficiency of heavy-duty trucks that could include devices that reduce aerodynamic drag and rolling resistance. This measure could also include hybridization of and increased engine efficiency of vehicles.</p>	
<p>Low Carbon Fuel Standard. ARB identified this measure as a Discrete Early Action Measure. This measure would reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020.</p>	
<i>Other</i>	
<p>Measures to Reduce High Global Warming Potential (GWP) Gases. ARB has identified Discrete Early Action measures to reduce GHG emissions from the refrigerants used in car air conditioners, semiconductor manufacturing, and consumer products. ARB has also identified potential reduction opportunities for future commercial and industrial refrigeration, changing the refrigerants used in auto air conditioning systems, and ensuring that existing car air conditioning systems do not leak.</p>	<p>Compliant. New products used, sold, or serviced in the Site (after implementation of the reduction of GWP gases) would comply with future ARB rules and regulations.</p>

Source: LSA Associates, Inc., 2009.

The adopted Scoping Plan includes proposed GHG reductions from direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as cap-and-trade systems. The Project's new buildings would be built to current codes and standards, including greater energy efficiency. While the Project would be built to code, the project design does not contain measures that advance the goal of energy efficiency and green building targets beyond the mandatory codes. In addition, the Project does not include measures to increase the efficiency of water use on the Site. As shown in Table 4-14.D, the Project is not consistent with some of the goals and strategies set forth in the ARB's *Climate Change Proposed Scoping Plan*. Mitigation measures would be required for the Project to comply with these strategies.

In addition to reducing GHG emissions to 1990 levels by 2020, AB 32 directed ARB to identify a list of "discrete early action GHG reduction measures" that can be adopted and made enforceable by January 1, 2010. In June 2007 ARB approved a list of 37 early action measures, including three discrete early action measures (Low Carbon Fuel Standard, Restrictions on High Global Warming Potential Refrigerants, and Landfill Methane Capture). Discrete early action measures are measures that are required to be adopted as regulations and made effective no later than January 1, 2010, the date established by Health and Safety Code (HSC) Section 38560.5. The ARB adopted additional early action measures in October 2007 that tripled the number of discrete early action measures.

ARB's focus in identifying the 44 early action items was to recommend measures that ARB staff concluded were "expected to yield significant GHG emission reductions, are likely to be cost-effective and technologically feasible." The combination of early action measures is estimated to

reduce statewide GHG emissions by nearly 16 million metric tons (MMT). Accordingly, the 44 early action items focus on industrial production processes, agriculture, and transportation sectors. Early action items associated with industrial production and agriculture do not apply to the Project. The transportation sector early action items such as truck efficiency, low carbon fuel standard, proper tire inflation, truck stop electrification and strengthening light duty vehicle standards are also not specifically applicable to the Project.

After mitigation, the Project would not conflict with applicable plans, policies, or regulations for reducing greenhouse gas emissions.

4.14.6 Cumulative Impacts

CEQA requires that lead agencies consider the reasonably foreseeable adverse environmental effects of projects considered for approval. Global climate change can be considered an “effect on the environment” and an individual project or plan’s incremental contribution to global climate change can have a cumulatively significant impact.

Cumulative impacts are the collective impacts of one or more past, present, or future projects, that when combined, result in adverse changes to the environment. Climate change is a global environmental problem in which: (a) any given development project contributes only a small portion of any net increase in GHGs and (b) global growth is continuing to contribute large amounts of GHGs across the world. Therefore, the analysis of global climate change impacts presented in this section addresses GHG emissions primarily as a cumulative impact. As discussed above, the Project would be expected to increase GHG emissions and require mitigation to be consistent with applicable plans and policies for reducing GHG emissions. Therefore, the Project’s cumulative impact related to global climate change is potentially significant.

4.14.7 Level of Significance Prior to Mitigation

Greenhouse Gas Emissions. The Project would develop a site that is currently vacant, therefore resulting in increased GHG emissions compared to existing uses. These impacts are potentially significant and mitigation would be required to reduce this impact to a less than significant level.

Plan, Policy or Regulation Consistency. The Project would be subject to all applicable permit and planning requirements in place or adopted by the County of Monterey and is also consistent with the early action measures proposed and adopted by ARB. However, the Project would not be consistent with all aspects of the Scoping Plan and mitigation would be required to reduce this impact to a less than significant level.

4.14.8 Mitigation Measures

The Project would be required to achieve compliance LEED 2009 “Certified Goals” for Project Design and Commercial Interiors as required in 4.13.6. Prior to final development map and building permit approvals, the applicant shall submit to the County of Monterey RMA-Planning and Building

Services Department for review and approval a plan that demonstrates it would achieve the points that would make the Project eligible for LEED Certified status.

The mitigation measures below outline several of the possible elements that should be considered for inclusion in the Project. These are further described in Mitigation Measures 4.13.1 through 4.13.6, which are required in Chapter 4.13: Utilities.

Mitigation Measure 4.14.1: Construction and Building Materials. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the following measures are incorporated into the design and construction of the Project:

- Use locally produced and/or manufactured building materials for construction of the Project;
- Recycle/reuse demolished construction material; and
- Use “Green Building Materials,” such as those materials which are resource efficient, and recycled and manufactured in an environmentally friendly way, including low Volatile Organic Compound (VOC) materials.

Mitigation Measure 4.14.2: Water Conservation and Efficiency Measures. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the following measures are incorporated into the design and construction of the Project:

- Devise a comprehensive water conservation strategy appropriate for the Project and location. The strategy may include the following, plus other innovative measures that might be appropriate:
- Water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls;
- Energy-efficient irrigation systems and devices;
- Water-efficient building design:
 - Energy-efficient and water-efficient fixtures and appliances, including low-flow faucets, dual-flush toilets and waterless urinals;
 - Restrictive watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff; and
 - Separate, non-potable distribution system to accommodate the potential future use of recycled water for landscape irrigation needs of large areas with irrigated landscaping.

Mitigation Measure 4.14.3: Incentives for the Reduction of Automobile Trips. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the following measures are incorporated into the design and construction of the Project:

- The applicant shall designate 5% of all parking spaces within the development for shared employee parking (e.g., carpools and vanpools).
- The applicant shall designate two areas in the development for bicycle parking. Each shall accommodate at least 25 non-motorized vehicles.

Mitigation Measure 4.14.4: Waste Disposal. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the following measure is incorporated into the design and construction of the Project:

- The applicant shall include notes on all site plan specifications stating that all construction contracts for the Project would be required to separate all construction waste into recyclable and non-recyclable materials and that construction waste must be taken to the closest waste disposal site.

4.14.9 Level of Significance After Mitigation

Greenhouse Gas Emissions. Implementation of Mitigation Measures 4.13.1 through 4.13.6 and Measures 4.14.1 and 4.14.4 would reduce GHG emissions from all applicable source categories to a less than significant level (LTS). In addition, as described in Chapter 4.12.5, implementation of the Project would result in a net reduction of 3,470 vehicle miles traveled per day which would provide an additional benefit from the Project.

Plan, Policy or Regulation Consistency. After implementation of the mitigation measures listed above, the Project would implement appropriate GHG reduction strategies and would not conflict with or impede implementation of reduction goals identified in AB 32, the Governor's Executive Order S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor. The Project would not conflict with the State goal of reducing GHG emissions and would not conflict with the AB 32 Scoping Plan or the early action measures. (LTS)

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4.15 ENVIRONMENTAL ISSUE AREAS DETERMINED TO BE LESS THAN SIGNIFICANT

4.15.1 Agricultural Resources

The Site is an undeveloped lot which is zoned light commercial. No agricultural resources are located on the Site or adjacent to the Site; therefore, the Project would not impact agricultural resources.

4.15.2 Mineral Resources

No mineral resources have been identified at or near the Site and or would be affected by the Project.

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5.0. OTHER CEQA CONSIDERATIONS

5.1. SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED

Section 15126.2(b) of the CEQA Guidelines requires that an EIR discuss significant impacts. When such impacts cannot be reduced to a less than significant level, the EIR must describe their implications and the reasons why the project is being proposed in spite of the impacts. The implementation of the project will result in alteration of the physical environment. Chapter 4: Existing Environmental Setting, Environmental Analysis Impacts, and Mitigation Measures of this DEIR provides a description of the potential environmental impacts for the Project as well as measures to reduce the environmental impacts to the maximum extent feasible. After implementation of the project and all related mitigation measures, it has been determined that the only significant unavoidable impacts are related to:

- Long-term groundwater supply and removal of the B-8 Overlay Zone; (refer to Chapter 4.7 Hydrology); and
- Direct Project impacts to the intersections of SR-68 and Laureles Grade and SR-68 and Corral de Tierra Road (refer to Chapter 4.12).

5.2. SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(c) of the CEQA Guidelines requires that an EIR discuss significant irreversible environmental changes which would be caused by implementation of the Project. 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 there after unlikely. An irreversible environmental change can result from a direct or indirect impact that generally commits future generations to similar uses. Irretrievable commitments of resources need to be evaluated to assure that consumption is justified.

The Site is vacant ruderal (disturbed) California grassland with sparse mature trees (mostly non-native) in the overstory. The Project would result in the conversion of approximately 11 acres of annual grassland habitat to commercial uses that would be permanently unusable for most native flora and fauna as habitat. There are 15 oak trees that occur within the non-native grassland habitat of which two cannot be avoided and would be removed as part of the Project. Similarly, the addition of a commercial retail development on currently undeveloped land would cause irreversible changes to other natural resources, including habitat for wildlife. However, because of the relatively small size of the Project, the irreversible changes that would accrue to biological resources would be adverse but not significant. Because of the relatively small amount of annual grassland (and few oaks) that would be removed by the Project, the irreversible changes that would accrue to biological resources at the Site would be adverse but not significant.

The placement of a man-made development along the south side of SR-68, a designated State Scenic Highway, at the southeast corner of the intersection with Corral de Tierra Road, would expand the commercial uses in the immediate area, generating a more developed look and feel to the intersection vicinity. The Project's contribution to the cumulative visual effect in the study area would be considerable and significant given the relatively narrow public corridors and short view depth of the visual study area.

Construction and operation of the Project and associated vehicular traffic would involve the ongoing consumption of limited nonrenewable resources and slowly renewable resources such as natural gas, electricity, petroleum-based fuels, fossil fuels, and water. Energy resources would be used for constructing the retail village and associated mitigation measures (e.g., road improvements); driving between the Project and area residences to shop once the project has been constructed; and operating the retail stores within the retail village (e.g., heating, cooling, lighting, and deliveries). The commitment of additional resources required for construction and operation of the retail village would limit their availability in the future. However, because of the limited size of the Project (approximately 126,000 sf), the consumption of these resources is considered an adverse but not a significant irreversible impact associated with the Project. Furthermore, the Site is zoned for commercial development. Therefore, the County's General Plan and the Toro Area Plan have anticipated commercial uses at this location and have factored them in to long range plans for resource use and consumption.

Construction and operations associated with the Project would result in additional vehicular traffic in the Project area. While traffic stemming from construction activities would be temporary, increased vehicular traffic resulting from operations of the Project would necessitate roadway modifications that themselves would involve the consumption of limited nonrenewable resources and slowly renewable resources and would also result in the conversion of undeveloped land making it permanently unusable for most native flora and fauna as habitat. The expansion of existing roadway or development of new roadways would also contribute to the developed nature of the scenic corridor.

The operation of the Project would involve the ongoing consumption of water. As discussed in Chapter 4.7 Hydrology the rate of ground water pumping from the El Toro Primary Aquifer System currently exceeds the rate of groundwater replenishment, thus the aquifer is in a state of overdraft condition. The project as proposed would negatively add to this condition by using 11.34 acre feet of water and would further deplete groundwater supplies, which are significant impacts. The Project, as proposed, would irreversibly add to the overdraft condition in the El Toro Primary Aquifer System due to the negative net water balance of 1.3 afy (with recharge) until such time as an alternative source is identified or strategies are developed to address the imbalance in the watershed. Note: The conclusion regarding an irreversible hydrologic impact does not apply to either of the alternatives.

5.3. GROWTH INDUCING IMPACTS

Section 15126.2(d) of CEQA Guidelines requires that an EIR discuss ways in which a Project could directly or indirectly foster economic or population growth, or the construction of additional housing. Direct growth inducing impacts are generally associated with aspects of a project that could remove obstacles to population or other growth, such as a major expansion of a wastewater treatment plant or upgrading infrastructure and facilities, which can then serve additional development.

The proposed project would construct local-serving infrastructure, including on-site water and sewer lines, and improvements to existing roads. The Project would make use of existing infrastructure and would not develop new or over-sized utilities that would allow for unplanned growth in adjacent areas. The Project is within an area planned for development by the Toro Area Plan and is designated for commercial use to server the surrounding residential uses. The Project would not be growth inducing.

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6.0 ALTERNATIVES TO THE PROJECT

6.1 INTRODUCTION

6.1.1 CEQA Requirements for Alternatives Analysis

CEQA Guidelines section 15126.6 (a) requires a description of a range of reasonable alternatives to the project or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project; an evaluation of the comparative merits of the alternatives is also required. Through this analysis, an environmentally superior alternative is identified. An EIR does not have to consider every conceivable alternative, but must consider a reasonable range of potentially feasible alternatives. An EIR does not need to consider alternatives that are infeasible. CEQA Guidelines section 15126.6(b) further requires that the discussion of alternatives focus on those alternatives capable of eliminating any significant adverse environmental impacts or reducing them to a level of insignificance, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly.

CEQA Guidelines section 15126.6(e) stipulates that a “no project” alternative be evaluated along with its impacts. The “no project” alternative analysis must discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved. If the environmentally superior project is the “no project” alternative, the EIR must also identify an environmentally superior alternative among the other alternatives.

The Alternatives to the Project evaluated herein were developed as a range of reasonable alternatives pursuant to the CEQA Guidelines, Section 15126.6. Alternatives are compared to the Project on a relative basis. For example, where both the Project and an alternative have a less than significant environmental impact, one might have less impact, and thus be relatively superior. The Environmentally Superior Alternative is identified in Section 6.5 along with a comparison of the alternatives to the Project provided in tabular form (refer to Table 6.F).

6.1.2 Alternatives Considered

The Project alternatives analyzed herein include the following:

- No Project Alternative
- Alternative Location
- LEED Silver: Reduced Water Consumption/Full Recharge Alternative
- A Reduced Density/Redesigned Alternative

Each of these alternatives to the Project is analyzed in comparison to the Project for effects on the key environmental topics discussed in Chapter 4.0 of this EIR.

6.2 ALTERNATIVES TO THE PROJECT

6.2.1 Alternative 1: No Project Alternative

Under the No Project Alternative, the two existing lots located on the Site off of the intersection of SR-68 and Corral de Tierra Road would neither be subdivided nor developed as proposed.

Aesthetics/Visual. The No Project Alternative would not cause any changes to aesthetic/visual resources or have an adverse impact on the scenic quality of SR-68 corridor as the site would remain undeveloped with grassland habitat. The No Project Alternative would not block existing views or vistas, and would not add to the aggregated visual change occurring in the Toro Area from cumulative development. The No Project Alternative would not add any new lighting to the Site such as would occur with the Project.

Air Quality. No additional vehicular trips would be anticipated with the No Project Alternative. Therefore, the No Project Alternative would not result in air emissions from construction or operational activities. This alternative would have fewer impacts than the Project with respect to air quality, although the Project's emissions are estimated to be below significant levels.

Biological Resources. The No Project Alternative would not result in any impacts to a landmark coast live oak, nesting habitat for raptors and birds, potential nesting and foraging habitat for burrowing owls, and potential refuge/aestivation habitat of the California tiger salamander and western spadefoot toad.

