City of Agoura Hills

Agoura Village Specific Plan

Updated Final Revised and Recirculated Environmental Impact Report

Volume I: Text

August 2008

AGOURA VILLAGE SPECIFIC PLAN

Updated Final Revised and Recirculated Environmental Impact Report

Volume I: Text

Prepared by:

City of Agoura Hills
Planning and Community Development Department
30001 Ladyface Court
Agoura Hills, CA 91301
Contact: Allison Cook
Senior Planner/Environmental Analyst

Prepared with the assistance of:

Rincon Consultants, Inc.
790 East Santa Clara Street, Suite 103
Ventura, California 93001

August 2008

This report is printed on 50% recycled paper with 10% post-consumer content and chlorine-free virgin pulp.

Agoura Village Specific Plan
Updated Final Revised and Recirculated EIR

Table of Contents

Page

Volume I

Executive Summary ES-1

1.0 Introduction
- 1.1 Purpose and Legal Authority 1-1
- 1.2 Scope and Content 1-2
- 1.3 Lead, Responsible, and Trustee Agencies 1-4
- 1.4 Environmental Review Process 1-4

2.0 Project Description
- 2.1 Project Applicant 2-1
- 2.2 Project Location 2-1
- 2.3 Existing Characteristics of the Project Area 2-1
- 2.4 Project Characteristics 2-8
- 2.5 Pending Projects 2-21
- 2.6 Project Objectives 2-22
- 2.7 Required Approvals 2-23

3.0 Environmental Setting
- 3.1 Regional Setting 3-1
- 3.2 Project Site Setting 3-2
- 3.3 Cumulative Projects Setting 3-3

4.0 Environmental Impact Analysis 4-1
- 4.1 Aesthetics 4.1-1
- 4.2 Air Quality 4.2-1
- 4.3 Biological Resources 4.3-1
- 4.4 Geology 4.4-1
- 4.5 Hazards and Hazardous Materials 4.5-1
- 4.6 Historic and Archaeological Resources 4.6-1
- 4.7 Hydrology and Water Quality 4.7-1
- 4.8 Land Use 4.8-1
- 4.9 Noise 4.9-1
- 4.10 Public Services 4.10-1
- 4.11 Transportation and Circulation 4.11-1

5.0 Growth Inducing Impacts
- 5.1 Growth Inducing Effects 5-1
- 5.2 Removal of Obstacles to Growth 5-3

6.0 Alternatives
6.1 Alternative 1: No Project 6-1
6.2 Alternative 2: Reduced Specific Plan Area 6-11
6.3 Alternative 3: Reduced Buildout Density 6-17
6.4 Alternative 4: Alternate Location 6-23
6.5 Alternative 5: Reduced Buildout Density (Without Residential Development) 6-29
6.6 Alternatives Considered But Rejected 6-35
6.7 Environmentally Superior Alternative 6-35

7.0 References and Report Preparers
7.1 References 7-1
7.2 Report Preparers 7-6

List of Figures

Figure 1-1 Environmental Review Process 1-7
Figure 2-1 Regional Location 2-2
Figure 2-2 Project Vicinity 2-3
Figure 2-3 Existing Conditions 2-4
Figure 2-4 Potential Buildout Zoness 2-7
Figure 2-5 Specific Plan Map 2-9
Figure 2-6 Example of Mixed Use 2-18
Figure 2-7 Example of Public Space 2-18
Figure 2-8 Example of Parking Concept 2-20
Figure 4.1-1 Photo Survey Locations 4.1-3
Figure 4.1-2 Views of Planning Area (Facing North) 4.1-5
Figure 4.1-3 Views of Prominent Natural Features 4.1-7
Figure 4.1-4 Existing Development and Urban Features 4.1-9
Figure 4.1-5 Views of SP area from Scenic Roadways 4.1-11
Figure 4.3-1 Vegetation Mapping 4.3-5
Figure 4.3-2 Sensitive Elements Recorded by CNDDB 4.3-15
Figure 4.3-3 Sensitive Species Map 4.3-17
Figure 4.3-4 Open Space Resources 4.3-25
Figure 4.3-5 Regional Wildlife Corridors 4.3-27
Figure 4.4-1 Regional Seismic Faults 4.4-4
Figure 4.4-2 Site Topography 4.4-5
Figure 4.4-3 Soils Map 4.4-7
Figure 4.4-4 Liquefaction and Slope Stability 4.4-9
Figure 4.7-1 Malibu Creek Watershed 4.7-5
Figure 4.7-2 Existing Drainage Conditions 4.7-7
Figure 4.7-3 Flood Insurance Rate Map 4.7-8
Figure 4.7-4 Post Project Drainage Boundary 4.7-19
Figure 4.9-1 Noise Compatibility Matrix 4.9-5
Figure 4.9-2 Agoura Hills General Plan Update 2010 CNEL Noise Contours 4.9-6
Figure 4.9-3 Projected Agoura Village 2010 CNEL Noise Contours 4.9-14
Figure 4.10-1 Existing Sewer Line Facilities 4.10-3
Figure 4.10-2 Recreational Facilities 4.10-8
Figure 4.11-1 Street Network/Project Site Location 4.11-2
Figure 4.11-2 Project Trip Distribution Percentages 4.11-12

Figure 4.11-3a Project –Added Average Daily Traffic and A.M. Peak Hour Traffic Volumes....4.11-13
Figure 4.11-3b Project –Added Average Daily Traffic and A.M. Peak Hour Traffic Volumes Continued....4.11-14
Figure 4.11-4a Project –Added P.M. Peak Hour Traffic Volumes....4.11-15
Figure 4.11-4b Project –Added P.M. Peak Hour Traffic Volumes Continued....4.11-16
Figure 4.11-5a Cumulative + Project Average Daily Traffic and A.M. Peak Hour Volumes....4.11-18
Figure 4.11-5b Cumulative + Project Average Daily Traffic and A.M. Peak Hour Volumes Continued....4.11-19
Figure 4.11-6a Cumulative + Project P.M. Peak Hour Volumes....4.11-20
Figure 4.11-6b Cumulative + Project P.M. Peak Hour Volumes Continued....4.11-21
Figure 6-1 Alternative 1: No Project....6-3
Figure 6-2 Alternative 2: Reduced Specific Plan Area....6-13
Figure 6-3 Alternative 3: Reduced Buildout Density....6-20
Figure 6-4 Alternative 4: Alternate Location....6-25
Figure 6-5 Alternative 5: Reduced Buildout Density (Without Residential Dev.)....6-31

List of Tables

Table ES-1 Summary of Environmental Impacts....ES-7
Table 2-1 Current Land Use Information....2-5
Table 2-2 Projection of Full Buildout Under Current General Plan....2-6
Table 2-3 Maximum Buildout Potential for Agoura Village Specific Plan....2-13
Table 2-4 Uses Allowed Under the Specific Plan....2-14
Table 3-1 Cumulative Projects List....3-3
Table 4.2-1 Current Federal and State Ambient Air Quality Standards....4.2-2
Table 4.2-2 Ambient Air Quality Data for Thousand Oaks, Ventura County....4.2-3
Table 4.2-3 Ambient Air Quality Data for the San Fernando Valley, Los Angeles County....4.2-4
Table 4.2-4 SCAQMD Air Quality Significance Thresholds....4.2-6
Table 4.2-5 SCAQMD LSTs for Construction and Operation....4.2-7
Table 4.2-6 Estimated Maximum Daily Air Pollutant Emissions During Construction....4.2-9
Table 4.2-7 Estimated Mitigated Maximum Daily Air Pollutant Emissions During Construction....4.2-11
Table 4.2-8 Potential Health Risks Associated With Grading Operations....4.2-12
Table 4.2-9 Operational Emissions Associated with the Proposed Project (lbs/day)....4.2-15
Table 4.2-10 Mitigated Operational Emissions Associated with the Proposed Project (lbs/day)....4.2-17
Table 4.3-1 Special-Status Plant Species Potentially Occurring in the Agoura Village Specific Plan Area....4.3-19
Table 4.3-2 Special-Status Wildlife Species Potentially Occurring in the Agoura Village Specific Plan Area....4.3-20
Table 4.3-3 Special Status Plant Communities Occurring Within a 5-mile Radius of the Agoura Village Specific Plan Area....4.3-23
Table 4.4-1 Significant Faults and Maximum Movement....4.4-13