Cultural Resources. The No Project Alternative would not result in any potential of encountering and impacting unknown historic or archeological resources, archeological sites or human remains.

Geology and Soils. The No Project Alternative would not result in soil erosion associated with site development as well as potential impacts to future buildings and persons occupying the Site as a result of seismic related activity.

Hazards and Hazardous Materials. The No Project Alternative would not result in project-related impacts associated with the transport or use of any hazardous materials. The No Project Alternative would also eliminate any risk to people or structures involving wildland fires.

Hydrology and Water Quality. The No Project Alternative would not result in any impacts to water quality, water supply, or surface water/storm runoff.

Land Use/Land Use Policies. Allowing the Site to remain vacant is consistent with many of the policies and goals for the area as articulated in the County General Plan, the Toro Area Plan, the Monterey County Growth Management Policy and Zoning Ordinance, particularly the B-8 Zoning

Overlay. However, the Site is currently zoned for a commercial use and therefore, implementation of the No Project alternative would not meet the intent of the General Plan, Toro Area Plan and Zoning Ordinance in that these plans and ordinances envisioned a commercial development at the Site.

Population and Housing. The No Project Alternative would not generate any additional residents (population) or housing units on the Site.

Public Services. As with the Project, the No Project Alternative would not result in an incremental demand for public services (fire and police) and utilities and service systems, such as wastewater treatment, storm water runoff system, potable water supply and solid waste containment.

Traffic and Transportation. No additional traffic would be generated by the No Project Alternative. Therefore, no additional vehicle trips on study area roadways and intersections would result. The No Project Alternative would not contribute to existing deficiencies on Corral de Tierra Road or at the intersection of SR-68 and Corral de Tierra Road or the intersection of SR-68/Laureles Grade . Therefore, the No Project Alternative would not result in any transportation/traffic related impacts.

Overall, the No Project Alternative would have less environmental impacts with respect to aesthetics, air quality biological resources, cultural resources, geology and soils, hazards and hazardous material, hydrology and water quality, population and housing, public services, and traffic as compared to the Project. With respect to land use, the “No Project” Alternative would not meet the intent of the General Plan to provide commercial use on the site. However, the “No Project” Alternative would be consistent with the B-8 zoning for the Site as compared to the Project.

The No Project Alternative would not meet any of the Project objectives.

6.2.2 Alternative 2: LEED SILVER: Reduced Water Consumption/Full Recharge Alternative

Alternative 2, the LEED Silver: Reduced Water Consumption/Full Recharge Alternative modifies the Project design in order to reduce potential impacts associated with hydrology; specifically water consumption and groundwater recharge (refer to Figure 6.1).

The LEED Silver Alternative would retain the same Project footprint, building square footage, and circulation layout as the Project. It would include the subdivision of two lots into seven lots. Alternative 2 would differ from the Project by:

- Including an engineered storm water retention/percolation system that fully captures runoff from the site, adjacent former service station, and adjacent hillside as contrasted with the Project which includes a smaller retention system, detains and then releases runoff to the storm drain system that is not retained and does not capture runoff from the adjacent hillside.
- Incorporating by design LEED Silver equivalent water fixtures for interior and exterior uses; and
- Incorporating by design LEED Silver equivalent Project design and building interior standards.

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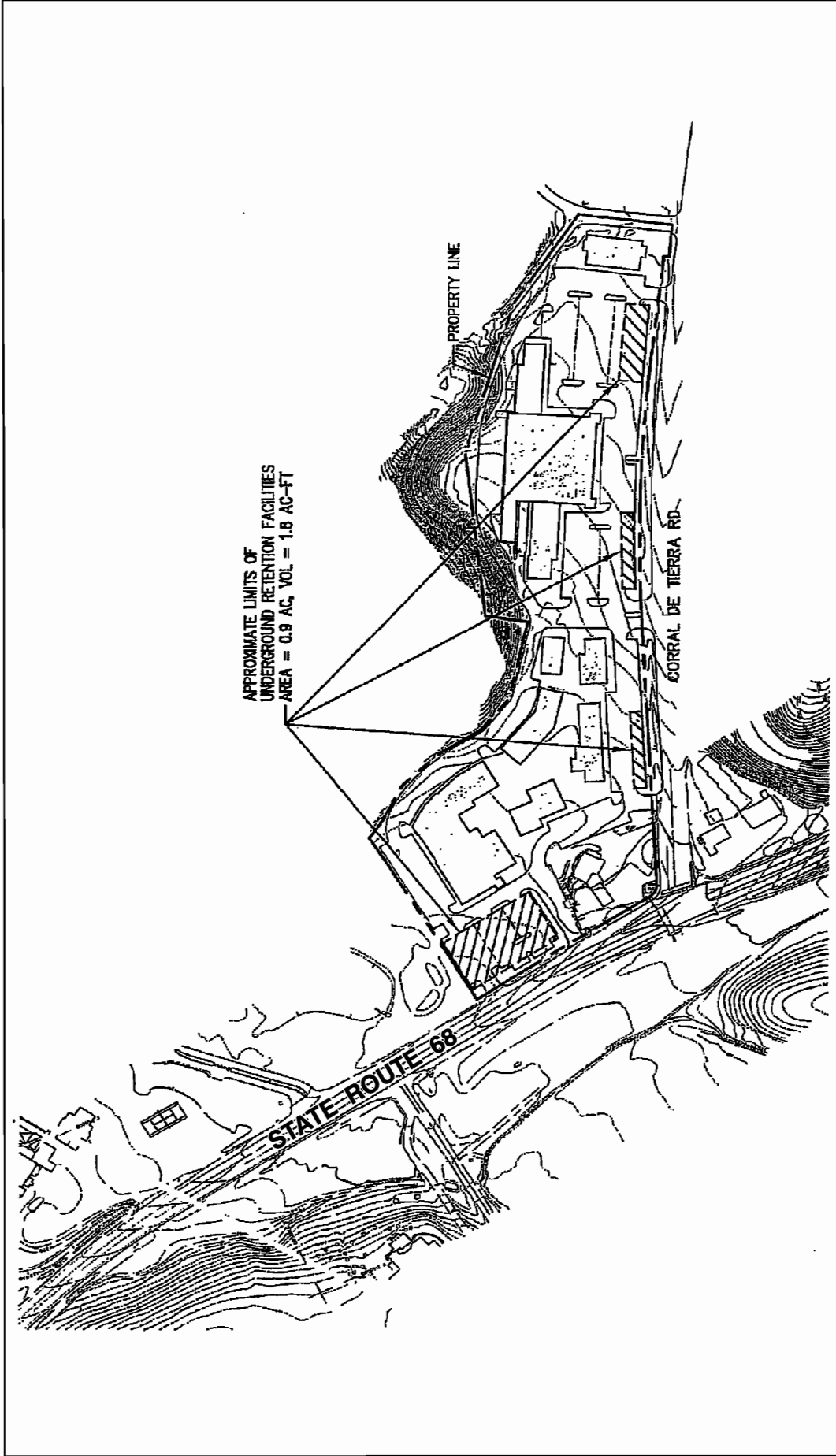


FIGURE 6.1

LSA



Corral de Tierra Neighborhood Retail Village Project
 Alternative 2: LEED Silver Alternative
 Stormwater Retention/Percolation System

SOURCE: Whitson Engineers

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Aesthetics. As with the Project, the LEED Silver Alternative would permanently alter the visual setting and scenic nature of the currently undeveloped site through the development of buildings, surface parking lots, and landscape areas. As with the Project, the retention/percolation system would be located underground, would not be visible to Site viewsheds, and therefore would not negatively impact views of the Site. Views of the Site from SR-68 and Corral de Tierra Road would be altered by the development with this alternative because the building and circulation layout and overall footprint would be the same as the Project. Potential aesthetic adverse impacts on the scenic vista and critical viewshed of the area would not be significant after implementation of standard conditions and mitigation measures identified for the Project. As with the Project, significant short-term aesthetic impacts would result from the loss of mature trees on site, which would be the same as those lost as part of the Project, until the replaced trees and woody vegetation of the landscape plan matures. As with the Project, the addition of new sources of light, especially lighting of parking areas, would create an adverse change in nighttime views of the Site. This potentially significant visual impact would be able to be reduced to below significance by containing light spill on-site through mitigation design specifications prescribed for the Project.

As with the Project, the LEED Silver Alternative's contribution on the cumulative visual effect in the study area would not be significant.

Air Quality. Similar to the Project, air emissions associated with construction activities as part of constructing the LEED Silver Alternative would be mitigated through standard construction air emission control standards and would not be significant.

The LEED Silver Alternative would not: conflict with Monterey Bay Unified Air Pollution Control District's (MBUAPCD) 2008 Air Quality Management Plan; interfere with the attainment and maintenance of ozone ambient air quality standards; exceed MBUAPCD's daily threshold for ambient PM10 concentrations, or emit diesel particulate matter in quantities that would pose a health risk.

The Site is not in an area of any known naturally occurring asbestos. Construction of this alternative, as with the Project, is not expected to result in a significant health risk from equipment that emits diesel particulate matter.

Similar to the Project, the LEED Silver Alternative would not result in a significant negative cumulative contribution to the air basin's air quality.

Biological Resources. The LEED Silver Alternative, as with the Project, would result in the permanent conversion of approximately 11 acres of native grassland to commercial use (i.e., commercial buildings, parking areas, roads, driveways, and ornamental landscaping).

As with the Project, the LEED Silver Alternative would require mitigation measures to ensure that potential significant impacts associated with the loss of native grassland, breeding habitat for special status wildlife species, nesting habitat for raptors and other birds, and native coast live oak trees are reduced to less than significant.

The LEED Silver Alternative would not contribute to the cumulative loss of native grassland within the project area.

Cultural Resources. As with the Project, the LEED Silver Alternative would not result in significant impacts to known architectural historic resources, unique archeological resources, or human remains. As with the Project, required standard conditions would ensure that potential impacts associated with the accidental discovery of architectural historic resources, unique archeological resources, or human remains during construction would be less than significant.

Geology and Soils. The LEED Silver Alternative would not result in a notable difference in impacts from geologic and soil-related hazards. The LEED Silver Alternative would also experience impacts associated with seismic shaking, ground lurching, seismically induced soil settlement, soil liquefaction, landslides, sheet and rill erosion, soil subsidence, and soil collapse. However, impacts associated with the above would be reduced to a less than significant level after prescribed mitigation is implemented.

Similar to the Project, the LEED Silver Alternative would not result in impacts associated with being located near an Alquist-Priolo Earthquake Fault Zone, lateral spreading, expansive soils, or cumulative impacts associated with any of the geologic or soil hazards listed above.

Hazards and Hazardous Materials. The LEED Silver Alternative would not result in a notable difference in impacts from hazards and hazardous materials. This alternative would not involve the transport, use and/or disposal of significant amounts of hazardous materials, the potential for significant accidental or chemical spills or releases from handling hazardous materials, the potential for hazardous emissions, the presence of hazardous material sites, and wildfire risks.

The Site is not located within an airport land use plan area or within the vicinity of a private airstrip and therefore, similar to the Project, this alternative would not impact airport operations or create airport related safety hazards.

Similar to the Project, the LEED Silver Alternative would generate the same forecast increase in the volume of traffic on the regional and local roadway networks, which could impair implementation or physically interfere with adopted emergency response or evacuation plans. With proposed standard conditions, however, potential there would be no significant impacts.

As with the Project, cumulative impacts associated with hazards and hazardous materials generated from the LEED Silver Alternative would be less than significant.

Hydrology and Water Quality. The LEED Silver Alternative would be designed to include an engineered stormwater retention/percolation system that would capture runoff from the Site, the surface area of the adjacent former service station site, and the area of adjacent hillside. This Alternative is designed to fully retain runoff for the 100-year storm event. As indicated in the Whitson Engineers November 6, 2009 site plan (refer to Figure 6.1), the retention system would include a series of underground facilities comprised of storm tech chambers with a footprint area of

0.9 acre, 1.8 afy of storage volume and the capability to retain stormwater runoff from a 100-year storm event. The facilities would be located on the northern edge of the Site adjacent to SR-68 and near the west border of the Site (refer to figure 6.1). The estimated annual recharge rate for the LEED Silver Alternative is 10.92 afy. The calculations provided by Whitson Engineers (February 17, 2009, August 24, 2009 and October 14, 2009, refer to Appendix I of Volume II of this EIR) utilize average annual precipitation and recharge assumptions. The retention facilities associated with the LEED Silver Alternative would cover a total area of 0.9 acre (Moore Twining, November 23, 2009).

In comparison, the Project storm tech chamber would have a 0.5 acre footprint area, 0.8 afy of storage volume and overflow would be directed via a new 24-inch storm drain to an existing box culvert under SR-68. The Project would recharge 10.04 afy of runoff. As with the Project, the commercial center operators would also be responsible for ongoing maintenance and repair of the facilities.

The LEED Silver Alternative would incorporate the use of LEED Silver equivalent water fixtures for both interior and exterior uses. Water consumption for this Alternative is estimated at 6.46 afy, compared to the estimated 11.34 afy consumption rate for the Project (Terrapin, September 28, 2009; December 11, 2008, refer to Appendix I of Volume II of this EIR). The reduction in consumption would be attributed to the installation of LEED Silver equivalent fixtures for the commercial center and LEED fixtures consistent with LEED-NC 2.2 Reference Guide for exterior/landscaping fixtures and plants. The LEED Silver Alternative assumes that landscape potable water demand would be reduced by 90 percent through the use of xeriscape plants, drip irrigation, and automatic irrigation sensors. This Alternative also assumes utilization of higher efficiency interior water fixtures.

Reduced water consumption and increased groundwater recharge associated with the LEED Silver Alternative design would result in an estimated net positive water balance of 4.46 afy compared to the Project's negative net water balance of 1.34 afy, a difference of 3.5 afy. Therefore, the LEED Silver Alternative would not result in a depletion of groundwater resources. Accordingly, the impact to groundwater resources would be less than significant (a net benefit).

Table 6.A below provides a comparison of the water balance of the Project with that of the LEED Silver Alternative. The LEED Silver Alternative's water balance analysis is provided in Table 6.B.

Table 6.A: Water Balance Comparison of Project and LEED Silver Alternative

	Pre Project Demand (afy)	Pre Project Recharge (afy)	Pre Project Water Balance (afy)	Post Project Demand (afy)	Post Project Recharge (afy)	Post Project Water Balance (afy)	Net Change (afy)
Project	0	0.94	0.94	11.34	10.04	-1.30	-2.2
LEED Silver Alternative	0	0.94	0.94	6.46	10.92	+4.46	3.5

afy = acre-feet per year

Table 6.B: Water Balance Analysis for Alternative 2: LEED Silver Design

Pre-Project					
Water Use					Water Use (afy)
Project Site					0.00
Existing Service Station					0.00
Hillside					0.00
Total Water Use					0.00
	Total Area (ac)	Undeveloped Area⁽¹⁾ (ac)	Mean Annual Precipitation⁽²⁾ (in/yr)	Recharge Rate⁽³⁾ (in/yr)	Recharge (afy)
Project Site	11.0	11.0	15.5	0.04	0.57
Existing Service Station	0.7	0.07	15.5	0.01	0.00
Hillside	3.6	3.6	15.5	0.08	0.37
Total Recharge					0.94
Water Balance = Recharge – Water Use					0.94
Post-Project					
Water Use	Area⁽⁴⁾ (square feet)	Multiplier⁽⁵⁾		Demand (afy)	LEED⁽⁶⁾ (afy)
Commercial/Retail/Office	109,500	0.00005		5.475	3.833
Restaurant/Deli/Food Services	17,023	0.0002		3.4046	2.383
Landscaping	1.69 ac x 1.46 afy/ac per Denise Duffy and Associates			2.46	0.246
Total Water Use					6.46
	Total Area (ac)	Developed Area⁽⁷⁾ (ac)	Mean Annual Precipitation (in/yr)	Recharge Rate⁽⁸⁾ (in/yr)	Recharge (afy)
Project Site	11.0	9.35	15.5	0.80	9.66
Existing Service Station	0.7	0.63	15.5	0.80	0.65
Hillside	3.6	0	15.5	0.13	0.60
Total Recharge					10.92
Water Balance = Recharge – Water Use					4.46
Net Change					
Post Project Water Balance – Pre-Project Water Balance					3.5

Notes:
1. The <i>Revised Evaluation of Potential for Increased Groundwater Recharge</i> dated October 14, 2009, states that 90% of the service station parcel is impervious surface and the remaining 10% of its area is available for recharge.
2. Mean Annual Precipitation provided in the <i>Schaaf & Wheeler Preliminary Drainage Study</i> dated July 30, 2002.
3. The recharge rates are based on results presented in the <i>Laguna Seca Subarea Phase I Hydrogeologic Update</i> (November 2002 prepared by Eugene B. Yates, Martin B. Feeney, and Lewis I. Rosenberg). These recharge rates represent 4%, 8%, and 1% of mean annual precipitation.
4. Estimates based on conceptual drawings.
5. Based on water demand factors from a Water Supply Assessment from the Marina Coast Water District for a shopping center for commercial retail uses and demand factors typically applied to individual deli and restaurant uses from Monterey Peninsula Water Management District.
6. LEED water demand has been reduced 30% for water efficient fixtures and equipment. Landscaping demand was reduced by 90% in accordance with estimates provided by Terrapin Bright Green, LLC.
7. The <i>Revised Evaluation of Potential for Increased Groundwater Recharge</i> prepared by Whitson Engineers dated October 14, 2009, estimated the project site would be 85% impervious surface and the service station parcel is 90% impervious.
8. The <i>Revised Evaluation of Potential Groundwater Recharge</i> , prepared by Whitson Engineers dated October 14, 2009, estimated the fraction of precipitation that would contribute to groundwater recharge could be increased to 80% for the impervious areas within the project site and former service station site due to the complete capture and percolation of runoff. According to the report, the recharge rate for adjacent hillside could be increased from 8% to 13%. The contribution to groundwater recharge from the proposed landscaped areas within the project site and service station parcel is taken as zero as a conservative assumption.

As contrasted with the Project, by reducing consumption and increasing groundwater recharge, the LEED Silver Alternative would not contribute further to the existing groundwater deficit. Since the LEED Silver Alternative would result in a net benefit to the groundwater basin, it would not contribute to a cumulative impact to water supply and is therefore, preferable to the Project with respect to hydrologic impacts.

Land Use. The LEED Silver Alternative, as with the Project, would not physically divide the existing Corral de Tierra community.

The LEED Silver Alternative would be inconsistent with Title 19 (Chapter 19.03.015 of the Subdivision Ordinance) which requires proof that there is a long term water supply (safe yield) for approval of a subdivision. As discussed in Chapter 4.7.1, the El Toro Groundwater Basin has been determined to be in overdraft.

Based on the groundwater recharge and net positive water balance described above, the LEED Silver Alternative would not adversely affect the constraints existing at the time the B-8 was imposed, and would be consistent with the respective provisions of Chapter 21.42.030 (H) (1) of the Zoning Ordinance. The Alternative would not, however, be consistent with Chapter 21.42.030(H) (2) of the Ordinance because it would also include a subdivision of lots where the Ordinance requires that the minimum building site is that which is recognized as a legal lot of record when the “B-8” District is imposed. Therefore, the LEED Silver Alternative would not be consistent with the B-8 zoning designation on the parcel (refer to Chapter 4.8 for a discussion of the Project’s consistency with the requirements of the B-8 Zoning District Regulations).

The Site’s principal zoning designation is Light Commercial (LC) with Building Site (B-8) and Design control (D) overlays or “LC-B-8-D”. Section 21.42.030(H)(3) of the Zoning Ordinance states

that setbacks in the “LC” District are established by the approval of a General Development Plan where such plan is required, and section 21.18.070(A)(4) states that minimum setback requirements by a combining “B” district shall apply.

A General Development Plan (GDP) is required because the project exceeds one acre, and includes more than one use. The GDP for the project establishes required setbacks that vary. Section 21.42.030(H)(3) of the Ordinance requires that building setbacks for development on lots with a “B-8” overlay not be less than is required in the “B-4” regulations unless otherwise indicated on parcel maps or Section District maps.

General Development Plans (GDP) are intended to allow flexibility in applying development standards for commercial and industrial projects depending on surrounding conditions. Therefore, the LEED Silver Project Alternative would be allowed to establish setbacks through the GDP and is consistent with required setbacks. Therefore, the Alternative would be consistent with Section 21.42.030(H) (3).

The Site and adjacent land uses are not covered by any habitat conservation plans or natural community conservation plans and therefore there would be no impacts to such planning requirements.

Noise. The LEED Silver Alternative would not result in a notable difference in impacts from short-term noise associated with construction activities or long-term noise associated with operational activities. With adherence to the policies and codes of the County’s General Plan and noise ordinance, as required of the Project, development of this alternative would not result in exceedance of the County’s noise standard. With implementation of identified BMPs and standard conditions, ground borne vibration associated with construction of the LEED Silver Alternative would be similar to the Project as would temporary increases in ambient noise levels at nearby residences.

This alternative would not result in significant operational traffic noise impacts, expose persons to excessive ground borne vibration or noise, or to excessive aviation-related noise.

Similar to the Project daytime operations would not result in significant impacts to ambient noise levels but nighttime activities, when ambient noise levels are lowest, would require mitigation measures to reduce noise-related impacts to less than significant.

This alternative, as with the Project, would not result in cumulative construction-related or operational noise impacts.

Population and Housing. Similar to the Project, the LEED Silver Alternative would not induce population growth in the area or displace existing housing (the property is currently vacant).

As with the Project, the LEED Silver Alternative would not result in cumulative impacts associated with population and housing and would have a positive cumulative impact on employment opportunities in the Project area.

Public Services. Similar to the Project, the LEED Silver Alternative would not cause a significant impact on fire and police emergency services, on public schools or on area parks, recreation or transit facilities.

Traffic and Transportation. The LEED Silver Alternative would result in the same direct impacts to traffic and transportation as the Project.

As with the Project, the LEED Silver Alternative would not result in impacts to emergency vehicle access. Similar to the Project, this Alternative would be required to provide at least one parking space per 250 sf of retail or office space.

Implementation of the LEED Silver Alternative in conjunction with other reasonable foreseeable projects in the area would result in cumulative impacts to intersections on SR-68, but these would be mitigated to a level that is less than significant with mitigation.

Utilities and Service Systems. As with the Project, the LEED Silver Alternative would not exceed the wastewater treatment requirements of the Regional Water Quality Control Board (RWQCB) and therefore would not experience significant impacts associated with wastewater treatment requirements or facilities.

As with the Project, the LEED Silver Alternative would be served by Cal American Water (Ambler Park system) which is able to provide service to the Project. For a discussion regarding the impacts of the LEED Silver Alternative with respect to water supply, refer to the discussion contained in the Hydrology Section above.

The LEED Silver Alternative would not result in significant impacts associated with solid waste.

Similar to the Project, development of the LEED Silver Alternative would require the implementation of mitigation measures to ensure that the energy demands associated with the project alternative are less than significant.

Implementation of the LEED Silver Alternative would not result in cumulative impacts associated with water and wastewater treatment and distribution, solid waste disposal, or energy. For a discussion regarding cumulative impacts associated with water supply, refer to the discussion contained in the Hydrology Section above.

Global Climate Change. As with the Project, the LEED Silver Alternative would generate Greenhouse Gas (GHG) emissions through motor vehicle use, electricity and natural gas consumption, solid waste disposal, water supply and water conveyance, water treatment, water distribution, and wastewater conveyance and treatment. However, because the LEED Silver Alternative incorporates Project design and construction and operation standards that are equivalent to LEED Silver standards, this alternative would result in a greater reduction in GHG emissions than would result from the Project. The increase in Project water efficiency associated with the LEED Silver Alternative would also provides additional GHG emission reduction benefits.

The LEED Silver Alternative, similar to the Project, would result in a cumulative increase in GHG emissions requiring mitigation to be consistent with applicable plans and policies for reducing GHG emissions. However, the LEED Silver Alternative would result in an incrementally smaller contribution to GHG emissions. Cumulative impacts related to global climate change associated with the LEED Silver Alternative, as with the Project, would be less than significant after mitigation has been implemented.

In summary, the LEED Silver Alternative (Alternative 2) would have the same impacts as the Project with respect to aesthetics, air quality, biological resources, cultural resources, land use, geology and soils, hazards and hazardous material, population and housing, public services and traffic. It would reduce impacts to groundwater supplies (hydrology) to a level that is less than significant (net benefit) as contrasted with the Project which would have a significant unavoidable impact to water resources. The LEED Silver Alternative would further reduce impacts associated with global climate change.

The LEED Silver Alternative would also meet all nine (9) project objectives.

6.2.3 Alternative 3: Reduced Density/Redesigned Project Alternative

The Reduced Density/Redesigned Project Alternative modifies the Project design in order to:

- Reduce the Project's identified visual impacts on the SR-68 Scenic Corridor and on the designated Critical Viewshed along Corral de Tierra Road;
- Reduce potential vehicular access/egress conflicts on both SR-68 and Corral de Tierra Road;
- Enhance the Project's accessibility to public transportation;

The Reduced Density/Redesigned Alternative would also:

- Further reduce emission of greenhouse gases from what is proposed in the LEED Silver Alternative
- Provide additional net benefits with respect to water balance beyond what is proposed in the LEED Silver Alternative.
- Result in consistency with the B-8 overlay district (MCC Chapter 21.42.030 [H]) because no new lots would be created (no subdivision)
- Render moot the requirements of MCC Chapter 19.03.015 (long term water supply) because the property would not be subdivided.

To accomplish the objectives of the Reduced Density/Redesigned Project Alternative, the following design aspects would be implemented:

- No subdivision of the two existing parcels;
- Inclusion of the LEED building features identified in the Alternative 2: LEED Silver Alternative paired with a reduction in the overall square footage of the buildings in the center and designation of 10% of the parking spaces for employee vanpools;

- Inclusion of the LEED water saving interior and exterior features identified in the Alternative 2: LEED Silver Alternative paired with a reduction in the overall square footage of the buildings that would thereby further reduce water consumption;
- Modifications to the Project and site plan (refer to Figure 6.2) as described below.

Specific modifications to the Project's design along SR-68 (refer to Figure 6.3):

1. Expansion and redesign of the proposed landscaping area on the Site frontage along the SR-68 corridor. The expansion would provide an approximately 30-foot wide landscaping area to provide additional visual screening of the Project from the SR-68 corridor. The redesign would include mounding, additional landscape buffering and an area for the relocated bus stop described under Item No. 5 below. The redesign would also provide a deeper throat length of 60 ft for the proposed driveway on the eastern end of the property. The redesign would reduce visual impacts associated with proposed Building No. 1 as viewed from SR-68 and Corral de Tierra Road.
2. Redesign of the parking area in front of proposed Building No. 1. The Project includes 61 parking spaces in this area, distributed in five parking rows parallel to the building (48 spaces), one parking row in front of the property (nine spaces), and four spaces parallel to the property boundary adjacent to the service station site. The redesign of the parking area would accommodate the additional landscaping area described above under Item No. 1 as well as the pedestrian access area described below under Item No. 6. The redesign would include an additional landscape island parallel to Building No. 1 which would allow planting of additional trees, landscaping and overall buffering of the building. The redesign would include 49 parking spaces in this area redistributed in three parking rows perpendicular to proposed Building No. 1. The redesign of the parking spaces in this area would result in 12 fewer parking spaces than the Project.
3. Elimination of the proposed driveway located nearest to the service station site on SR-68. This driveway is proposed in close proximity to existing driveways located on the service station site. Elimination of the proposed driveway would reduce vehicle circulation hazards, protect traffic flow, and provide added safety for vehicle circulation along SR-68.
4. Extension of the easternmost driveway proposed on SR-68. The extension would include a 60-foot throat length which would provide sufficient space for vehicle stacking and vehicle turning movements into and out of the Site and reduce traffic hazards on the highway. Turning movements on and off of SR-68 to the Site would be right turn only.
5. Relocation of the existing bus stop located in front of the service station site to the expanded landscaping area. The relocated bus stop would be designed and constructed to standards as recommended by Monterey Salinas Transit.
6. Construction of a pedestrian/landscaping corridor connecting the relocated bus stop to the shopping village to improve accessibility to the Project from public transportation.

Specific modifications to the Project's design along Corral de Tierra Road (refer to Figure 6.4):

1. Redesign of the proposed main entrance on Corral de Tierra Road to include the following:
 - a. Extension of the main driveway to provide a 100-foot throat length on the north side of the driveway and a 40-foot length on the south side of the driveway. The extension would: 1) provide sufficient stacking space for vehicles leaving the Site; 2) facilitate

vehicle flow and turning movements into and out of the Site; 3) maintain vehicular traffic flow and reduce traffic hazards on Corral de Tierra Road.

- b. Relocation and realignment of the access to the parking area north of the main entrance approximately 100 ft from Corral de Tierra Road to connect to the extended main driveway. Substitution of diagonal parking in the parking area fronting on Corral de Tierra Road immediately south of the main entrance in place of straight-in parking as with the project, and restriction of vehicle circulation in this area to right-only turns from the main entrance. The new parking layout and restricted vehicle circulation would allow the provision of additional landscaping areas, assure vehicle circulation flow for vehicles entering the Site, and reduce potential traffic hazards on Corral de Tierra Road.
2. Elimination of the proposed driveway located nearest to the service station site on Corral de Tierra Road. The driveway is proposed in close proximity to existing driveways located on the service station site. Elimination of the proposed driveway would reduce vehicle circulation hazards, protect traffic flow, and provide added safety for vehicle circulation along Corral de Tierra Road.
 3. Exchange the location of the proposed retail Building No. 5 and No. 8 whereby Building No. 8 would be relocated fronting Corral de Tierra Road in the original location of Building No. 5, and where Building No. 5 would be relocated to the original location of Building No. 8. This relocation would require a reduction in the size of Building 5 from 4,200 sf to approximately 3,600 sf (a loss of approximately 600 sf). The relocation of these buildings are necessary to accommodate the realignment of the access to the north parking area described above in Item 1b.
 4. Expansion of the proposed landscaping area directly in front of the Market building to a width of approximately 30 ft to provide additional visual screening and reduce potential visual impacts from Corral de Tierra Road to less than significant levels.
 5. Reduction in the size of the proposed Market building by 8,000 sf. This reduction would provide the area needed for the expanded landscaping area while maintaining necessary parking.

The Project changes under the Alternative 3: Reduced Density/Redesign Project Alternative would result in a reduction in the project size and parking spaces as indicated in Table 6.C below.