Table 4.7-1 Storm Water Monitoring Data for the Malibu Creek Watershed.....4.7-10
Table 4.7-2 Existing Beneficial Uses of Surface Waters in the Malibu Creek Watershed4.7-12
Table 4.7-3 Peak Runoff Flows for Pre- and Post Project Conditions.....4.7-20
Table 4.7-4 Estimated Contaminant Levels in Surface Runoff 4.7-24
Table 4.8-1 Land Use Information for the Project Area 4.8-3
Table 4.8-2 Existing Land Uses Within the Developed Portion of the Agoura Village Project Area.....4.8-3
Table 4.9-1 Common Environmental Noise Source Sound Levels 4.9-2
Table 4.9-2 Measured Noise Levels in the Site Vicinity.....4.9-3
Table 4.9-3 Significance of Changes in Operational Roadway Noise Exposure 4.9-8
Table 4.9-4 Typical Noise Level Ranges at Construction Sites 4.9-8
Table 4.9-5 Comparison of Pre-Project and Post-Project Traffic Noise On Study Area Roadways.....4.9-10
Table 4.9-6 Projected Noise Attenuation Due to Structural Density & Distance...4.9-11
Table 4.10-1 Enrollments and Capacities of Schools Serving the Site Vicinity 4.10-4
Table 4.10-2 Recreational Facilities in the City of Agoura Hills 4.10-6
Table 4.10-3 Estimated Waste Water Generation for Future Land Uses within the Specific Plan Area 4.10-10
Table 4.10-4 Estimated Water Demand Generated by Land Uses Within the Specific Plan Area.....4.10-11
Table 4.10-5 Generation Factors and Student Generation.....4.10-15
Table 4.10-6 Post Project Enrollments and Capacities of Schools Serving the Site Vicinity 4.10-15
Table 4.10-7 Projected Solid Waste Generation at Full Specific Plan Buildout 4.10-17
Table 4.11-1 Study-Area Roadways & Intersections.....4.11-3
Table 4.11-2 Existing Roadway Volumes and Levels of Service 4.11-6
Table 4.11-3 Existing A.M. and P.M. Peak Hour Intersection Levels of Service.....4.11-7
Table 4.11-4 Agoura Village Trip Generation 4.11-10
Table 4.11-5 Project Trip Distribution Percentages 4.11-11
Table 4.11-6 Cumulative and Cumulative + Proposed Agoura Village Specific Plan Roadway Volumes and Levels of Service.....4.11-17
Table 4.11-7 Cumulative and Cumulative + Proposed Agoura Village Specific Plan A.M. Peak Hour Intersection Levels of Service 4.11-22
Table 4.11-8 Cumulative + Proposed Agoura Village Specific Plan P.M. Peak Hour Intersection Levels of Service 4.11-23
Table 4.11-9 Cumulative + Proposed Agoura Village Specific Plan Mitigated A.M. Peak Hour Intersection Levels of Service 4.11-27
Table 4.11-10 Cumulative + Proposed Agoura Village Specific Plan Mitigated P.M. Peak Hour Intersection Levels of Service 4.11-27
Table 4.11-11 Peak Parking Demand Times.....4.11-31
Table 4.11-12 Acceptable Walking Distances for Shared Parking Facilities 4.11-31
Table 5-1 Employment and Housing Projections for the Las Virgenes, Malibu, Conejo COG.....5-2
Table 6-1 Comparison of Project Alternatives 6-1
Table 6-2 Alternative 1: No Project.....6-5
Table 6-3 No Project Alternative Traffic Generation.....6-10
Table 6-4 Alternative 2: Reduced Specific Plan Area.....6-12
Table 6-5 Alternative 3: Reduced Buildout Density.....6-18

Table 6-6 Alternative 4: Alternate Location 6-23
Table 6-7 Alternative 5: Reduced Buildout Density (Without Residential Development) 6-30
Table 6-8 Comparison of Environmental Effects 6-37

Volume II

Appendices

Appendix A: Air Quality Emissions Calculations
Appendix B: Biological Resource Studies
Appendix C: Geotechnical Studies
Appendix D: Water Quality and Runoff Calculations
Appendix E: Noise Modeling Calculations
Appendix F: Traffic Study and Traffic Technical Appendix
Appendix G: Response to Comments on the DEIR
Appendix H: NOP Comments
Appendix I: Mitigation Monitoring and Reporting Program
Appendix J: Response to Comments on the Updated Draft Revised and Recirculated EIR

Volume III

Biological Technical Appendix

EXECUTIVE SUMMARY

This document is an Updated Revised and Recirculated Final Environmental Impact Report (Updated RR EIR) for the Agoura Village Specific Plan project. The Updated RR EIR was recirculated (June 23rd through August 7th, 2008) for additional public review and comment in response to a Writ of Mandate issued by the Superior Court of California, County of Los Angeles in the case of Mary Altmann vs. City of Agoura Hills, April 20, 2007. This Updated Final Revised and Recirculated EIR incorporates the Updated RR EIR sections, those sections of the 2006 Final EIR which did not change and were not recirculated (including the 2006 comments and response to comments), and comments and responses to comments made on the Updated RR EIR. Note that all recommended changes that were adopted in the 2006 Final EIR have been accepted within this document for the purposes of reading clarity. This document illustrates (in underline format) only those changes made between the Updated Draft RR EIR and the Updated Final RR EIR. This section summarizes the characteristics of the proposed project, the environmental impacts associated with the project, and mitigation measures recommended to mitigate identified significant impacts.

PROJECT SYNOPSIS

Project Applicant

City of Agoura Hills
30001 Ladyface Court
Agoura Hills, California 91301

Project Description

The proposed project involves adoption of a Specific Plan (the Agoura Village Specific Plan) to guide future development within an approximately 233-acre area in the southern portion of the City in and around the intersection of Agoura Road and Kanan Road. The proposed Specific Plan would provide the planning framework to guide future development within the project area.

Currently about 32 acres of the project area located north of Agoura Road are developed with a mix of commercial and retail uses while the lands south of Agoura Road are mostly undeveloped. The Specific Plan outlines land use development standards and design criteria that would apply to any new development as well as any redevelopment of existing uses within the project area. The Specific Plan is intended to create a "Village" setting for the project area and involves a mix of residential, general commercial, office, and restaurant uses. Full buildout of the Specific Plan would result in development of between 235 and 293 residential units and a total of up to 576,458 square feet of new office, retail, restaurant, community center, and hotel building area; and redevelopment of the existing 372,042 square feet of office and retail space with a higher density development within the same footprint. Approximately 137 acres along the southern boundary of the project area would be preserved as open space. Future development within the project area would be subject to the development standards and design criteria as well as the policy guidance contained in the Specific Plan. All future development projects, including both new projects and revitalization of existing development, would be required to obtain an Agoura Village Development Permit (AVDP) prior to construction.

ALTERNATIVES

As required by CEQA, the EIR examines a range of alternatives to the proposed project. Studied alternatives include:

- **No Project (Alternative 1) –** This alternative assumes that the project is not constructed, and that the project area builds out in accordance with the land use designations and policies contained in the City of Agoura Hills General Plan. While this alternative would not accomplish the community vision of creating a "Village" setting for the project area, it would be anticipated to reduce overall impacts associated with land use, public services, and traffic. This alternative would be expected to require about the same amount of grading, soil export, and construction related noise and air emissions compared to the proposed Specific Plan. Therefore, impacts related to air quality, geology and seismic activity, hazards, historic resources, hydrology, water quality, and noise, would be anticipated to be about the same as impacts under the Specific Plan.
- **Reduced Specific Plan Area (Alternative 2) –** This alternative would be similar to the proposed project except that it would exclude all Zones west of Kanan Road (Zones B, D west, F and G). Avoidance of the area west of the intersection of Agoura and Kanan Roads would reduce the overall Specific Plan area by about 25 acres. This alternative would reduce the amount of grading and soil export, impacts to biological resources, changes to the visual character of the area, pedestrian and traffic safety issues related to building a roundabout at the corner of Kanan and Agoura Roads and pedestrian traffic moving across Kanan Road.
- **Reduced Buildout Density (Alternative 3) –** This alternative would be similar to the Specific Plan except that the project area would be developed with a lower density. Development at a lower density would reduce the overall building square footage for the proposed development by roughly 109,000 square feet. The primary benefit of this alternative would be to provide more open space which would help avoid biological impacts and to reduce demand on local infrastructure.
- **Alternate Location (Alternative 4) –** This alternative redefines the Specific Plan boundaries and shifts development west of Kanan Road. The concept for this alternative would be to create the same Agoura Village atmosphere with development on both sides of Agoura Road. The purpose of this alternative is to avoid impacts related to modifying natural landforms onsite, to avoid developing near Medea Creek, and to shift pedestrian movement away from Kanan Road. It should be noted that the alternative location is located partially within the proposed Specific Plan boundaries, due to the minimal remaining undeveloped areas within the City of Agoura Hills. Thus, the lack of vacant land within the City limited the alternative location alternatives for this project. Overall this alternative increases potential impacts and would be considered less desirable than the proposed Specific Plan.
- **Reduced Buildout Density Without Residential Development (Alternative 5) –** This alternative would be similar to the Specific Plan, but would reduce the overall building square footage by about 250,300 square feet and would drop all residential development. Development at this scale would retain the design standards and guidelines outlined in the Specific Plan, but would substantially reduce traffic, air quality, and noise related impacts. The primary goal of this alternative is to reduce the Specific Plan to a size that would avoid Class I impacts related to traffic.

The Reduced Buildout Density (Without Residential Development) alternative would be considered environmentally superior overall. This scenario has less impact than the proposed project for a number of reasons. This alternative would avoid the introduction of residential uses and would reduce the amount of traffic moving through the Specific Plan area. This would eliminate one Class I impact associated with roadway and intersection traffic. The reduction in traffic would further reduce air quality and noise related impacts within the area. Additionally, this alternative would incrementally reduce impacts relating to biological resources and public services. Although this alternative would substantially reduce project related impacts, as compared with the proposed Specific Plan, the elimination of residential uses makes this alternative infeasible. Thus, this alternative would fail to meet the basic objectives of the "Mixed-use Village," to transition from the area's current state toward a "Mixed-use" pedestrian-oriented center with residential uses and retail shops, restaurants, offices, and entertainment uses that serve the City and the larger Conejo Valley region.

Of the remaining alternatives, the No Project alternative is considered environmentally superior, as it would eliminate one Class I impact associated with roadway traffic. This alternative would also reduce the overall impact of several other impacts found to be significant but mitigable under the proposed project. However, this alternative also would not fulfill the basic objective of the project. As this alternative lacks a residential component, as well as the development guidelines and standards provided in the Specific Plan, this alternative would not provide for a "Mixed-use" pedestrian-oriented center with residential uses and retail shops, restaurants, offices, and entertainment uses that serve the City and the larger Conejo Valley region.

The Reduced Specific Plan Area alternative would reduce the amount of potential grading activity onsite, soil export, impacts to biological resources, hydrological conditions, pedestrian and traffic safety issues related to building a roundabout at the corner of Kanan and Agoura Roads and pedestrian traffic moving across Kanan Road. However, this alternative would not include the proposed roundabout, which is considered a key element of the Specific Plan. This alternative would also not fully achieve a pedestrian oriented village environment, as envisioned in the Specific Plan, since a major component of the area (Kanan intersection) of the village would be removed. This alternative would result in the same Class I impacts as those under the proposed Specific Plan, and thus would not result in a substantial improvement in the environmental impacts of the proposed project. This alternative has the potential to avoid the Class I impact on Agoura Road and accomplish the project objectives of traffic calming needed to create the Village setting. However, the ability to avoid this impact will largely depend upon the nature and intensity of uses that could be developed within that area (25 acres) that has been deleted from the proposed Specific Plan. It is important to note that development in Zones B and F would likely occur even without the Specific Plan. Thus, with implementation of the Specific Plan, these areas would be planned and integrated together.

The Reduced Buildout Density alternative would generally have the same level of impact with respect to aesthetics, air quality, geologic hazards, hazardous materials, historic and cultural resources, hydrology, water quality, land use, noise, public services, and transportation, as the Specific Plan. However, this alternative would likely free up more open space, would reduce demand on local infrastructure, and would lessen encroachment on biological resources, such as oak trees, onsite. Overall, this alternative is considered very similar to the Specific Plan. However, this alternative would result in the same unavoidably significant impacts as those under the proposed

project. This alternative would not have a substantial improvement in environmental impacts over those of the proposed project.

The Alternate Location alternative would increase environmental impacts, as compared with the Specific Plan. Given the topography along the south side of Agoura Road and the presence of numerous important oak trees within the area, the alternative would have a greater significant impact with respect to biological resources, geologic conditions, and public services. Overall, this alternative increases potential impacts and would be considered less desirable than the proposed Specific Plan.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table ES-1 includes a brief description of the environmental impacts associated with the proposed project, proposed mitigation measures, and impacts after mitigation. Impacts are categorized by class. Class I impacts are defined as significant, unavoidable adverse impacts which require a statement of overriding considerations to be issued per Section 15093 of the *State CEQA Guidelines* if the project is approved. Class II impacts are significant adverse impacts that can be feasibly mitigated to less than significant levels and which require findings to be made under Section 15091 of the *State CEQA Guidelines*. Class III are considered less than significant impacts. The following is a list of project impacts by impact classification.

Class I - Unavoidable Adverse Impacts

***Air Quality**: Construction emissions would exceed established SCAQMD thresholds for ROG and NO_x. Operation of the proposed mixed use development would generate long-term air pollutant emissions exceeding SCAQMD operational significance thresholds.*

***Traffic:** Full buildout of the Specific Plan will result in the addition of 17,593 new average daily trips onto the local circulation network. This would cause one street segment to operate below the City's LOS C standard.*

Class II -Significant Impacts That Can Be Mitigated To Less than Significant Levels

***Aesthetics**: The proposed development would alter views from U.S. 101 and other identified scenic highways and roadways and would potentially modify two significant natural landforms within the Specific Plan area. The proposed project would produce new sources of glare that would intensify daytime glare within the planning area. Development of the Agoura Village Specific Plan could result in the removal of oak trees that are considered to be an important aesthetic resource, pursuant to the Oak Tree Preservation Guidelines.*

***Air Quality**: Grading equipment and diesel trucks used for earth export have the potential to expose sensitive populations in the vicinity to elevated levels of diesel exhaust. The proposed construction of an equestrian trail along Medea Creek that would connect to the existing equestrian trail along Cheseboro Creek and Agoura Road has the potential to create nuisance odors within the portion of the project area that is adjacent Medea Creek.*

***Biological Resources**: Full build out of the Specific Plan area has the potential to affect sensitive species (including two federally listed plant species: Agoura Hills dudleya and Lyon's pentacheata), including nesting raptors and migratory birds. Build out of the Specific Plan area has the potential to adversely affect sensitive communities onsite. Build out within the Specific Plan area may require removal of oak trees and indirectly affect additional oaks. Individual project*

development could disturb wetlands and areas under the jurisdiction of the CDFG and Corps and Coastal Sage Scrub habitat.