Table 6.C: Project Size Reductions with Alternative 3: Reduced Density/Redesign Project

Design Element	Project	Reduced Density/Redesign Project Alternative	Total Reduction
Building Size			
Building No. 5	4,200 (ft ²)	3,600 (ft ²)	600 ft ²
Market Building	40,073 (ft ²)	32,073 (ft ²)	8,000 ft ²
Total Project Size	126,523 (ft²)	117,923 (ft²)	8,600 ft²
Parking Spaces			
Required	506 spaces	472 spaces	34 spaces
Proposed	508 spaces	472 spaces	34 spaces

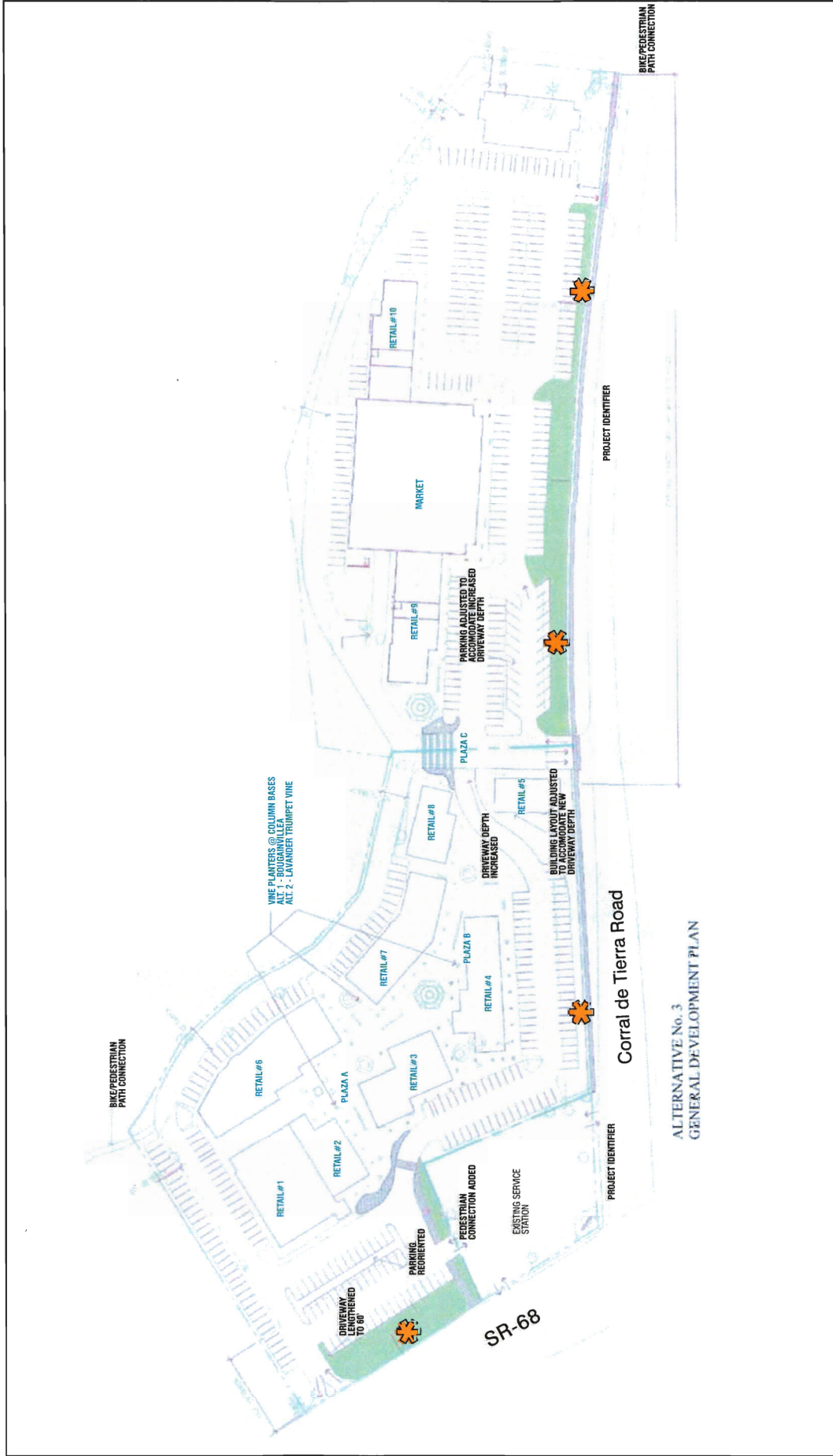


FIGURE 6.2

LSA

LEGEND
 Approximate Location of
 Underground Retention Facilities



Corral de Tierra Neighborhood Retail Village Project
 Alternative 3: Reduced Density/Redesigned
 Project Alternative Site Plan



FIGURE 6.3

Corral de Tierra Neighborhood Retail Village Project
Alternative 3: Reduced Density/Redesigned Project
Alternative Site Design Modifications Along SR-68

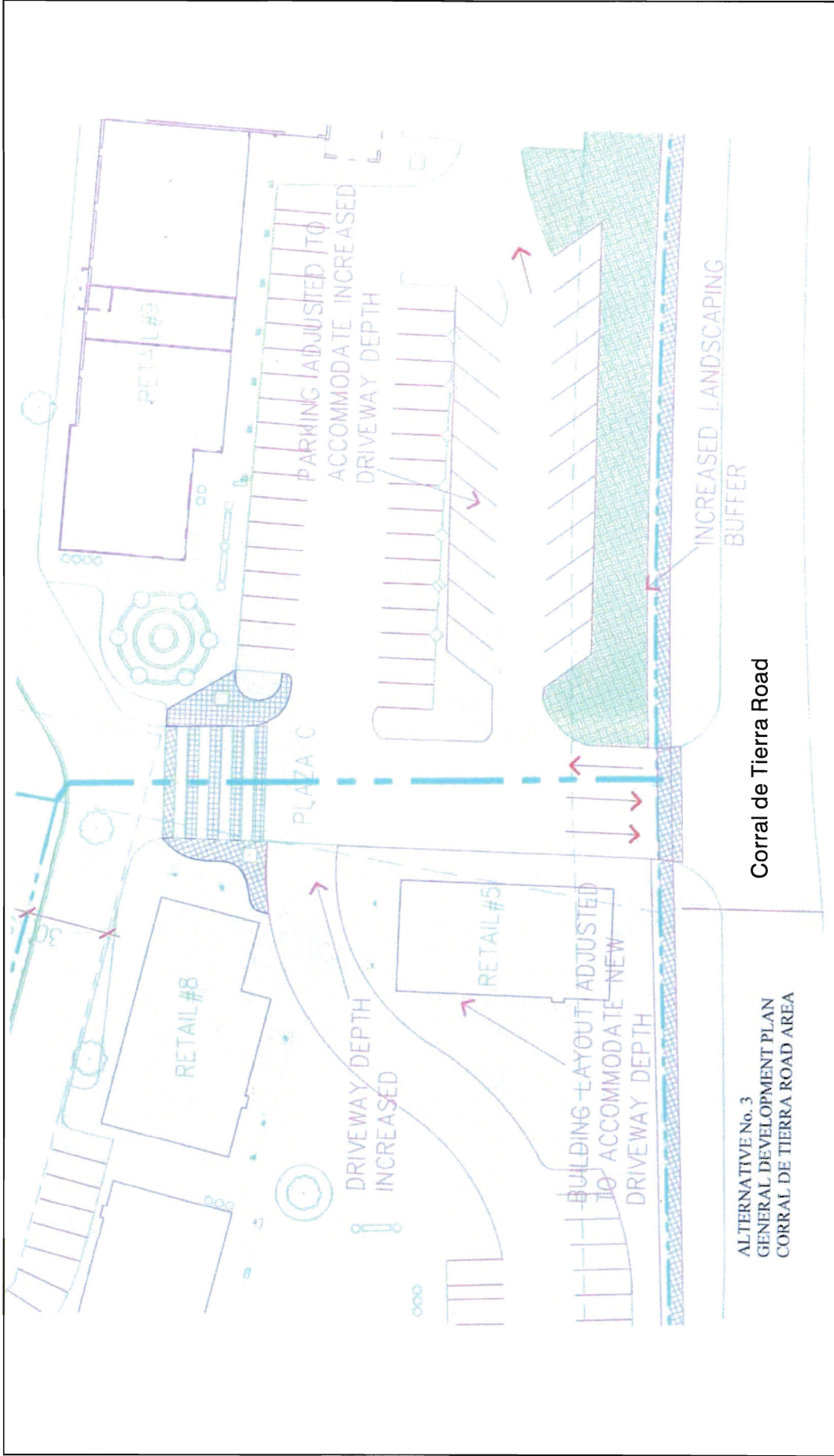


FIGURE 6.4

LSA



Corral de Tierra Neighborhood Retail Village Project
Alternative 3: Reduced Density/Redesigned Project Alternative
 Site Design Modifications Along Corral de Tierra Road

Aesthetics. As with the Project, the Reduced Density/Redesigned Project Alternative would permanently alter the visual setting and scenic nature of the currently undeveloped site through the development of buildings, surface parking lots, and landscape areas. However, this alternative would require a reduction in the square footage of certain buildings with a corresponding reduction in parking spaces and increase the landscaping along SR-68 and Corral de Tierra Road, which together would provide an incremental reduction in aesthetic/visual impacts on the scenic vista and critical viewshed when the Site is viewed from both SR-68 and Corral de Tierra Road as compared to the Project.

More specifically, the expansion of the landscaping area along the SR-68 designated Scenic corridor would provide an area to include additional landscaping. The redesign of the parking lot in this area of the Project, including an additional landscape island parallel to Building No. 1, would also provide additional landscaping areas. Planting of screening landscaping in these areas would buffer the visibility of buildings and parking areas from the Scenic Corridor and would mitigate the visual impacts of the Project on the corridor to less than significant levels. This is in contrast to the Project which includes less landscaping and which does not provide adequate buffering for the site.

Expansion of the landscaping area directly in front of the Market building on Corral de Tierra Road and on the area adjacent to the Project's main entrance on Corral de Tierra Road would provide additional area for landscaping. This additional landscaping would provide significant visual screening that would mitigate the visual impacts of the Project on the designated "VS" (Visual Sensitivity) areas and on the County-designated scenic corridor on Corral de Tierra Road. This is in contrast to the Project design which includes a smaller scale landscaping strip in this area which would not sufficient reduce the visibility of the parking areas or the buildings.

Similar to the Project, the retention/percolation system would be located underground, would not be visible to Site viewsheds, and therefore would not negatively impacts views of the Site.

As with the Project, significant short-term aesthetic impacts would result from the loss of mature trees on site, which would be the same as those lost as part of the Project, until the replaced trees and woody vegetation of the landscape plan matures.

New light sources would be reduced with a smaller building footprint and smaller parking lot. Therefore, the Reduced Density/Redesigned Project Alternative would result in an incrementally smaller contribution of new sources of light at the Site. However, this alternative would still generate new sources of light and create an adverse change in the nighttime views of the Site. This potentially significant visual impact would be able to be reduced to below significance by containing light spill on-site through mitigation design specifications prescribed for the Project.

In summary, although with mitigation, the Project's impacts to visual resources are reduced to a level that is less than significant, the Reduced Density/Redesigned Project Alternative would further reduce visual impacts along the SR-68 and Corral de Tierra Road corridors in the Toro Area.

Air Quality. The reduced building and parking area square footage with the Reduced Density/Redesigned Project Alternative would result in the generation of incrementally fewer emissions during the construction period. However, similar to the Project, air emissions associated

with construction activities would be mitigated through standard construction air emission control standards and would not be significant.

The Reduced Density/Redesigned Project Alternative would not: conflict with MBUAPCD's 2008 Air Quality Management Plan; interfere with the attainment and maintenance of ozone ambient air quality standards; exceed MBUAPCD's daily threshold for ambient PM10 concentrations; or emit diesel particulate matter in quantities that would pose a health risk.

The reduced building square footage associated with this alternative would require less energy to support during its long term operation and therefore would result in incrementally fewer air emissions than that of the Project. As with the Project, this alternative would be consistent with MBUAPCD's 2008 Air Quality Management Plan, would not exceed emissions thresholds established by MBUAPCD, and would not result in a considerable net increase of any criteria pollutant for which the proposed region is in nonattainment under an applicable federal or state ambient air quality standard.

Similar to the Project, the Reduced Density/Redesigned Project Alternative would not result in a significant negative cumulative contribution to the air basin's air quality.

Biological Resources. The proposed reduction in building square footage and parking area and increase in ornamental landscaping associated with this alternative would not alter any of the biological impacts as compared to the Project. Under the Reduced Density/Redesigned Project Alternative, the entire approximately 11 acre Site would still be permanently converted from native grassland to a developed use (i.e., commercial buildings, parking areas, roads, driveways, same native trees retained and lost, and ornamental landscaping).

However, as with the Project, the Reduced Density/Redesigned Project Alternative would include implementation of Mitigation Measures to address potential impacts to biological resources such as requiring pre-construction surveys for special status species to reduce impacts to sensitive species and the habitats they depend on to a level below significance. Therefore, similar to the Project, the Reduced Density/Redesigned Project would not result in significant impacts associated with the loss of native grassland, breeding habitat for special status wildlife species, nesting habitat for raptors and other birds, or native coast live oak trees.

The Reduced Density/Redesigned Project Alternative would also not substantially contribute to the cumulative loss of native grassland within the project area.

Cultural Resources. The amount of impervious area and site disturbance include with the Reduced Density/Redesigned Alternative would be the same as with the Project. Therefore, as with the Project, the Reduced Density/Redesigned Project Alternative would not result in significant impacts to known architectural historic resources, unique archeological resources, or human remains.

Geology and Soils. The Reduced Density/Redesigned Project Alternative would not result in a notable difference in impacts from geologic and soil-related hazards compared to the Project. The Reduced Density/Redesigned Project Alternative could also experience impacts associated with seismic shaking, ground lurching, seismically induced soil settlement, soil liquefaction, landslides,

sheet and rill erosion, soil subsidence, and soil collapse. However, impacts associated with the above impacts would be reduced to a less than significant level after prescribed mitigation is implemented.

Similar to the Project, the Reduced Density/Redesigned Project Alternative would not result in impacts associated with being located near an Alquist-Priolo Earthquake Fault Zone, lateral spreading, expansive soils, or cumulative impacts associated with any of the geologic or soil hazards listed above.

Hazards and Hazardous Materials. The Reduced Density/Redesigned Project Alternative would not result in a notable difference in impacts from hazards and hazardous materials. This alternative would not involve the transport, use and/or disposal of significant amounts of hazardous materials, the potential for significant accidental or chemical spills or releases from handling hazardous materials, the potential for hazardous emissions, the presence of hazardous material sites, and wildfire risks.

The Site is not located within an airport land use plan area or within the vicinity of a private airstrip and therefore, similar to the Project, this alternative would not impact airport operations or create airport related safety hazards.

Similar to the Project, the Reduced Density/Redesigned Project Alternative would generate an increase in the volume of traffic on the regional and local roadway networks, which could impair implementation or physically interfere with adopted emergency response or evacuation plans. With implementation of standard conditions, however, these impacts would not be significant.

As with the Project, there would be no cumulative impacts associated with hazards and hazardous materials generated from the Reduced Density/Redesigned Project Alternative.

Hydrology and Water Quality. Similar to Alternative 2: the LEED Silver Alternative, the Reduced Density/Redesigned Project Alternative would incorporate a storm water retention/percolation system which would capture runoff from the Site, the surface area of the adjacent service station site, and the adjacent hillside. The Reduced Density/Redesigned Project Alternative would be designed to fully retain runoff for a 100-year storm event. This is in contrast to the Project system which does not capture and retain water from the adjacent hillside and is designed as a combination retention/detention system.

The reduction in building square footage (8,600 sf) would result in a reduction in water consumption for the Project. Additionally, the installation of LEED Silver equivalent fixtures for the commercial center and LEED fixtures consistent with LEED-NC 2.2 Reference Guide for exterior/landscaping fixtures and plants would contribute to the reduction in water consumption. This Alternative is estimated to consume 5.32 afy of water per year. Based upon variables provided by Whitson Engineers (February 19, 2009 and October 16, 2009) and the reduced site coverage in the Reduced Density/Redesigned Project Alternative, estimated site recharge would be 10.66 afy for the "full retention system". Therefore, the Reduced Density/Redesigned Project Alternative would result in a net positive water balance of 4.4 afy. This represents a 6.6 afy increase in recharge as compared to the Project; it also represents a 0.9 afy additional net benefit to the groundwater basin compared to the LEED Silver Alternative. As such, implementation of this Alternative would not result in potentially

significant impacts to groundwater resources. Table 6.D below provides a comparison of the water balance of the Project with that of Alternative 3: Reduced Density/Redesigned Project Alternative. A detailed water balance analysis for this alternative is provided in Table 6.E.