Geology: *Seismically induced ground shaking could destroy or damage structures and infrastructure, resulting in loss of property or risk to human safety. Future seismic events could result in liquefaction of soils within the Specific Plan area. Specifically, new development near the eastern boundary of the Specific Plan area would be most susceptible to liquefaction hazards. Slope instability can pose a geologic hazard onsite. The project is underlain by Conejo Volcanics which would be difficult to excavate and may require the use of blasting to perform some excavations. The proposed project is located in an area underlain by expansive soils. Portions of onsite soil materials consist of fill materials and may not be suitable for compaction. Cut from the project site may also not be suitable for reuse as fill onsite as it could settle during earthquakes or due to construction-related loading.*

Hazards and Hazardous Materials*: The potential presence of hazardous materials on both developed and undeveloped properties within the project area has the potential to adversely affect future users, construction workers, and/or the environment.*

Historic and Archaeological Resources*: New development within the project area has the potential to cause a substantial change to identified cultural resources located in the project area, and could expose previously undiscovered, buried cultural resources.*

Hydrology and Water Quality*: The proposed project would substantially alter the existing drainage pattern of the Specific Plan area. This would increase peak storm water flows and would contribute runoff water which may exceed the capacity of existing or planned stormwater drainage systems. Specific Plan build out may place structures within the 100-year floodplain, and may alter the existing conditions of Medea Creek.*

Land Use: *The proposed Specific Plan would generally be compatible with the existing surrounding commercial, freeway, and open space land uses and over time is intended to enhance the existing commercial uses within the project area. However, buildout of mixed uses (including possible density bonuses if specific criteria are met) as an integral part of the Specific Plan would potentially result in land use conflicts between planned new commercial and residential land uses and between proposed equestrian uses and residential uses. In general the proposed project would implement a majority of the applicable policies of SCAG's Regional Comprehensive Plan and Guide. However, since the City already exceeds locally recognized population and housing forecasts, any addition of new population or housing is considered significant, but mitigable.*

Noise: *Project construction, including possible blasting along the bases of the knoll onsite during site preparation, would create temporary noise levels that would be audible to nearby residents. Project-generated traffic would incrementally increase noise levels on roads in the project vicinity. The increase in noise due to project traffic exceeds the significance threshold for the following roadway segments: 1) Kanan Road North of Agoura Road; 2) Agoura Road West of Kanan Road; 3) Agoura Road between Kanan Road and Cornell Road; and 4) Agoura Road East of Cornell Road. Some of the new residences planned for the site would be in a noise environment that exceeds the normally acceptable range for residential development. Blasting in areas underlain by Conejo Volcanics may cause vibrations at existing commercial and residential uses within the AVSP area.*

Public Services: *Build out of new development within the Specific Plan area would incrementally increase demands on the LACFD, but is not anticipated to require new Fire Department personnel or equipment. However, because the project area is in a high severity wildfire zone and would potentially interfere with an emergency access route impacts to fire protection are considered significant but mitigable. Build out of the proposed Specific Plan would incrementally increase demand upon the Los Angeles County Sheriff's Department Lost Hills Substation and would potentially interfere with an emergency access route. Build out of the proposed Specific Plan*

would be expected to generate about 181 students at the Las Virgenes Unified School District. This would contribute to the current over-capacity condition at local schools.

Traffic: *Full buildout of the Specific Plan will result in the addition of 804 A.M. peak hour trips and 1,633 P.M. peak hour trips to the study-area intersections. This would generate adverse impacts at two intersections during the A.M. peak hour and at eight intersections during the P.M. peak hour. Project development would require access, circulation and parking improvements that may adversely affect pedestrian and bicycle movements and safety. In addition the proposed Specific Plan would provide for exceptions to the City's current parking requirements potentially resulting in the overall reduction of parking required for future development within the Specific Plan area.*

Class III - Less Than Significant Impacts

Aesthetics: *The proposed project would produce new sources of light that would intensify nighttime lighting within the planning area. Development of the southern portion of the Specific Plan would result in the transformation of the rural visual character of the southern project boundary area to a more urban, contemporary low-scale built environment.*

Biological Resources*: Build out of the Specific Plan area would potentially affect wildlife corridors.*

Hazards and Hazardous Materials*: Future development in the Specific Plan area, and specifically future development in the hillside areas south of Agoura Road, are in a wildland fire hazard area could create a public safety hazard. New development within the Specific Plan area would be required to comply with existing regulations intended to minimize the potential effects associated with wildfires. A release of hazardous materials associated with the use, storage, and transport of hazardous materials related to existing and new development within the Specific Plan area has the potential to result in adverse impacts to human health and safety and the environment. Existing regulations and hazardous materials management programs are in place to minimize the effects associated with unauthorized or accidental releases of hazardous materials.*

Hydrology and Water Quality*: During construction activities, the soil surface would be subject to erosion and temporary sedimentation and discharges of various pollutants to the downstream watershed. Groundwater near the project site is not utilized for consumption and is not anticipated to be adversely affected by the project. Urban land uses could adversely affect the quality of surface runoff because of increased pollutant loading, including such pollutants as oil, pesticides, and herbicides.*

Land Use: *Buildout of the Specific Plan would introduce residential land uses south of US 101, an area that is generally commercial in nature. While this would not physically divide an established community, it would allow for residential uses that are separated from other more traditional residential areas of the community, north of US 101. On balance, these changes could be found to be consistent with the intent of General Plan and other land use policies that apply to the project area.*

Public Services*: Build out of the proposed Specific Plan would generate an estimated 144,031 gallons per day (gpd) of wastewater. The Tapia Water Reclamation Facility has sufficient capacity to accommodate this level of new development. Build out of the Specific Plan would generate demand for an estimated 165,994 gallons of water per day (gpd). The LVMWD would be able to supply the projected volume of water. With implementation of mandated water conservation methods throughout the project area, impacts would be considered less than significant. Build out under the proposed Specific Plan would generate an estimated 2.3 tons of solid waste per day. Because the Calabasas Landfill has adequate capacity to accommodate such an increase, impacts related to solid waste are considered less than significant. The City currently has a shortage of parks and recreational facilities to meet the needs of its population. The population increase associated with build out of the Specific Plan area would exacerbate this shortage and increase demand for*

recreational facilities. However, in lieu fees given to the City would compensate for this impact by providing funding for additional facilities.

Class IV - Beneficial Impacts

Aesthetics: *Development of the portion of the Agoura Village Specific Plan area located between U.S. 101 and Agoura Road would improve the visual character of this area.*

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts		
Impact	**Mitigation Measures**	**Significance After Mitigation**
AESTHETICS		
Impact AES-1 The proposed development would alter views from U.S. 101 and other identified scenic highways and roadways. This is considered a Class II, *significant but mitigable* impact.	**AES-1 Retaining Wall Design**. In the event any proposed retaining walls are visible from designated scenic roadways, the City's Architectural Review Board shall determine whether they are consistent with the City's Architectural Design Standard and Guidelines (1992). If any wall is found to be inconsistent with the Guidelines, the Architectural Review Board shall recommend additional design features to bring the wall(s) into compliance. Possible design features may include the use of textured retaining walls with more natural features, such as those that simulate rocks or boulders. Additionally, design features may include the planting of landscape vegetation along the wall facing south toward the freeway. This landscape vegetation should include plants that provide vertical wall coverage, in order to enhance the visual character of the wall and break up the area of the wall that is visible from scenic corridors. Such retaining wall, landscaping and other related design features shall be shown on the project plans and verified by City Planning and Community Development Department Staff prior to issuance of a Grading or Building Permit.	Less than significant.
Impact AES-2 Development of the portion of the Agoura Village Specific Plan area located between U.S. 101 and Agoura Road would improve the visual character of this area, thereby resulting in Class IV, *beneficial*, impacts.	None required.	Beneficial.
Impact AES-3 Development of the Specific Plan would result in the transformation of the visual quality of the site. Implementation of the proposed AVSP development standards would result in Class III, *less than significant*, visual impacts to the rural visual character of this area. However, the potential development of two knolls onsite is considered a Class II, *significant but mitigable* impact on a substantial scenic resource.	The proposed Specific Plan includes a number of development standards that would reduce the visual impacts associated with the alteration of the natural topography due to grading activities. Moreover, a number of development standards would promote the preservation of natural landforms and resources (e.g., hillsides and oak trees) to the extent feasible, given the proposed building densities and infrastructure (e.g., roadways) required to accommodate the proposed uses within this area. Additionally, the Specific Plan would ensure site layout and design principles which dictate the arrangement of buildings and parking areas, the size and location of pedestrian spaces and landscaping, and how these features relate to one another. These development standards would reduce the visual impacts associated with site grading and alteration of natural landforms; and, thus, would reduce impacts related to the visual character or quality of the site and its surroundings to a less than significant level. However, these measures would not mitigate for the loss of the two knolls onsite. Therefore, the following mitigation is required to reduce impacts related to the removal of the knolls in Zone A south and Zone E.	With the mitigation above, impacts would be reduced less than significant. However, if avoidance and minimization are infeasible, the impacts would remain significant and unavoidable.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	AES-3 Avoidance of Knolls. The applicant shall avoid development, removal, or reduction (to include grading or blasting) of that knoll located south and east of the intersection of Agoura and Kanan Road. Although development of the knoll is unlikely, given that the Specific Plan would identify this area as Zone "G," the applicant shall minimize earthwork in this area in order to avoid substantially modifying a scenic resource. Additionally, the applicant shall minimize grading (subject to approval of City Community Planning and Development Department) of the knoll located south and east of the intersection of Agoura and Cornell Road. Although development and minor modifications would be allowed on the knoll, the majority of the knoll shall be preserved.	
Impact AES-4 The proposed project would produce new sources of light and glare that would intensify daytime glare and night lighting within the planning area. Implementation of the proposed development standards for exterior lighting would result in Class III, *less than significant*, visual impacts from night lighting. However, the introduction of new sources of glare within the planning area would result in Class II, *significant but mitigable*, visual impacts.	**AES-4 Glare Reduction.** Project design and architectural treatments shall incorporate additional techniques to reduce glare, such as:• Use of low reflectivity glass; • Use of plant material along the perimeter of structures to soften views; and,• Brush-polishing metal surfaces and/or use of metal surfaces that are not highly reflective.Plans for new development shall indicate the architectural treatments and/or landscaping to be used in order to reduce glare that could be generated by new development. Plans shall be reviewed by City staff, the Architectural Review Panel, and the City's Architectural consultant for compliance with this standard.	Less than significant.
Impact AES-5 Development of the Agoura Village Specific Plan could result in the removal oak trees that are considered to be an important aesthetic resource, pursuant to the Oak Tree Preservation Guidelines. This is considered a Class II, *significant but mitigable*, impact.	**AES-5** Each project applicant would be required to obtain a permit from the City and to comply with the provisions of the permit, prior to the approvals of removal of oak trees. In addition, implementation of Mitigation Measures BIO-3(a) through BIO-3(d) would ensure that damage to, and removal of, oak trees would be avoided to the extent feasible. Moreover, implementation of the Oak Tree Preservation Guidelines (§C.1) and Mitigation Measures BIO-3(a) through BIO-3(d) would ensure that when development impacts to oak trees cannot be avoided, oak trees are planted or replaced such that the overall population size of oak trees within the project area is not reduced.	With mitigation impacts would be less than significant. However, the City would need to approve a variance for oak tree removals if individual projects would remove more than 10% of the oaks on-site for any given development.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
AIR QUALITY		
Impact AQ-1 Project construction would generate air pollutant emissions that exceed construction thresholds for ozone precursors NOx, VOC (=ROG) and Fugitive Dust. Project construction is not expected to generate air pollutant emissions that exceed LSTs for the area. Because emissions cannot feasibly be reduced to below established thresholds, temporary construction impacts are considered Class I, *significant and unavoidable*.	**AQ-1(a) Fugitive Dust Control Measures:** • Water trucks shall be used during construction to keep all areas of vehicle movements damp enough to prevent dust from leaving the site. At a minimum, this will require twice daily applications (once in late morning and once at the end of the workday). Increased watering is required whenever wind speed exceeds 15 mph. Grading shall be suspended if wind gusts exceed 25 mph. • The amount of disturbed area shall be minimized and onsite vehicle speeds shall be limited to 15 mph or less. • If importation, exportation and stockpiling of fill material is involved, earth with 5% or greater silt content that is stockpiled for more than two days shall be covered, kept moist, or treated with earth binders to prevent dust generation. Trucks transporting material shall be tarped from the point of origin or shall maintain at least two feet of freeboard. • After clearing, grading, earth-moving or excavation is completed, the disturbed area shall be treated by watering, revegetation, or by spreading earth binders until the area is paved or otherwise developed. • All material transported off-site shall be securely covered to prevent excessive amounts of dust. **AQ-1(b) NO_x Control Measures:** • When feasible, electricity from temporary power poles on site shall be utilized rather than temporary diesel or gasoline generators; • When feasible, on site mobile equipment shall be fueled by methanol or natural gas (to replace diesel-fueled equipment), or, propane or butane (to replace gasoline-fueled equipment) • Aqueous Diesel Fuel or biodiesel (B20 with retarded fuel injection timing), if available, shall be used in diesel fueled vehicles when methanol or natural gas alternatives are not available. • **AQ-1(c) VOC Control Measure:** • Low VOC architectural and asphalt coatings shall be used on site and shall comply with AQMD Rule 1113-Architectural Coatings. The following additional measure is required to further reduce emissions of construction-related ozone precursors (VOC and NOx): **AQ-1(d) Ozone Precursor Control Measures:** • Equipment engines should be maintained in good condition and in proper tune as per manufacturer's specifications; • Schedule construction periods to occur over a longer time period (ie lengthen from 60 days to 90 days) during the smog season so as to minimize the number of vehicles and equipment operating simultaneously; and	Significant and Unavoidable