Table 6.D: Water Balance Comparison of Project and Reduced Density/Redesigned Project Alternative

	Pre Project Demand (afy)	Pre Project Recharge (afy)	Pre Project Water Balance (afy)	Post Project Demand (afy)	Post Project Recharge (afy)	Post Project Water Balance (afy)	Net Change (afy)
Project	0	0.94	0.94	11.34	10.04	-1.30	-2.2
Reduced Density/Redesigned Project Alternative	0	0.94	0.94	5.32	10.66	+5.34	4.4

As contrasted with the Project, by reducing consumption and increasing groundwater recharge, the Reduced Density/Redesigned Project Alternative would not contribute further to the existing groundwater deficit. Since this Alternative would result in a net benefit to the groundwater basin, it also would not contribute to a cumulative impact to water supply and is therefore preferable to the Project with respect to hydrologic impacts.

Land Use. The Reduced Density/Redesigned Project Alternative would not result in changes to the Project location or zoning designation; therefore, like the project, this Alternative would not physically divide the existing Corral de Tierra community.

Per the provisions of Section 21.42.030(H)(1), a finding, with supporting evidence, would be needed for approval of a project stating that “The Project would result in construction of commercial uses that do not adversely affect the constraints that caused the B-8 to be applied to the property”.

Based on the net positive water balance described above, the Reduced Density/Redesigned Project Alternative would be consistent with Section 21.42.030(H) (1) of the Ordinance with respect to water demand as compared to the constraints at the time the B-8 zoning was imposed. At the time of the adoption of the B-8 zoning for the Site, there was minimal water consumption on the Site. By utilizing water consumption reducing fixtures and water reducing landscaping fixtures and strategies, the Reduced Density/Redesigned Project Alternative would reduce water consumption to 5.32 afy. Additionally, the retention/percolation system proposed under this alternative would capture runoff from the site, adjacent service station site, and adjacent hillside increasing groundwater basin recharge. The estimated groundwater basin recharge would exceed the estimated water consumption for this alternative. This results in a net positive water balance as compared to the demand on the Project site when the B-8 was imposed. This would be consistent with the requirements of the B-8 zoning for future commercial development of the Site. A full discussion of the provisions of Chapter 21.42.030 (H) of the Ordinance is provided in Chapter 4.8.2 of the EIR.

Table 6.E: Water Balance Analysis for Reduced Density/Redesigned Project Alternative

Pre-Project					
Water Use					Water Use (afy)
Project Site					0.00
Existing Service Station					0.00
Hillside					0.00
Total Water Use					0.00
Recharge	Total Area (ac)	Undeveloped Area ⁽¹⁾ (ac)	Mean Annual Precipitation ⁽²⁾ (in/yr)	Recharge Rate ⁽³⁾ (in/yr)	Recharge (afy)
Project Site	11.0	11.0	15.5	0.04	0.57
Existing Service Station	0.7	0.07	15.5	0.01	0.00
Hillside	3.6	3.6	15.5	0.08	0.37
Total Recharge					0.94
Water Balance = Recharge – Water Use					0.94
Post-Project					
Water Use	Area ⁽⁴⁾ (square feet)	Multiplier ⁽⁵⁾		Demand (afy)	LEED ⁽⁶⁾ (afy)
Commercial/Retail/Office	108,900	0.00005		5.445	3.812
Restaurant/Deli/Food Services	9,023	0.0002		1.8046	1.263
Landscaping	1.69 ac x 1.46 afy/ac per Denise Duffy and Associates			2.46	0.246
Total Water Use					5.32
Recharge	Total Area (ac)	Developed Area ⁽⁷⁾ (ac)	Mean Annual Precipitation (in/yr)	Recharge Rate ⁽⁸⁾ (in/yr)	Recharge (afy)
Project Site	11.0	9.10	15.5	0.80	9.40
Existing Service Station	0.7	0.63	15.5	0.80	0.65
Hillside	3.6	0	15.5	0.13	0.60
Total Recharge					10.66
Water Balance = Recharge – Water Use					5.34
Net Change					
Post Project Water Balance – Pre-Project Water Balance					4.4
Notes:					
1. The <i>Revised Evaluation of Potential for Increased Groundwater Recharge</i> dated October 14, 2009, states that 90% of the service station parcel is impervious surface and the remaining 10% of its area is available for recharge.					
2. Mean Annual Precipitation provided in the <i>Schaaf & Wheeler Preliminary Drainage Study</i> dated July 30, 2002.					
3. The recharge rates are based on results presented in the <i>Laguna Seca Subarea Phase I Hydrogeologic Update</i> (November 2002 prepared by Eugene B. Yates, Martin B. Feeney, and Lewis I. Rosenberg). These recharge rates represent 4%, 8%, and 1% of mean annual precipitation.					
4. Estimates based on conceptual drawings.					
5. Based on water demand factors from a Water Supply Assessment from the Marina Coast Water District for a shopping center for commercial retail uses and demand factors typically applied to individual deli and restaurant uses from Monterey Peninsula Water Management District.					
6. LEED water demand has been reduced 30% for water efficient fixtures and equipment. Landscaping demand was reduced by 90% in accordance with estimates provided by Terrapin Bright Green, LLC.					

7. The *Revised Evaluation of Potential for Increased Groundwater Recharge* prepared by Whitson Engineers dated October 14, 2009, estimated the project site would be 85% impervious surface and the service station parcel is 90% impervious.
8. The *Revised Evaluation of Potential Groundwater Recharge*, prepared by Whitson Engineers dated October 14, 2009, estimated the fraction of precipitation that would contribute to groundwater recharge could be increased to 80% for the impervious areas within the project site and former service station site due to the complete capture and percolation of runoff. According to the report, the recharge rate for adjacent hillside could be increased from 8% to 13%. The contribution to groundwater recharge from the proposed landscaped areas within the project site and service station parcel is taken as zero as a conservative assumption.

Per the provisions of Section 21.42.030(H)(2), the minimum building site shall be that which is recognized as an existing legal lot of record at the time the B-8 Zoning District is imposed on the property. This implies that the lots cannot be subdivided. The site of the Project includes two separate legal lots of record. Since the Reduced Size/Redesigned Alternative would not include further subdivision of these existing lots, this Alternative would be considered consistent with the provisions of Section 21.42.030(H) (2).

The Site's principal zoning designation is Light Commercial (LC) with Building Site (B-8) and Design control (D) overlays or "LC-B-8-D". Section 21.42.030(H)(3) of the Zoning Ordinance states that setbacks in the "LC" District are established by the approval of a General Development Plan where such plan is required, and section 21.18.070(A)(4) states that minimum setback requirements by a combining "B" district shall apply.

A GDP is required because the project exceeds one acre, and includes more than one use. The GDP for the Project establishes required setbacks that vary. Section 21.42.030(H)(3) of the Ordinance requires that building setbacks for development on lots with a "B-8" overlay not be less than is required in the "B-4" regulations unless otherwise indicated on parcel maps or Section District maps.

General Development Plans are intended to allow flexibility in applying development standards for commercial and industrial projects depending on surrounding conditions. Therefore, the Reduced Density/Redesigned Alternative would be allowed to establish setbacks through the GDP and is consistent with required setbacks. Therefore, the Alternative would be consistent with Section 21.42.030(H) (3).

The Reduced Density/Redesigned Project Alternative does not include a subdivision of the two existing parcels; therefore Title 19 is not applicable.

The Site and adjacent land uses are not covered by any habitat conservation plans or natural community conservation plans and there would therefore be no impacts.

In conclusion, in comparison to the Project, the Reduced Density/Redesigned Project Alternative would be consistent with all relevant zoning requirements and therefore, impacts with respect to Land Use would be reduced to a level that is less than significant.

Noise. The Reduced Density/Redesigned Project Alternative would not result in a notable difference in impacts from short-term noise associated with construction activities or long-term noise associated with operational activities although the construction timeframe would likely be shorter and there

would also be a reduction in scope of operational activities because of the reduction in square footage of this Alternative. With adherence to the policies and codes of the County's General Plan and noise ordinance, as required of the Project, development of this alternative would not result in exceedance of the County's noise standard. With implementation of identified Best Management Practices (BMPs) and standard conditions, ground borne vibration associated with construction of the Reduced Density/Redesigned Project Alternative would be similar to the Project as would temporary increases in ambient noise levels at nearby residences.

This alternative would not result in significant operational traffic noise impacts, expose persons to excessive ground borne vibration or noise, or to excessive aviation-related noise.

Similar to the Project daytime operations would not result in significant impacts to ambient noise levels but nighttime activities, when ambient noise levels are lowest, would require mitigation measures to reduce noise-related impacts to less than significant.

This alternative, as with the Project, would not result in cumulative construction-related or operational noise impacts.

Population and Housing. Similar to the Project, the Reduced Density/Redesigned Project Alternative would not induce population growth in the area or displace existing housing (the property is currently vacant). Because this alternative requires a reduction in the total square footage of the proposed neighborhood retail village, the Reduced Density/Redesigned Project Alternative would increase employment opportunities in the retail sector of the Toro Area but to a lesser extent than the Project.

As with the Project, the Reduced Density/Redesigned Project Alternative would not result in cumulative impacts associated with population and housing and would have a positive cumulative impact on employment opportunities in the Project area.

Public Services. Similar to the Project, the Reduced Density/Redesigned Project Alternative would not cause a significant impact on fire and police emergency services, on public schools or on area parks, recreation or transit facilities.

Traffic and Transportation. The Reduced Density/Redesigned Project Alternative would generate fewer Project operational vehicular trips than the proposed given the reduced commercial or office space associated with this Project alternative. However, although there would be an incremental reduction in projected Project-related trips, the direct and cumulative impacts to traffic levels would be similar to those of the Project.

The Reduced Density/Redesigned Project Alternative would include site plan modifications to improve vehicular access/egress, enhance the Project's interface with public transportation, eliminate driveways that are too close together, and provide improvements along the Project's frontage on both Corral de Tierra Road and SR-68. The combination of these site plan modifications would substantially reduce Project-related impacts to traffic and transportation infrastructure, which are significant impacts associated with the Project. For example, the Reduced Density/Redesigned Project

Alternative would eliminate impacts associated with driveway throat depths, eliminate two driveways, and redesign the parking layout. These modifications would reduce potential vehicle circulation hazards on both SR-68 and Corral de Tierra Road, maintain vehicle flow on these roads, and provide for improved internal vehicle circulation. The Reduced Density/Redesigned Project Alternative would also include modifications to the site design along Corral de Tierra Road to include additional frontage that would allow for geometric improvements to construct vehicle turning lanes, a Class II bikeway, and sidewalks. This is in contrast to the Project where the proposed driveway throat length and number of driveways would potentially result in reductions of speed/vehicle flow and increased hazards from vehicle stacking on both adjacent roadways. The Reduced Density/Redesigned Project Alternative would also provide sufficient parking as shown in Table 6.C.

The Reduced Density/Redesign Project Alternative includes relocation of the existing bus stop located at the adjacent service station site to the Site's frontage on SR-68. Additionally, a pedestrian connection from the bus stop to the retail village would be constructed to provide enhanced and safer access from the Site to public transit. The improved accessibility of the bus stop would facilitate transit ridership to and from the Site in compliance with Toro Area Plan policies.

As with the Project, the Reduced Density/Redesigned Project Alternative would not result in impacts to emergency vehicle access.

Although the Reduced Density/Redesigned Project Alternative would have less building square footage and would therefore would generate a corresponding reduction of vehicular traffic. Nevertheless, this Alternative would result in the same direct impacts to traffic and transportation as the Project.

Utilities and Service Systems. As with the Project, the Reduced Density/Redesigned Project Alternative would not exceed the wastewater treatment requirements of the RWQCB and therefore would not experience significant impacts associated with wastewater treatment requirements or facilities.

As with the Project, this Alternative would be served by Cal American Water (Ambler Park System) which is able to provide service to the project. For a discussion regarding the impacts of the Reduced Density/Redesigned Project Alternative's with respect to water supply, refer to the discussion contained in the Hydrology Section above.

There would be incrementally less waste generated by the Reduced Density/Redesigned Alternative because of the reduction in building square footage. This alternative would not result in significant impacts associated with solid waste.

There would be incrementally less energy demand associated with this alternative because of the reduction in building square footage. However, similar to the Project, development of this alternative would require the implementation of mitigation measures to ensure that the energy demands associated with the Project alternative are less than significant.

Implementation of the Reduced Density/Redesigned Project Alternative would require incrementally smaller demands on water and wastewater treatment and distribution, solid waste disposal, and energy. Similar to the Project, this alternative would not result in cumulative impacts associated with

water and wastewater treatment and distribution, solid waste disposal, or energy. For a discussion regarding cumulative impacts associated with water supply, refer to the discussion contained in the Hydrology Section above.

Global Climate Change. Although proportionally less because of the reduced building square footage in comparison to the Project, the Reduced Density/Redesigned Project Alternative would generate GHG emissions through motor vehicle use, electricity and natural gas consumption, solid waste disposal, water supply, water conveyance, water treatment, water distribution, and wastewater conveyance and treatment, requiring implementation of mitigation to reduce these impacts to less than significant levels. The Reduced Density/Redesigned Project Alternative would include the LEED building features for energy use reduction as were identified in the LEED Silver Alternative. This Alternative would also include additional dedicated carpool spaces and by enhancing access to public transit, may also provide further reduction of GHG emissions. The LEED building features would reduce GHG emissions associated with the Project to less than significant levels.

Implementation of LEED Silver equivalent fixtures for both interior and exterior uses and LEED building features would advance the goal of energy efficiency and green building targets beyond the mandatory codes under this Alternative.

This alternative, as is true for the Project, is expected to increase GHG emissions and require mitigation to be consistent with applicable plans and policies for reducing GHG emissions. Therefore, this alternative's cumulative contribution related to global climate change would be less than significant after mitigation has been implemented.

In summary, the Reduced Density/Redesigned Project Alternative (Alternative 3) would have the same impacts as the Project with respect to biological resources, cultural resources, geology and soils, hazards and hazardous material, population and housing, public services and utilities. It would have slightly less impacts with respect to air quality, noise, traffic and global climate change.

Alternative 3 would considerably reduce impacts with respect to aesthetics based upon the site design changes that are included in this alternative and would considerably reduce impacts related to internal circulation and traffic safety as contrasted with the Project.

With respect to impacts to groundwater supplies (hydrology), Alternative 3 would reduce impacts to a level that is less than significant (net benefit) as contrasted with the Project which would have a significant unavoidable impact to water resources. It would provide slightly greater reductions than the LEED Silver Alternative.

With respect to Land Use, the Reduced Density/Redesigned Alternative would reduce impacts related to Land Use to a level that is less than significant as contrasted with the Project which is inconsistent with several County ordinance provisions.

The Reduced Density/Redesigned Project Alternative would meet all nine (9) Project objectives.

6.2.4 Alternative 4: Alternative Project Location

Per the CEQA Guidelines, Section 15126.6 (f)(2), an alternative Project location need only be analyzed if the significant effects of the Project would be avoided or substantially lessened by putting the Project in another location. The Project is being proposed along SR-68 within the Toro Area of Monterey County where land uses are predominantly a mix of rural/agricultural and residential. The site is designated commercial to provide neighborhood retail uses to serve residential uses in the immediate area. Older commercial uses (gas station, convenience store) are located on the corner properties at this intersection, but do not provide the level of commercial uses that would serve the neighborhood. Other commercial uses along the SR-68 corridor include Ryan Ranch (seven miles away) and Toro Park (1.5 miles away). There are no commercially-zoned properties along SR-68 in the Toro Area and moving the Project outside of the Project vicinity would not meet the Project objectives of establishing a retail neighborhood village and offices to meet the demands not currently being fulfilled in this portion of the County of Monterey. The primary adverse impacts associated with the project area water supply and transportation/traffic. A majority of the SR-68 corridor has similar water supply issues; accordingly, developing an alternate site along the SR-68 corridor would not resolve the Project's unavoidable adverse impact associated with an inadequate supply of water. Similarly, any alternate site along SR-68 would have similar traffic impacts to the corridor. Therefore it is unlikely that any of the significant impacts associated with the Project would be avoided or lessened by developing the Project in an alternate site within the Toro Area and an alternative site location for the Project is not determined feasible.

6.2.5 Summary Comparison of Project Alternatives

Table 6.F provides a summary comparison of the environmental effects of the alternatives considered compared to the Project.

6.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Per the CEQA Guidelines, Section 15126.6, the purpose of evaluating alternatives to the Project is to determine whether any different Project designs or locations, could feasibly attain most of the basic Project objectives while avoiding or substantially reducing the significant impacts of the Project. In the case of this Project, the basic objectives include establishing a retail neighborhood shopping village and office spaces to meet demands currently not being fulfilled in this portion of the County of Monterey and provide goods and services for the daily needs of residents in the Toro Area.

Section 15126.6 (e) states that if the No Project Alternative is the environmentally superior alternative, another of the alternatives considered must be identified as the environmentally superior alternative.

In addition to the Project, four alternatives were analyzed, two of which meet all of the Project objectives: the LEED Silver: Reduced Water Consumption/Full Recharge Alternative and the Reduced Density/Redesigned Project Alternative, and two of which meet none of the Project objectives, the No Project Alternative and the Alternative Project Location. The LEED Silver: Reduced Water Consumption/Full Recharge Alternative and the Reduced Density/Redesigned Project Alternative either avoided or minimized to a greater extent the impacts associated with the Project.

Table 6.F: Summary Comparison of Alternatives

Environmental Topic	Project	No Project Alternative	LEED Silver Alternative	Reduced Density/Redesigned Project Alternative
Project Objectives	Meets all objectives	Meets none of the project objectives	Meets all objectives	Meets all objectives
Aesthetics	Less than significant impacts with proposed mitigation measures	Less impacts than Project	Same impacts as Project	Less impacts than Project
Air Quality	No Impacts	No Impacts	No Impacts	No Impacts
Biological Resources	Less than significant impacts with proposed mitigation measures	Less impacts than Project	Same impacts as Project	Same impacts as Project
Cultural Resources	No Impacts	No Impacts	No Impacts	No Impacts
Geology and Soils	Less than significant impacts with proposed mitigation measures	Less impacts than Project	Same impacts as Project	Same impacts as Project
Hydrology and Water Quality	Potentially significant impacts	Less impacts than Project	Less impacts than Project	Less impacts than Project
Hazards and Hazardous Materials	No Impacts	No Impacts	No Impacts	No Impacts
Land Use and Planning	Potentially significant impacts	No impacts	Same impacts as Project	Less impacts than Project
Noise	Less than significant with proposed mitigation measures.	No impacts	Same impacts as Project	Less impacts than Project
Population and Housing	No impacts	No impacts	No impacts	No impacts
Public Services	No impacts	No impacts	No impacts	No impacts
Traffic and Transportation	Potentially significant impacts	Less impacts than Project	Same impacts as Project	Less impacts than Project
Utilities	Less than significant impacts with proposed mitigation measures	Less impacts than Project	Same impacts as Project	Same impacts as Project
Global Climate Change	Less than significant impacts with proposed mitigation measures	Less impacts than Project	Less impacts than Project	Less impacts than Project

The Alternate Project location was determined to be infeasible. The No Project Alternative was the only alternative that avoided all the impacts related to the Project. Therefore, when all the alternatives were considered, the No Project Alternative is considered to be the Environmentally Superior Alternative. However, as mentioned previously, Section 15126.6(e) of CEQA requires that if the No Project Alternative is the environmentally superior alternative, than another alternative must be identified amongst the alternatives considered as the Environmentally Superior Alternative.

Therefore, the Reduced Density/Redesigned Alternative is considered to be the Environmentally Superior Alternative because it meets all the project objectives with incrementally less environmental impacts to, air quality, noise, traffic and transportation, and global climate change. It would further reduce impacts to aesthetics and site circulation. It would reduce impacts related to land use and consistency with plans and policies to a level that is less than significant and would reduce hydrologic impacts to a level that is less than significant. The Reduced Density/Redesigned Project Alternative would not change the impacts associated with biological resources, cultural resources, geology and soils, hazards and hazardous materials, population and housing, public services, and utilities.

7.0 MITIGATION MONITORING AND REPORTING PLAN¹

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
4.1.1		<p>State Route 68 Scenic Corridor. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the Site plan is modified to:</p> <ul style="list-style-type: none"> • Eliminate approximately eight parking spaces in the parking area fronting on SR-68 and increase the landscaping area in this part of the Site to a width of approximately 40 feet to provide additional landscaping and mounding to buffer the visibility of the parking areas and buildings from the SR-68 scenic corridor; • Eliminate the proposed driveway and four parking spaces adjacent to the existing service station site and convert the area of the driveway into additional pedestrian and landscaping areas consistent with applicable Toro Area Plan policies; • Provision of an improved transit stop (bus turnout lane or bus stop) consistent with Monterey-Salinas Transit standards and as required by the mitigation measures contained in the Traffic and Transportation Chapter of the EIR; • Reduce the total square footage of the Project to correspond with the loss of parking spaces in this area and parking spaces that may be lost per Mitigation Measure 4.1.2. 	<p>The County of Monterey RMA- Planning Department shall ensure that the project applicant modifies the site plan to reduce potential significant impacts on the designated scenic highway.</p>	<p>The County of Monterey RMA- Planning Department</p>	<p>Prior to issuance of a grading permit</p>

¹ Note that there are gaps in the mitigation measure numbering because some topical analyses require implementation of standard conditions, which are provided in Chapter 4.0 but are not included in this table.

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
	4.1.2	<p>Corral de Tierra Road County Scenic Corridor. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the Site Plan shall be modified to widen the landscaping area directly in front of the Market building to include additional landscaping and land mounding to buffer the visibility of the proposed Market building and Retail Building numbers 9 and 10 from Corral de Tierra Road, as well as the visibility of the parking areas fronting on this road. If the Site plan changes required in Mitigation Measure 4.1.2.4 include significant changes to parking and vehicle circulation, the relocation of these buildings towards Corral de Tierra Road could be considered provided that appropriate building materials and colors and additional landscaping features such as mounding are used to buffer the visibility of these buildings.</p>	<p>The County of Monterey RMA- Planning Department shall ensure that the project applicant modifies the Project to reduce potential significant impacts to critical viewsheds along Corral de Tierra Road.</p>	<p>The County of Monterey RMA-Planning Department</p>	<p>Prior to issuance of a grading permit</p>
	4.1.3	<p>Building Aesthetics/Hardscape Elements. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the building and overall project design including exterior construction materials, colors and style blend and are consistent with the surrounding natural setting and rural ranch properties of the Corral de Tierra area. Specific design components for the project parking lots shall include materials such as light colored asphalt, light colored interlocking pavers, and/or reinforced gravel products to mimic the existing landscape colors; dark green paint for space striping and recycled plastic vehicle stops.</p>	<p>The County of Monterey RMA- Planning Department shall ensure that the building and overall project design colors and style blend and are consistent with the surrounding Corral de Tierra area.</p>	<p>The County of Monterey RMA-Planning Department</p>	<p>Prior to issuance of a grading permit</p>
	4.1.4	<p>Landscape Plan. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the landscaping plan is modified by a landscape architect to include the Site plan changes required under Mitigation Measures 4.1.1 and 4.1.2. The plan shall include appropriate tree species to provide maximum shading in the parking areas; shall include native drought-tolerant and rapid growth shrub and tree species to buffer the visibility of the Project from the scenic corridors; xeriscape principles; and shall include such techniques and materials as low precipitation sprinkler heads, bubblers, drip irrigation systems and timing devices. The plans shall be in</p>	<p>The County of Monterey RMA- Planning Department shall ensure that the landscaping plan is modified by a landscape architect to use xeriscape principals in buffering the visibility of the Project from the scenic corridors.</p>	<p>The County of Monterey RMA-Planning Department</p>	<p>Prior to issuance of a grading permit</p>

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
	4.1.5	<p>sufficient detail to identify the location, species, and size of the proposed landscaping and shall include an irrigation plan. The landscaping shall be installed and inspected prior to occupancy. All landscaped areas and/or fences shall be continuously maintained by the applicant and all plant material shall be continuously maintained in a litter-free, weed-free, healthy condition.</p> <p>Lighting Plan Specifications. A Final Lighting Plan for the Project shall be submitted for review to the County of Monterey RMA-Planning Department prior to issuance of any building permits. The plan would be reviewed for adequacy and its ability to reduce lighting impacts. All exterior lighting shall be unobtrusive, down-lit, harmonious with the local area, and constructed or located so that only the intended area is illuminated and off-site glare is fully controlled. Exterior lights shall have recessed lighting elements. Exterior light sources that would be directly visible when viewed from a common public viewing area, as defined in Section 21.06.195, are prohibited shall be minimized to provide only minimum safety requirements. The lighting shall comply with the requirements of the California Energy Code set forth in California Code of Regulations, Title 24, Part 6. The plan shall include the following components to minimize adverse visual effects during nighttime:</p> <ul style="list-style-type: none"> • All exterior project light lamps shall be focused downward within the Site boundaries to avoid light spill upward to the night sky or out on adjacent properties; this includes luminaries with a distance of 2.5 times the mounting height from the property boundary; • The majority of the lighting on-site shall be limited to business hours only, with minimal lighting left on during off-business hours for security purposes. The lighting plan shall be reviewed by the County Sheriff's Department for consistency with security and safety requirements; 	<p>The County of Monterey RMA- Planning Department shall ensure that a Final Lighting Plan for the Project is prepared such that only the Project is illuminated and off-site glare is controlled and that the Plan complies with the requirements of the California Energy Code set forth in California Code of Regulations, Title 24, Part 6.</p>	<p>County of Monterey RMA- Planning Department</p>	<p>Prior to issuance of building permits</p>

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
		<p>Mitigation Measures</p> <ul style="list-style-type: none"> Project exterior luminaries with more than 1,000 initial lamp lumens shall be shielded to direct lighting downward and within the Site; and exterior luminaries with more than 3,500 initial lamp lumens shall meet the Full Cutoff IESNA (Illuminating Engineering Society of North America) Classification; All interior project lighting shall have a maximum candela value such that the light falls within the buildings; Lamps shall be rural in style to be consistent with the rural character of the Site and surrounding community. 			
	4.1.6	<p>Underground Utility Lines. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall verify that plan specifications include notes specifying that all utilities shall be placed underground.</p>	<p>The County of Monterey RMA- Planning Department shall ensure that plan specifications include notes specifying that all utilities shall be placed underground.</p>	The County of Monterey RMA- Planning Department	Prior to issuance of a grading permit
	4.3.1	<p>Special Status Bat Species. Prior to issuance of grading permit, the applicant shall contract with a qualified biologist to conduct preconstruction surveys for bats; such surveys shall be conducted at least 30 days before any construction or grading regardless of the time of year. Tree removal and construction shall occur in late fall to minimize the likelihood of impacting individuals within one or more species of bats. To be in compliance with Fish and Game Code 1801, the applicant shall have a qualified biologist examine the trees within 100 feet of the development area on the Site for use by bats. If no bats, or evidence of, are found during preconstruction surveys, a survey report shall be prepared that documents the findings of the surveys, and requirements for avoidance, minimization, mitigation, and monitoring. The contract between the biologist and the applicant must be submitted for review and approval by the County of Monterey RMA-Planning Department prior to issuance of any permits.</p> <p>If bats are found to be using the trees as night roosts,</p>	<p>The project applicant shall have a qualified biologist conduct preconstruction surveys for bats at least 30 days prior to any construction or grading activities. In addition the County of Monterey RMA- Planning Department shall approve the contract with the biologist.</p>	The County of Monterey RMA- Planning Department	Prior of issuance of a grading permit

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
		<p>construction can proceed during daylight hours with no impact, so long as trees used by roosting bats are not directly impacted. In the event that trees to be removed are being used as day roosts, a plan shall be developed under the consultation of a qualified biologist to exclude bats from these areas before construction can proceed. Construction related activities shall be prohibited within the exclusion zone until the bats have abandoned the roost site. Passive exclusion measures that allow bats to leave but not return to the roost would be allowed unless the roost site supports a maternity colony. Exclusion measures would only be allowed at maternity roost sites when the young have fledged. A qualified biologist shall monitor each roost one per week in order to track the status of each roost and inform the project applicant when a roost site has been cleared for construction. Once all bats have been evicted, tree removal can resume. Weekly monitoring reports shall be prepared by the bat biologist and submitted to the County of Monterey RMA-Planning Department.</p> <p>Nesting Birds. The following measures shall be implemented to mitigate for potential impacts to nesting birds (including but not limited to Northern Harrier, white-tailed kite, California horned lark, and loggerhead shrike):</p> <p>7) Should construction occur during the nesting season (February 21 through August 22), the applicant shall contract with a qualified biologist to conduct preconstruction surveys for nesting raptors. The biologist shall submit a report documenting the results of the preconstruction surveys, avoidance, minimization, mitigation and monitoring requirements. The contract between the biologist and the applicant must be submitted for review and approval by the County of Monterey RMA-Planning Department prior to the issuance of any building and grading permits.</p> <p>8) If possible, all trees, brush and other potential nesting habitat that would be impacted by project construction shall be removed during the non-nesting season (August</p>	<p>The project applicant shall have a qualified biologist conduct preconstruction surveys for nesting birds. In addition the County of Monterey RMA- Planning Department shall approve the contract with the biologist.</p>	<p>The County of Monterey RMA- Planning Department</p>	<p>Prior to issuance of a grading permit or ground disturbing activities</p>

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
	9)	<p>22 through February 21). These specific dates and survey distances have been established by the County of Monterey RMA-Planning Department, per the August 7, 2009 Tree Assessment Workshop.</p> <p>If suitable nesting habitat cannot be removed during the non-nesting season and project construction is to begin during the nesting season (February 22 through August 21), prior to initiating construction-related activities, all suitable nesting habitat within the limits of work and a 500-foot buffer shall be surveyed by a qualified biologist. Surveys shall be conducted no more than 14 days prior to the start of work. The qualified biologist shall locate active nests within 300 feet of the footprint of development. If no nesting is discovered, construction can begin as planned. If an active nest is discovered, a buffer shall be established on the Site around the nest and delineated using orange construction fence or equivalent. Buffers for raptor nests shall be 300 feet; buffers for non-raptor nests shall be 100 feet. The buffer shall be maintained in place until the end of the breeding season or until the young have fledged, as determined by a qualified biologist. The active nest sites within the exclusion zone shall be monitored by the qualified biologist on a weekly basis throughout the nesting season to identify any signs of disturbance. These protection measures shall remain in effect until the young have left the nest and are foraging independently or the nest is no longer active. A report shall be prepared at the end of the construction season detailing the results of the preconstruction surveys. The report shall be submitted the California Department of Fish and Game (CDFG) by November 30 of each year.</p> <p>Construction beginning during the non-nesting season and continuing into the nesting season shall not be subject to these measures.</p>			