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	• Use new technologies to control ozone precursor emissions as they become readily available.	
Impact AQ-2 Grading equipment and diesel trucks used for earth export have the potential to expose sensitive populations in the vicinity to elevated levels of diesel exhaust. This is a Class II *significant but mitigable* impact.	**AQ-2 Decrease Emissions** of diesel particulate matter during site grading by implementing one of the following four measures. • Construction contractors shall not operate more than two pieces of heavy-duty diesel-powered equipment within 600 feet of any residence at any time. • Construction contractors shall use biodiesel fuel in all on-site diesel-powered equipment. Biodiesel that is blended with low sulfur diesel fuel shall be used if available. • Construction contractors shall use only Tier 2 diesel-powered earth moving equipment. • At least 80% of the diesel-fueled construction equipment in terms of brake-horsepower shall have DPFs installed, or all equipment shall be equipped with diesel oxidation catalysts. • Construction contractors shall limit the movement of large trucks to off-peak commute hours.	Less than significant.
Impact AQ-3 Operation of the proposed mixed use development would generate air pollutant emissions exceeding SCAQMD operational significance thresholds. Because emissions cannot be reduced to below threshold levels, the project's operational impact to regional air quality is considered Class I, *significant and unavoidable*.	**AQ-3(a) Energy Consumption.** Onsite structures shall reduce energy consumption by at least 20% below current Federal guidelines as specified in Title 24 of the Code of Federal Regulations. Potential energy consumption reduction measures include, but are not limited to, the use of photovoltaic roof tiles, installation of energy efficient windows, and the use of R-45 insulation in the roof/attic space of all onsite structures. **AQ-3(b) Landscape Equipment.** Multi-family residential developments shall be encouraged to utilize electrical powered landscape maintenance equipment, and exterior outlets shall be installed at the front and rear of residences. **AQ-3(c) Shade Trees** Shade trees shall be planted to shade onsite structures to the greatest extent possible in summer, reducing indoor temperatures, and reducing energy demand for air conditioning. The City's ARB shall review project landscaping plans for consistency with this mitigation measure. **AQ-3(d) Bus Stops.** Applicants shall provide bus stops within the Specific Plan Area. The number to be constructed will be determined in consultation with the City Traffic Engineer and the local transit agencies. Bus stops shall meet the requirements of the transit agency providing service to the City and shall include street furniture that provides shelter for passengers.	Significant and Unavoidable
Impact AQ-4 The proposed construction of an equestrian center and trail near Medea Creek, that would connect to the existing equestrian trail along Cheseboro Creek and Agoura Road, has the potential to create nuisance odors. This is a Class II,	**AQ-4 Equestrian Center and Trail Maintenance Plan**. The feasibility study for an equestrian center within the Specific Plan area, shall include provisions for a maintenance plan of both the equestrian center and related trails. The maintenance plan shall include the following measures, at a minimum: • Organic debris/waste shall be properly disposed of or sold offsite on a regular basis, • BMPs shall be instituted to prevent dust from moving offsite, • BMPs (to include necessary bioswales or erosion control measures) shall be instituted to prevent	Less than significant.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
significant but mitigable impact.	organic waste, or associated nutrients from organic waste, from entering nearby water bodies.	
BIOLOGICAL RESOURCES		
Impact BIO-1 Full build out of the Specific Plan area has the potential to affect sensitive species, including nesting raptors and migratory birds. This is considered a Class II, *significant but mitigable* impact.	**BIO-1(a) Sensitive Plant Survey and Protection Plan.** Prior to approval of individual development applications within the residual natural areas of Zones A south, B, E, and F, surveys for sensitive plant species, including but not limited to Agoura Hills dudleya and Lyon's pentachaeta, should be performed by a qualified plant ecologist. These surveys shall be performed during the blooming period (April - June). If a sensitive species is found, avoidance shall be required unless the applicant provides substantial documentation that avoidance would not be feasible or would compromise the objectives of the Specific Plan. For Lyon's pentachaeta and Agoura Hills dudleya, avoidance is defined as a minimum 200 foot setback unless an active maintenance plan is implemented for the known occurrence. With implementation of an active maintenance and management program, the buffer width may be reduced further based on review and approval by the jurisdictional agencies (USFWS and/or CDFG). For other sensitive species avoidance shall be determined based on the specific plant pursuant with the recommendations of a qualified plant ecologist, and with the coordination of USFWS and/or CDFG for state or federally listed plants. The maintenance and management plan must be approved by the appropriate jurisdictional agencies prior to issuance of a grading permit. If avoidance is not feasible, on-site mitigation is preferred if suitable, unoccupied, habitat is present that can be isolated from human disturbance. Otherwise, an offsite location would be considered; the Ladyface Mountain Specific Plan area may contain appropriate habitat and may be a preferred location. A mitigation restoration plan shall be prepared by a qualified plant ecologist that identifies the number of plants to be replanted and the methods that will be used to preserve this species in the on- or off-site mitigation location. The plan shall also include a monitoring program so that the success of the effort can be measured. Restoration efforts shall be coordinated with applicable federal, state, and local agencies. The required level of success for Agoura Hills dudleya and Lyon's pentachaeta shall be defined at a minimum as a demonstration of five consecutive years, <u>or a period as deemed appropriate by the permitting agencies (USFWS and/or CDFG)</u>, of growth of a population equal to or greater than that which would be lost due to the project. This level of success shall be achieved prior to removal of the impacted population. Success criteria for other sensitive species will be determined on an individual basis pursuant with the recommendations of a qualified plant ecologist, and with the coordination of USFWS and/or CDFG for state or federally listed plants. When applicable the mitigation restoration plan shall be submitted to the appropriate regulatory agencies for review and approval, with the approved plan then submitted to the City of Agoura Hills prior to issuance of a grading permit for the area of concern.	Less than significant.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	BIO-1(b) Sensitive Wildlife Survey. Not more than two weeks prior to ground disturbing construction within the Specific Plan area, a preconstruction survey for the two-striped garter snake, burrowing owl, western pond turtle, sensitive bat species, and any other special-status species shall be conducted by a qualified biologist and submitted to the City Planning and Development Department prior to beginning construction and/or commencement of any disturbance. If a species is found, avoidance is the preferred mitigation option. If avoidance is not feasible these species shall be captured, when possible, and transferred to adjacent appropriate habitat within designated open space areas either onsite or directly adjacent to the project area. This shall be performed only by a CDFG approved biologist. The CDFG and City of Agoura Hills shall be formally notified and consulted regarding the presence of these species onsite. If a federally listed species is found prior to grading of the site, the USFWS shall also be notified. Only a USFWS approved biologist would be allowed to capture and relocate these animals.	Less than significant.
	BIO-1(c) Bird Nesting Surveys. If vegetation clearing (including tree pruning and removal) or other project construction is to be initiated during the bird breeding season (February 1 through August 31), pre-construction/grading surveys shall be conducted by a qualified ornithologist (a person with a biology degree and/or established skills in bird recognition). Surveys shall begin 30 days prior to initial disturbance activities and shall continue weekly, with the last survey being conducted no more than three days prior to the initiation of clearance/construction work. If bird species are observed nesting within 500 feet of construction/grading areas, all construction or grading activities will be postponed or halted at the discretion of the biologist until the nest is vacated and the juveniles have fledged. Limits of construction to avoid a nest should be established in the field with flagging and stakes or construction fencing. This distance shall be at least 300 feet for raptors and at least 100 feet for all other bird species. Construction personnel should be instructed on the sensitivity of the area. The applicant should record the results of the recommended protective measures described above to document compliance with applicable State and federal laws pertaining to the protection of native birds.	Less than significant.