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
	4.3.3	<p>Alternatively, CDFG may be consulted to determine if it is appropriate to decrease the specified buffers with or without implementation of other avoidance and minimization measures (e.g., having a qualified biologist on-site during construction activities during the nesting season to monitor nesting activity).</p> <p>Burrowing Owl. Prior to issuance of a grading permit, the following measures shall be implemented to mitigate for potential impacts to burrowing owl:</p> <p>14) Prior to issuance of a grading permit, the applicant shall contract with a qualified biologist to conduct burrowing owl presence and absence surveys. Preconstruction surveys shall be completed and if necessary, avoidance and minimization measures shall be implemented. The biologist shall submit a report documenting the results of the preconstruction surveys, avoidance, minimization, mitigation and monitoring requirements. The contract between the biologist and the applicant must be submitted for review and approval by the County of Monterey RMA-Planning Department prior to the issuance of any building and grading permits.</p> <p>15) Burrowing Owl presence and/or absence surveys shall be conducted in accordance with the California Department of Fish and Game (CDFG) Staff Report on Burrowing Owls (CDFG, 1995). The protocol requires four surveys during the nesting season (April 15 through July 15) and four surveys during the winter season (December 1 through January 31). If the survey results are negative, measures 3 and 4 are not required.</p> <p>16) If burrowing owls are found to be occupying burrows within the Site in either season, and if occupied burrows are to be removed or lost as part of the Project, compensation for loss of foraging habitat shall be required in accordance with the CDFG Staff Report on Burrowing Owls (CDFG, 1995). Compensation shall consist of preservation of 6.5-acres of suitable foraging</p>	<p>The project applicant shall have a qualified biologist conduct preconstruction presence and absence surveys for burrowing owls in accordance with CDFG requirements 30 days prior to any ground disturbing activities. In addition the County of Monterey RMA- Planning Department shall approve the contract with the biologist.</p>	<p>The County of Monterey RMA- Planning Department</p>	<p>Prior to issuance of a grading permit</p>

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
		<p>habitat for each breeding pair or unpaired winter resident. Preservation of this habitat shall be accomplished through:</p> <ul style="list-style-type: none"> a) Acquisition of suitable habitat and recording a conservation easement over the property. Preparation of a management plan and establishment of an endowment in an amount to be determined by the County and CDFG for maintenance and management of the mitigation site in perpetuity shall also be established; b) purchasing sufficient credits at an approved conservation bank; c) a combination of the above methods, or d) another method acceptable to CDFG. <p>17) Prior to issuance of a grading permit or other project-related disturbance of the Site, the Project proponent shall provide evidence that adequate mitigation has been provided for the loss of burrowing owl foraging habitat, as described above.</p> <p>18) No more than 30 days prior to any ground disturbing activities, a qualified biologist shall conduct a preconstruction survey for burrowing owls. A preconstruction survey is not necessary if the last presence and/or absence survey was conducted within 30 days of the start of ground disturbing activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the initial preconstruction surveys, the Site shall be resurveyed. All surveys shall be conducted in accordance with the CDFG Staff Report on Burrowing Owls (CDFG, 1995). If no burrowing owls are present, construction can begin as planned. Construction beginning during the non-nesting season and</p>			

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
	<p>continuing into the nesting season shall not be subject to these measures.</p> <p>19) If the preconstruction surveys identify burrowing owls on the Site during the non-breeding season (September 1 through January 31), burrowing owls occupying the Site shall be evicted from the Site by passive relocation as described in the CDFG Staff Report on Burrowing Owls (CDFG 1995).</p> <p>If the preconstruction surveys identify burrowing owls nesting on the Site during the breeding season (February 1 through August 31), a 250-foot buffer shall be established on the Site around the nest burrow and delineated using orange construction fence or equivalent. The buffer shall be maintained in place until the end of the breeding season or until a qualified biologist determines through non-invasive methods that 1) the birds have not begun egg laying, or 2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once the fledglings are capable of independent survival, the burrow(s) can be destroyed.</p>	<p>California Tiger Salamander. Prior to issuance of any grading or building permit for the Project, the applicant shall retain a qualified biologist to conduct a Site Assessment following the Fish and Wildlife Service (USFWS) 2003 <i>Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander</i>. Written documentation of the Site Assessment results shall be provided to the USFWS and California Department of Fish and Game (CDFG) within two weeks of completion of the Site Assessment. Additional California Tiger Salamander (CTS) site assessment/survey requirements may be required by USFWS and CDFG pending the results of the Site Assessment.</p> <p>If the USFWS and CDFG determine that no further CTS surveys are warranted, construction may proceed at any time</p>	<p>The project applicant shall have a qualified biologist conduct a CTS site assessment following USFWS 2003 guidance. The project applicant shall have a qualified biologist ensure implementation of avoidance and minimization measures pertaining to CTS. In addition the County of Monterey RMA- Planning Department shall approve the contract with the biologist.</p>	<p>The County of Monterey RMA- Planning Department and California Department of Fish and Game and US Fish and Wildlife Service</p>	<p>Prior to issuance of grading permits or building permits</p>
4.3.4					

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
		<p>with implementation of the prescribed CTS avoidance and minimization measures described below.</p> <p>Avoidance and Minimization Measures:</p> <p>5) Exclusion fencing shall be installed along the limits of work associated with construction of the retail village to prevent encroachment into adjacent California Tiger Salamander upland habitat to be preserved. Fencing shall consist of silt fence or equivalent material, and shall be installed such that no openings are present. Additionally, the bottom three inches of fence shall be buried. The exclusion fencing shall be maintained in good condition until project construction is complete.</p> <p>6) Following completion of work, areas of potential California Tiger Salamander upland habitat in the project area that are denuded during project construction shall be revegetated with locally occurring native species as described in the Landscape Plan.</p>			
	4.3.5	<p>California Red-legged Frog and Western Spadefoot Toad. Prior to issuance of a grading permit, the project applicant shall retain a qualified biologist to ensure implementation of the following avoidance and minimization measures pertaining to California red-legged frog (CRLF) and western spadefoot. The contract must be submitted for review and approval by the County of Monterey RMA-Planning Department prior to issuance of any permits.</p> <p>7) Exclusion fencing shall be installed along the limits of work associated with construction of the retail village to prevent encroachment into adjacent upland habitat to be preserved. Fencing shall consist of silt fence or equivalent material, and shall be installed such that no openings are present. Additionally, the bottom three inches of fence shall be buried. The exclusion fencing shall be maintained in good condition until project construction is</p>	<p>The project applicant shall have a qualified biologist ensure implementation of avoidance and minimization measures pertaining to CRLF and western spadefoot toad. In addition the County of Monterey shall approve the contract with the biologist.</p>	<p>The County of Monterey RMA-Planning Department and US Fish and Wildlife Service</p>	<p>Prior to issuance of a grading permit</p>

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
		<p>complete.</p> <p>8) Following completion of work, areas of potential upland habitat on the Site that are denuded during Project construction shall be revegetated with locally occurring native species as described in the Landscape Plan.</p> <p>9) All burrows in the area to be disturbed shall be surveyed during the dry season for presence of aestivating CRLF or spadefoot. Surveys shall be conducted at each burrow either by hand excavation or surveying with a fiber optic camera. Written documentation of the survey results shall be provided to the United States Fish and Wildlife Service (USFWS) within two weeks of completion of the surveys.</p>			
	4.5.1	<p>Uniform Building Code for Seismic Zone IV. Prior to the issuance of a building permit, the project engineer shall prepare and submit project design specifications to the County of Monterey RMA-Planning Department for review and approval. The project design specifications shall be in accordance with the requirements of the Uniform Building Code's current edition for Seismic Zone IV. The requirements state that all buildings are to be founded on undisturbed native soils and/or accepted engineering fill to prevent resonance amplification between soils and the structure.</p>	<p>The County of Monterey RMA- Planning Department shall ensure project design specifications are in accordance with the requirements of the Uniform Building Code's current edition for Seismic Zone IV.</p>	<p>The County of Monterey RMA- Planning Department</p>	<p>Prior to issuance of a building permit</p>
	4.5.2	<p>Ground Lurching. Prior to issuance of a building permit, the applicant shall submit operation and emergency response plans to the County of Monterey, Health Department, Environmental Health Division for review and approval. The plans shall consider the potential for ground lurching to occur in response to seismic events, and the potential for lurching to damage lifelines, utilities, and structures. The operation and emergency response plans shall include an employee-training plan; an evacuation plan; a checklist for emergency response including responsible parties; a facility site plan; a storage map for hazardous materials; and a records management plan.</p>	<p>The project applicant shall provide the County of Monterey Health Department- Environmental Health Division an operation and emergency response plan for review and approval.</p>	<p>The County of Monterey Health Department- Environmental Health Division</p>	<p>Prior to issuance of a building permit</p>

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
	4.5.3	<p>Erosion Control Plan. Prior to issuance of a grading permit, the contractor shall prepare and submit an erosion control plan to the County of Monterey RMA-Planning Department for review and approval. The erosion control plan shall include the following measures:</p> <ul style="list-style-type: none"> • Graded cut and fill slopes shall be vegetated or landscaped in a manner that would reduce the potential for soil erosion following construction. • Site drainage shall be provided to control surface water, direct water away from slopes, and control surface water discharge. 	<p>The project applicant shall provide the County of Monterey RMA- Planning Department an erosion control plan for review and approval.</p>	<p>The County of Monterey RMA- Planning Department</p>	<p>Prior to issuance of a grading permit</p>
	4.5.4	<p>Design Level Geotechnical Report. Prior to issuance of a grading permit, the applicant shall submit a design-level Geotechnical Report to the County of Monterey RMA- Planning Department for review and approval. The Geotechnical Report should specifically address the site preparation and grading, foundation design, estimated differential settlement due to liquefaction, foundation and seismic loading, and the design of the Site's retaining walls that would support the adjacent slope.</p>	<p>The project applicant shall provide the County of Monterey RMA- Planning Department a design-level Geotechnical Report for review and approval.</p>	<p>The County of Monterey RMA- Planning Department</p>	<p>Prior to issuance of a grading permit</p>
	4.5.5	<p>Building Construction Plans. Prior to the issuance of a building permit, the project engineer shall prepare and submit project building construction plans including design specifications consistent with the design level geotechnical engineering investigation to the County of Monterey RMA- Planning Department for review and approval. The project design specifications shall detail the design and construction of the buildings and the method to be used (e.g., removing the alluvial soil that is prone to liquefaction and seismic settlement and replacing it with properly compacted (engineered) fill, deeply compacting the soils in-place, or supporting structures on deep foundations bearing below the settlement-prone soil to address impacts associated with potential liquefaction and seismic settlement associated with alluvial soils on-site.</p>	<p>The project engineer shall provide the County of Monterey - RMA Planning Department project building construction plans including design specifications consistent with the design level geotechnical engineering investigation for review and approval.</p>	<p>The County of Monterey RMA- Planning Department</p>	<p>Prior to issuance of a building permit</p>

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
	4.7.5	<p>Drainage Plan. Prior to issuance of any grading or building permits, the applicant shall provide the County of Monterey Water Resources Agency, a final Drainage Plan and maintenance plan prepared by a registered civil engineer addressing on- and off-site impacts. The drainage plan shall be accompanied by a hydrologic report that would include calculations certifying that storm water detention/percolation facilities are designed to limit the 100-year post-development runoff rate to the 10-year pre-development runoff rate. The drainage plan shall include an oil-water separator/sediment trap upstream from the retention/detention basin and construction details, utilizing Caltrans standards, for the proposed 24-inch storm drain line that would convey stormwater to an existing box culvert under SR-68. Calculations shall be provided certifying the oil-water separator/sedimentation trap has been sized to accommodate the flow from the Site during the County recommended storm event. Drainage improvements shall be constructed in accordance with the plans approved by the County of Monterey Water Resources Agency.</p> <p>The Drainage Plan for the Project shall also include calculations demonstrating the adequacy of the existing culvert along El Toro Creek under SR-68 to pass the Caltrans-specified design flood events, including any additional stormwater discharge volumes originating from the Site after construction. If the capacity of the existing culvert is insufficient to meet Caltrans design criteria, the applicant shall submit plans for upgrading or replacing the culvert and shall upgrade or replace the culvert as part of the Project.</p>	<p>The project applicant shall submit to the County of Monterey Water Resources Agency a final Drainage Plan and Maintenance Plan prepared by a registered civil engineer.</p>	<p>The County of Monterey Water Resources Agency</p>	<p>Prior to issuance of grading permit or building permits</p>
	4.7.6	<p>Drainage and Flood Control Systems Agreement. Prior to filing the final map, a signed and notarized <i>Drainage and Flood Control Systems Agreement</i> shall be provided by the applicant to the County of Monterey Water Resources Agency for review and approval. The agreement shall include a summary of required annual maintenance activities and provisions for the preparation of an annual drainage report.</p>	<p>The project applicant shall submit a signed and notarized <i>Drainage and Flood Control Systems Agreement</i> to the County of Monterey Water Resources Agency for review and approval which shall include a summary of required annual maintenance activities and provisions for</p>	<p>The County of Monterey Water Resources Agency</p>	<p>Prior to final map approval</p>

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
		<p>Mitigation Measures</p> <p>The annual report shall be prepared by a registered civil engineer and submitted to the County of Monterey Water Resources Agency for review and approval. If the applicant and/or subsequent property owners, after notice and hearing, fails to properly maintain, repair, or operate the site drainage and flood control facilities, the County of Monterey Water Resources Agency shall be granted the right by the property owners to enter any and all portions of the property to perform repairs, maintenance or improvements necessary to properly operate the drainage and flood control facilities in the Project. The County of Monterey Water Resources Agency shall have the right to collect the cost for said repairs, maintenance or improvements from the property owners upon their property tax bills. A hearing shall be provided by the Board of Supervisors as to the appropriateness of the costs. The <i>Drainage and Flood Control Systems Agreement</i> shall be recorded concurrently with the final map.</p>	<p>the preparation of an annual drainage report.</p>		
	4.7.7	<p>Retaining Walls. Prior to issuance of grading and site development permits, the applicant shall submit a design approved by a registered civil engineer for retaining walls/debris deflection walls along areas of the eastern Site boundary where evidence of slope instability has been observed or areas that pose a risk of future instability. The wall shall be adequately sized so as not to be overtopped by potential mudflows, and shall be designed to withstand the impact of any mudflows travelling down the slope. The applicant shall implement a maintenance program to remove any debris that is accumulated behind the wall after any mudflow event, and at the end of every rainy season.</p>	<p>The project applicant shall submit a design approved by a registered civil engineer to the County of Monterey RMA – Planning Department for retaining walls/debris deflection walls along areas of the eastern site boundary where evidence of slope instability has been observed or for areas that pose a risk of future instability.</p>	The County of Monterey RMA- Planning Department	Prior to issuance of grading or site development permits
	4.9.2a	<p>Loading Dock. Prior to issuance of the grading permit, the County of Monterey shall review the site design to ensure that the loading dock facility is enclosed so that all adjacent noise sensitive land uses are completely shielded from a direct line of sight to the loading dock;</p>	<p>The County of Monterey RMA- Planning Department shall verify that the loading dock facility on the site design is enclosed.</p>	The County of Monterey RMA- Planning Department	Prior to issuance of a grading permit