Impact BIO-2 Build out of the Specific Plan area has the potential to adversely affect sensitive communities onsite. This impact is considered Class II, *significant but mitigable*.	**BIO-2(a) Buffer Zones.** Except in cases of Lyon's pentachaeta and/or Agoura Hills Dudleya, which are addressed in MM BIO-1(a), a minimum buffer zone of 50-100 feet of native vegetation shall be maintained between urban development and adjacent sensitive native habitats. This includes those areas located along the unchannelized portions of Medea and Lindero Canyon Creeks within the Specific Plan boundaries. Such vegetation should be sensitive to, and similar in nature to, the natural environment surrounding the sensitive native habitats. A minimum buffer of 50 feet (or greater if required by the CDFG) from the top of bank and/or edge of riparian cover (whichever is greater) shall be established for the protection of southwestern pond turtle where preferred nesting habitat (exposed, southerly-facing slopes vegetated with open scrub or sparse grassland vegetation, dense soils with a high silt and clay fraction, and less than 25% slope) is present. No heavy equipment or ground disturbance shall enter the buffer zone during the nesting period of SWPT (April-August). Further, equestrian trails shall be located no less than 10 to 20 (preferred) feet from the edge of the exterior riparian canopy.	Less than significant.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	BIO-2(b) Native Grassland Protection. Prior to approval of individual development applications within the southern portion of the Specific Plan area, surveys for native grasslands shall be performed by a qualified biologist (with acceptance by the City Planning and Community Development Department Staff). If native grasslands are found, avoidance shall be required unless the applicant provides substantial documentation that avoidance would not be feasible or would compromise the objectives of the Specific Plan. Avoidance shall be planned and enforced with a **Native Grassland Protection Program**. If the applicant demonstrates that avoidance would not be feasible or would compromise the objectives of the Specific Plan, on-site mitigation would be required if suitable habitat is present and can be isolated from human disturbance. In this event, a **Native Grassland Restoration Plan** shall be prepared and implemented. **Native Grassland Protection Program.** If native grasslands are found onsite and avoidance is feasible, a native grassland protection program shall be prepared by a qualified biologist. The protection program shall be submitted for review and approval as part of the application process with the City Planning and Development Department. In addition, final plans shall be subject to review and approval by the City Planning and Community Development Department prior to issuance of a grading permit. The protection program shall include, but not be limited to, the following components: • A qualified biologist shall map the current extent of habitat; and • The location of native grassland habitat outside of the construction footprint shall be fenced in the field. Fencing shall be depicted on final grading and building plans. The location of the habitat and fencing shall be done under the direction of a qualified biologist (with acceptance by the City Planning and Community Development Department Staff); and • All ground disturbances, including grading for buildings, accessways, easements, subsurface grading, and utilities shall be prohibited within the fenced native grassland area. **Native Grassland Restoration Plan.** If avoidance is not feasible, on-site mitigation is preferred if suitable habitat is present that can be isolated from human disturbance. In this event, a restoration plan shall be prepared by a qualified plant ecologist that identifies the location and acreage to be replanted and the methods that will be used to preserve this community in that location. The plan shall also include a monitoring program so that the success of the effort can be measured. The required level of success, at a minimum, shall be defined as a demonstration of three consecutive years of at least 50% native grass dominance within the mitigation area. If off-site mitigation is proposed, the Ladyface Mountain Specific Plan area may contain appropriate habitat and may be a preferred location. Restoration efforts shall be coordinated with applicable federal, state, and local agencies (including LA County Fire Department). The restoration plan shall be submitted for review as part of the application process with the City Planning and Development Department. In addition, final plans shall be subject to review and approval by the City Planning and Development Department prior to issuance of a Grading Permit.	Less than significant.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	Native grassland habitat shall be replaced at a minimum ratio of three to one for native grassland lost and shall utilize native species from onsite habitats. Target sites for mitigation plots shall be sampled for soil type and habitat criteria sufficient for the establishment and growth of the native grassland lost. No species identified as invasive on the CNPS, Channel Islands Chapter Invasive Plants List (1997) shall be utilized in the landscape plans. The plan shall include, but not be limited to, the following components: • Performance criteria (i.e., what is an acceptable success level of revegetation to mitigate past impacts); • Monitoring effort (i.e., who is to check on the success of the revegetation plan, and how frequently); • Contingency planning (i.e., if the effort fails to reach the performance criteria, what remediation steps need to be taken); • Irrigation method/schedule (i.e., how much water is needed, where, and for how long); • Plant species, seed mixes, weed suppression and planting methodology From preliminary observations, it appears that potential target areas to perform mitigation for the loss of native grassland exist on the northern slopes of Ladyface Mountain, within the open space of Zone G (the area formerly identified in the 1996 Creekside EIR as valley needlegrass grassland and located south of Lindero Canyon Creek) in the southwest corner of the Specific Plan boundary. These areas need testing to confirm that they meet the soil and habitat requirements for native grassland species. If sufficient mitigation area does not exist onsite, off site mitigation or in lieu fees to an off site local or regional mitigation bank acceptable to the City of Agoura Hills shall be done.	
	BIO-2 (c) Southern Willow Scrub/ Southern Arroyo Willow Riparian Protection. Based on a review of pending development applications near Lindero Canyon Creek, it is anticipated that the existing southern willow scrub/ southern arroyo willow riparian may be encroached upon; however, avoidance of these areas is required. If avoidance is feasible, the following Riparian Habitat and Creek Protection Program shall be implemented in order to reduce impacts to this sensitive community. If the applicant demonstrates that avoidance would not be feasible or would compromise the objectives of the Specific Plan, on-site mitigation is preferred and shall be implemented through a Riparian Habitat Restoration Plan, as outlined below. **Riparian Habitat and Creek Protection Program.** A riparian habitat and creek protection program shall be prepared and implemented for any future developments proposed within the Specific Plan area adjacent to Lindero Canyon or Medea Creeks. These shall be prepared by a qualified biologist (with acceptance by the City Planning and Community Development Department Staff) and shall include specific measures as dictated by CDFG. The program shall, to the extent feasible, avoid encroachment into any riparian areas. The program shall include, but not be limited to, the following components:	Less than significant.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	• Riparian areas shall be indicated and fenced off on all grading and construction plans. The location of the habitat and fencing off shall be done under the direction of a qualified biologist (with acceptance by the City Planning and Community Development Department Staff). Construction personnel shall be informed of the sensitivity and location of riparian habitat on the project site; and • All ground disturbances including grading for buildings, accessways, easements, subsurface grading, and utilities shall be prohibited within the fenced riparian area. The protection program shall be submitted for review as part of the application process with the City Planning and Community Development Department. In addition, the final plans shall be subject to review and approval by the City Planning and Community Development Department prior to the issuance of a Grading Permit. **Riparian Habitat Restoration Plan.** However, if avoidance is not feasible, on-site mitigation is preferred over off-site mitigation but both mitigation measures could be effective at reducing the impacts to less than significant. If avoidance is not feasible, a restoration plan shall be prepared by a qualified plant ecologist. The preferred area to perform mitigation for the loss of riparian forest exists within the southern reach of the channelized and concrete lined portion of Medea Creek, located directly south of Agoura Road and also in the vicinity of Lindero Canyon Creek. If development were to encroach upon this sensitive community, the appropriate permits would be necessary from the Army Corps of Engineers, the California Department of Fish and Game, and the Los Angeles Regional Water Quality Control Board. Individual applicants for projects located south of Agoura Road and that contain riparian habitat areas, shall submit a Riparian Habitat Restoration Plan for review by the City Planning and Community Development Department and, as necessary, a City approved biologist or qualified landscape specialist, as part of the initial project application. Riparian habitat shall be replaced at a minimum ratio of 2.0 acres for every 1.0 acre of riparian habitat lost. However, additional mitigation may be required by the CDFG. The restoration plans shall include, but not be limited to, the following components: • Performance criteria (i.e., what is an acceptable success level of revegetation to mitigate past impacts); • Monitoring effort (i.e., who is to check on the success of the revegetation plan, and how frequently); • Contingency planning (i.e., if the effort fails to reach the performance criteria, what remediation steps need to be taken); and • Irrigation method/schedule (i.e., how much water is needed, where, and for how long). The required level of success, at a minimum, shall be defined as a demonstration of three consecutive years of growth of a population double the size of that which would be lost due to the project. The final restoration plan shall be subject to review and approval by the City Planning and Community Development Department prior to Grading Permit issuance.	