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
	4.9.2b	<p>Loading Dock. Prior to issuance of the grading permit, the County of Monterey shall review the site design to ensure that it includes specifications that the use of the loading dock for noise producing activities shall be restricted to the daytime hours of 7:00 a.m. to 10:00 p.m. daily.</p>	<p>The County of Monterey shall review the site design to ensure that it includes specifications that the use of the loading dock for noise producing activities shall be restricted to the daytime hours of 7:00 a.m. to 10:00 p.m. daily.</p>	The County of Monterey	Prior to issuance of a grading permit
	4.12.1	<p>Impact Fee for Project Impacts at SR-68/San Benancio Road; SR-68/Corral de Tierra Road; and SR-68/Laureles Grade. Prior to the issuance of building permits, the Project applicant shall comply with one of the following actions to address Project level impacts to intersections along SR-68:</p> <ol style="list-style-type: none"> 1. Upon issuance of each building permit for proposed development on the Site, the applicant shall contribute the proportionate fair share, as calculated by the County, towards the "State Route 68 Commuter Improvements" through payment of the TAMC Regional Development Impact Fee (RDIF) in effect at that time. The TAMC RDIF payment will be earmarked for completion of the Caltrans Project Study Report (PSR) for the 2.3 miles "State Route 68 Commuter Improvements" project identified with the TAMC RDIF; or 2. Prior to the issuance of the first building permit for proposed development on the Site, the applicant shall pay the entire fair share for the proposed development toward the "State Route 68 Commuter Improvements" through payment of the TAMC RDIF or; 3. The Project applicant shall fund, initiate and complete a Caltrans Project Study Report for the 2.3 mile "State Route 68 Commuter Improvements" project identified in the TAMC RDIF. The PSR process will identify the total roadway improvement costs, as well as each project applicant's 	<p>The project applicant shall pay to the County of Monterey its proportionate fair share towards the "State Route 68 Commuter Improvements" through payment of the TAMC Regional Development Impact Fee (RDIF) in effect at that time or shall fund or shall fund, initiate and complete a Caltrans Project Study Report for the 2.3 mile "State Route 68 Commuter Improvements" project.</p>	The County of Monterey Department of Public Works	Prior to issuance of a building permit

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
		<p>proportionate fair share of those costs. If costs of the PSR exceeds the Project's proportionate fair share of the TAMC RDIF obligation, the applicant shall be reimbursed the amount in excess of the proportionate fair share. Monterey County will enter into a reimbursement agreement with the Project applicant to refund the costs in excess of the proportionate fair share of the TAMC RDIF as additional fees are collected from other applicants and sources.</p>			
	<p>4.12.2</p>	<p>Street Frontage and Accessways. In order to mitigate the potentially hazardous situations created by inadequate street frontage and access improvements, prior to the issuance of grading permits, the Project applicant shall modify the Project Site Plan to the satisfaction of the County of Monterey departments of Public Works and Planning to provide the following design features on Corral de Tierra Road and SR-68:</p> <ul style="list-style-type: none"> A. Extend the twelve-foot southbound merge lane to the main entrance; B. Stripe an eleven-foot southbound through lane; C. Construct an eleven-foot southbound turn lane; D. Construct a raised center divide to prevent left turning movements; E. Restripe an eleven-foot northbound through/left turn lane; F. Construct a twelve-foot northbound right turn lane; G. Construct a northbound four-foot Class II bicycle lane; H. Construct a five-foot sidewalk on east side of Corral de Tierra Road; I. Provide a three-foot foot utility, traffic sign, and public facilities easement behind back of walk; J. Redesign the site plan to provide a minimum 40 foot throat depth for all driveways on Corral de Tierra Road; and K. Eliminate the northernmost driveway on Corral de 	<p>The project applicant shall modify the site plan to the satisfaction of the County of Monterey Department of Public Works with specific design features to address street frontage and access improvements.</p>	<p>The County of Monterey Department of Public Works</p>	<p>Prior to issuance of a grading permit</p>

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
		<p>Tierra Road.</p> <p>L. Additionally the following modifications are required on SR-68:</p> <p>M. Redesign the site plan to provide a 60 foot deep driveway throat on the eastern most driveway on SR-68;</p> <p>N. Eliminate the westernmost driveway on SR-68;</p>			
	4.12.3	<p>Class II Bikeway. In order to maintain consistency with the General Plan policy 37.4.1 and Toro Area Plan policy 39.2.2.2, the applicant shall install a Class II Bikeway along the Project frontage on Corral de Tierra Road.</p>	<p>The project applicant shall pay to the County of Monterey Department of Public Works for remittance to TAMC the Regional Development Impact Fee to mitigate the Project impact at the intersection of SR-68/San Benancio Road.</p>	The County of Monterey Department of Public Works	Prior to issuance of a grading permit
	4.12.4	<p>Impact Fee for Cumulative Traffic Impacts at SR-68/San Benancio Road; SR-68/Corral de Tierra Road; and SR-68/Laureles Grade. Prior to the issuance of building permits, the Project applicant shall comply with one of the following actions to address cumulative impacts to intersections along SR-68:</p> <ol style="list-style-type: none"> Upon issuance of each building permit for proposed development on the Site, the applicant shall contribute his proportionate fair share, as calculated by the County, towards the "State Route 68 Commuter Improvements" through payment of the TAMC Regional Development Impact Fee (RDIF) in effect at that time. The TAMC RDIF payment will be earmarked for completion of the Cal Trans Project Study Report (PSR) for the 2.3 miles "State Route 68 Commuter Improvements" project identified with the TAMC RDIF; or Prior to the issuance of the first building permit for proposed development on the Site, the applicant shall pay 	<p>The project applicant shall pay to the County of Monterey its proportionate fair share towards the "State Route 68 Commuter Improvements" through payment of the TAMC Regional Development Impact Fee (RDIF) in effect at that time or shall fund or shall fund, initiate and complete a Caltrans Project Study Report for the 2.3 mile "State Route 68 Commuter Improvements" project.</p>	The County of Monterey Department of Public Works	Prior to issuance of a grading permit

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
		<p>the entire fair share for the proposed development toward the "State route 68 Commuter Improvements" through payment of the TAMC RDIF or;</p> <p>3. The Project applicant shall fund, initiate and complete a Caltrans Project Study Report for the 2.3 mile "State Route 68 Commuter Improvements" project, identify the total roadway improvement costs, as well as each Project applicant's proportionate fair share of those costs. If costs of the PSR exceed the Project's proportionate fair share of the TAMC RDIF obligation, the applicant shall be reimbursed the amount in excess of the proportionate fair share. Monterey County will enter into a reimbursement agreement with the Project applicant to refund the costs in excess of the proportionate fair share of the TAMC RDIF as additional fees are collected from other applicants and sources.</p>			
	4.13.1	<p>Passive Solar Design Elements. Prior to final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a building plan which incorporates the following passive solar design elements to the extent feasible:</p> <ul style="list-style-type: none"> • Building orientation that maximizes energy gain from the sun, shade, and wind. • Thermal mass materials, such as tile or brick, used in flooring or walls, especially south-facing walls, to store the sun's heat during the day and release it back into the building at night or when the temperature drops. • Insulation of both the ceilings and walls. • Passive solar design techniques such as large south and west-facing windows with proper window overhangs and/or reflective window film to improve heating and cooling of the building naturally, reducing the need for artificial heating or cooling mechanisms. 	The project applicant shall submit to the County of Monterey RMA- Planning Department a building plan which incorporates passive solar design elements.	The County of Monterey RMA- Planning Department	Prior to final development map/plan approval

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
		<ul style="list-style-type: none"> A daylighting system to effectively integrate daylight with electrical lighting systems to reduce electricity consumption when sufficient daylight is present within the building. 			
4.13.2		<p>Energy Efficient Building Equipment and Design Elements. Prior to the final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a building plan which incorporates the following energy efficient building equipment and design elements to the extent feasible:</p> <ul style="list-style-type: none"> Water heating equipment which includes integral automatic temperature controls and circulating service water system controls such as geothermal heat pumps - Geothermal heat pumps provide heating, cooling, and hot water, and are generally more efficient and less expensive to operate and maintain than conventional systems. The installation of lighting systems with automatic time switch controls, occupant-sensing devices such as motion detectors, automatic daylighting controls, dimmers, indoor photosensors, and efficient security, street, and parking lot lighting (e.g. high pressure low sodium fixtures). The use of alternative energy sources such as photovoltaic (i.e., solar electric) systems on all building rooftops to reduce the Project's electrical energy consumption. The use of alternative building materials that contain post-consumer recycled materials to the greatest extent possible. 	The project applicant shall submit to the County of Monterey RMA- Planning Department a building plan which incorporates energy efficient building design elements.	The County of Monterey RMA- Planning Department	Prior to final development map/plan approval
4.13.3		<p>Energy Management Design Systems. Prior to final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a building plan which incorporates energy management systems to control space conditioning or heating,</p>	The project applicant shall submit to the County of Monterey RMA- Planning Department a building plan which incorporates energy management systems.	The County of Monterey RMA- Planning Department	Prior to final development map/plan approval

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
		ventilating, or air conditioning (HVAC) systems including operating hours, set point, scheduling of chillers, etc.			
	4.13.4	Landscape Design Plan. Prior to final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a landscape design plan which integrates heat island minimization, xeriscape principals, and native drought-tolerant plants.	The project applicant shall submit to the County of Monterey RMA- Planning Department a landscape design plan which integrates heat island minimization, xeriscape principals, and native drought-tolerant plants.	The County of Monterey RMA- Planning Department	Prior to final development map/plan approval
	4.13.5	Alternative Transportation Design. Prior to final development map/plan approval, the applicant shall submit to the County of Monterey RMA-Planning Department for review and approval a site plan which increases the potential for the use of alternative transportation to access the Site. The plan shall include a transit stop on SR-68 as recommended and approved by Caltrans and Monterey-Salinas Transit, and an improved pedestrian area connecting the transit stop to the shopping village (refer to mitigation measures in Section 4.1.8 of the EIR).	The project applicant shall submit to the County of Monterey RMA- Planning Department a development plan which increases the potential for the use of alternative transportation to access the Site.	The County of Monterey RMA- Planning Department	Prior to final development map/plan approval
	4.13.6	LEED Compliance. As defined by the LEED Program of the United States Green Building Council, the project design shall comply with the requirements that are consistent with a "LEED Certified" designation. As part of the application for building permits, the applicant shall provide evidence to the County of Monterey RMA-Planning Department that the Project has received a LEED Certified designation or evidence that the Project design includes sufficient elements that demonstrate consistency with the LEED Certified designation.	The project applicant shall provide the County of Monterey RMA- Planning Department evidence that a LEED Certified designation has been met.	The County of Monterey RMA- Planning Department	Prior to occupancy or use of the new project buildings
	4.13.7	Capacity of Wastewater Treatment Facility. Prior to approval of any building permits, the applicant shall verify that there is sufficient capacity in the California Utilities Service, Inc. (CUS) wastewater treatment facility to address the wastewater needs of the Project. If the CUS facility has exceeded 60% of its existing capacity or the Project would cause the facility to exceed its permitted capacity, then the County of Monterey would not issue a building permit until such time as the CUS has attained a revised permit from the Regional Water Quality Control Board.	The project applicant shall verify that there is sufficient capacity in the CUS wastewater treatment facility to address the wastewater needs of the project.	The project applicant	Prior to approval of building permits

Permit Cond. Number	Mitig. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
	4.14.1	<p>Construction and Building Materials. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the following measures are incorporated into the design and construction of the Project:</p> <ul style="list-style-type: none"> • Use locally produced and/or manufactured building materials for construction of the Project; • Recycle/reuse demolished construction material; and • Use “Green Building Materials,” such as those materials which are resource efficient, and recycled and manufactured in an environmentally friendly way, including low Volatile Organic Compound (VOC) materials. 	<p>The project applicant shall provide the County of Monterey RMA- Planning Department evidence that “green building materials” have been incorporated into the design and construction of the Project.</p>	<p>The County of Monterey RMA- Planning Department</p>	<p>Prior to issuance of a grading permit</p>
	4.14.2	<p>Water Conservation and Efficiency Measures. Prior to issuance of a grading permit, the County of Monterey RMA- Planning Department shall ensure that the following measures are incorporated into the design and construction of the Project:</p> <ul style="list-style-type: none"> • Devise a comprehensive water conservation strategy appropriate for the Project and location. The strategy may include the following, plus other innovative measures that might be appropriate: • Water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls; • Energy-efficient irrigation systems and devices; • Water –efficient building design: <ul style="list-style-type: none"> ○ Energy-efficient and water-efficient fixtures and appliances, including low-flow faucets, dual-flush toilets and waterless urinals; ○ Restrictive watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff; and ○ Separate, non-potable distribution system to 	<p>The County of Monterey RMA- Planning Department shall ensure that a comprehensive water conservation strategy appropriate for the Project and location has been incorporated into the design and construction of the Project.</p>	<p>The County of Monterey RMA- Planning Department</p>	<p>Prior to issuance of a grading permit</p>

Permit Cond. Number	Mitigation Measures	Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.	Responsible Party for Compliance	Timing
	<p>accommodate the potential future use of recycled water for landscape irrigation needs of large areas with irrigated landscaping.</p>			
4.14.3	<p>Incentives for the Reduction of Automobile Trips. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the following measures are incorporated into the design and construction of the Project:</p> <ul style="list-style-type: none"> • The applicant shall designate 5% of all parking spaces within the development for shared employee parking (e.g., carpools and vanpools). • The applicant shall designate two areas in the development for bicycle parking. Each shall accommodate at least 25 non-motorized vehicles. 	<p>The County of Monterey – RMA Planning Department shall ensure that incentives for the reduction of automobile trips are incorporated into the design and construction of the Project.</p>	<p>The County of Monterey – RMA Planning Department</p>	<p>Prior to issuance of a grading permit.</p>
4.14.4	<p>Waste Disposal. Prior to issuance of a grading permit, the County of Monterey RMA-Planning Department shall ensure that the following measure is incorporated into the design and construction of the Project:</p> <ul style="list-style-type: none"> • The applicant shall include notes on all site plan specifications stating that all construction contracts for the Project would be required to separate all construction waste into recyclable and non-recyclable materials and that construction waste must be taken to the closest waste disposal site. 	<p>The County of Monterey – RMA Planning Department shall ensure that all site plan specifications state that the Project would be required to separate all construction waste into recyclable and non-recyclable materials and that construction waste must be taken to the closest waste disposal site.</p>	<p>The County of Monterey – RMA Planning Department</p>	<p>Prior to issuance of a grading permit</p>

8.0. ORGANIZATIONS AND PERSONS CONTACTED

Association of Monterey Bay Area Governments

Carl Sdoryk, General Manager, Monterey-Salinas Transit

Chad Alino, County of Monterey, Department of Public Works

Dave Crozier, County of Monterey, Central Patrol

Dee Baker, Superintendent, Washington Union School District

Diana Palmer, Superintendents Office, Washington Union School District

Dorothy Priolo, Deputy Fire Marshal, Salinas Rural Fire Protection District

Elaina Smith, Waste Management, Inc.

Gary Black, Hexagon Transportation Consultants, Inc.

Harold Kahn, Superintendent, Spreckels Union School District

Howard Franklin, County of Monterey, Water Resources Department

Hunter Harvath, Director of Administration, Monterey-Salinas Transit

Jean Getchell, Supervising Air Quality Planner, Monterey Bay Unified Air Pollution Control District

Karen Luna, Manager Planning/Facilities, Salinas Union High School District

Luis Osorio, Planning Services Manager, County of Monterey Planning Department

Lynn Burgess, Parks Planning Manager, County of Monterey

Mike Kanalakis, Sheriff, County of Monterey Office of the Sheriff

Mike Urquides, Fire Chief, Salinas Rural Fire Department

County of Monterey, RMA-Planning Department

Monterey Regional Waste Management District

Richard Higgins, Park Manager, County of Monterey Parks

Salinas City Planning Department

Sand City Planning Department

Tino Arellano, EMS Analyst, County of Monterey Health Department-Emergency Medical Services Division

Tracy Brown, Central Patrol Station Commander, County of Monterey Sheriffs Office

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