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
Impact BIO-3 Build out within the Specific Plan area may require removal of oak trees and indirectly affect additional oaks. This is considered a Class II, *significant but mitigable* impact.	**BIO-3(a) Oak Tree Protection and Preservation.** Individual project applicants shall submit the results of an oak tree survey and an Oak Tree Report, including an Oak Tree Preservation Program, for review and approval by the City's oak tree consultant as part of the project application. Individual projects shall be developed and operated in compliance with the approved Oak Tree Preservation Program and any other conditions determined to be necessary by the City oak tree consultant. The program shall include, but not be limited to, the following components: • No grading or development shall occur within 5 feet from the driplines of oak trees that occur in the construction area. • All specimen oak trees within 25 feet of proposed ground disturbances shall be temporarily fenced with chain-link or other material satisfactory to the City throughout all grading and construction activities. The fencing shall be installed six feet outside the dripline of each specimen oak tree, and shall be staked every six feet. • No construction equipment shall be parked, stored or operated within six feet of any specimen oak tree dripline. • No fill soil, rocks, or construction materials shall be stored or placed within six feet of the dripline of a specimen oak tree (pervious paving and other materials are allowed, as approved by the City). • No artificial surface, pervious or impervious, shall be placed within six feet of the dripline of any specimen oak tree, except for project access roads. • Any roots encountered that are one inch in diameter or greater shall be cleanly cut. This shall be done under the direction of a City approved arborist/oak tree consultant. • Any trenching required within the dripline or sensitive root zone of any specimen tree shall be done by hand. In addition, trenching n the protected zone needs to preserve roots over 1 inch by tunneling. • No permanent irrigation shall occur within the dripline of any existing oak tree. • Any construction activity required within three feet of a specimen oak tree's dripline shall be done with hand tools.	Implementation of the recommended mitigation measures would reduce impacts to oak trees to a level considered less than significant. Nevertheless, the City would need to approve a variance for oak tree removals if individual projects would remove more than 10% of the oaks onsite for any given development.
	BIO-3(b) Grading Plan. The number of oak trees requiring removal and the number of trees that will be encroached upon by grading and project development shall be confirmed by the City's oak tree consultant with the final grading plan. The plan shall also indicate requirements for retaining walls, tree wells, tree drainage requirements, and pruning as part of the plan. **BIO-3(c) Oak Tree Replacement.** For impacts involving 10 percent or less of oak tree removal resulting from grading and project development, each oak tree shall be replaced with specimen oak trees of the same species as the tree that was removed at a ratio and dimension specified in the City's Zoning Ordinance. This mitigation is to occur onsite. For impacts involving greater than 10 percent of oak tree removal resulting from grading and project development, mitigation shall either be onsite with the requirements as listed above, or an in-lieu fee may be paid to the City to be used to acquire land and/or install oak trees on another site, preferably in as close proximity to the area of removal as possible.	Less than significant. Less than significant.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	The sum of the calipers of all oak trees planted must be at least equal to that removed. The locations of the replanted trees shall be indicated on the project plans submitted to the City for review by the City's oak tree consultant. Trees shall be planted so that mature trees will have a continuous canopy. Every attempt shall be made to plant oak trees according to species-specific habitat requirements: valley oaks at lower elevations in alluvial soils; and coast live oaks on mesic north facing slope locations. Each oak tree removed by grading and project development shall be replaced with two 36 inch box and two 24 inch box specimen oak trees of the same species as the tree that was removed. Additionally, all naturally occurring native vegetation in the areas proposed for oak tree mitigation shall be identified. This includes surveys for ephemeral plants and bulbs. Oak tree planting shall not cause the removal or destruction of existing native vegetation without replacement in the same locations. **BIO-3(d) Oak Planting Arrangements.** Where appropriate pursuant to the recommendations of the City's oak tree consultant, replacement oaks for the removal of individual oak trees shall be clustered in an attempt to replace oak woodland habitat removed. Trees shall be planted so that mature trees will have a continuous canopy. Every attempt shall be made to plant oak trees according to species-specific habitat requirements: valley oaks at lower elevations in alluvial soils and coast live oaks on mesic north facing slope locations.	Less than significant.
Impact BIO-4 Individual project development could disturb wetlands and areas under the jurisdiction of the CDFG and Corps. This is considered a Class II, *significant but mitigable* impact.	Compliance with the requirements of the appropriate Corps, CDFG, and RWQCB permits, and implementation of any mitigation measures contained therein, would offset the loss of waters of the U.S. and waters of the State. As discussed in Section 4.7, *Hydrology and Water Quality*, a National Pollution Discharge Elimination System (NPDES) permit will likely be required for development of individual projects. As a result, Best Management Practices (BMPs) would be required to minimize impacts to water quality and quantity both onsite and offsite during construction. In addition to the mitigation required in Section 4.7, *Hydrology and Water Quality*, HYD-1 through HYD-4(b), the following mitigation is required to reduce impacts to wetlands to a less than significant level. Although the Corps and CDFG will require specific mitigation as part of their permitting processes, the following measures provide minimum requirements for individual projects that may be implemented within the project area. **BIO-4(a) Replacement Ratio**. Federal and State protected wetland habitat shall be replaced at a minimum ratio of 2.0 acres of habitat, at the same or greater quality, for every 1.0 wetland acre removed. Replacement shall be at an Agoura Hills Planning and Community Development Department approved location or by providing adequate funding for the replacement of wetland habitat to an organization currently conducting restoration of wetland habitat. The organization and its activities are to be approved by an Agoura Hills Planning and Community Development Department approved biologist. Two areas located within the Specific Plan boundaries shall be considered for mitigation credit. That portion of Lindero Canyon Creek located between Agoura Road and Kanan Road is the preferred mitigation location for impacts to other wetland areas within the project area. This restoration effort would include restoring	Mitigation measures provided here, as well as those required in the Corps, CDFG, RWQCB, and NPDES permits ,would reduce impacts to wetlands and jurisdictional areas to a level considered less than significant.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	the channel to a more natural state. Improvement of the unchannelized portion of Medea Creek, located south of Agoura Road, shall be considered as an alternate location for mitigation and wetland restoration. **BIO-4(b) Wetland Restoration Plan.** For projects that may adversely impact wetland areas, individual project applicants shall submit a wetland creation or restoration plan for review and approval by an Agoura Hills Planning and Community Development Department staff and, as necessary, a City approved biologist or qualified landscape specialist, as part of the initial application. The final restoration plan shall be submitted for City review and approval prior to Grading Permit issuance. The plan shall include, but not be limited to the following components: • Performance criteria (i.e., what is an acceptable success level of revegetation to mitigate past impacts); • Monitoring effort (i.e., who is to check on the success of the revegetation plan, and how frequently); • Contingency planning (i.e., if the effort fails to reach the performance criteria, what remediation steps need to be taken); and • Irrigation method/schedule (i.e., how much water is needed, where and for how long).	Less than significant.
	BIO-4(c) City Approval. For projects where wetland areas are affected, the individual project applicants shall demonstrate to the City of Agoura Hills that the requirements of agencies with jurisdiction over wetlands onsite can be met prior to obtaining grading permits. This will include, but not be limited to, consultation with those agencies, securing the appropriate permits, waivers or agreements, and arrangements with a local or regional mitigation bank including in lieu fees, as needed. **BIO-4(d) Riparian Habitat Preservation and Restoration.** Refer to BIO-2(c) above. **BIO-4(e) Fencing.** Solid barrier fencing onsite shall be prohibited around areas that border open spaces or routes of animal movement, specifically riparian areas. Fencing in these areas shall consist of “ranch style” post fencing. Fencing shall allow at least one-foot of clearance above ground to permit wildlife movement. Fencing between creekside trails and the creeks shall be designed to limit human entry into significant habitat. Such fencing or vegetative barrier shall be at least four feet in height and shall be planted with spinescent plants such as wild rose, blackberry, or other suitable native species in a dense bramble.	Less than significant. Less than significant.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	The following measure is suggested to reduce adverse effects to common and special-status wildlife species along the Medea and Lindero Canyon Creek corridors. **BIO-4(f) Corridor Lighting.** The following low-light design features shall be implemented throughout the Specific Plan area, and shown on the individual project plans submitted as part of the application. • Streetlight poles shall be of an appropriate height to reduce the glare and pooling of light into open space and corridor areas, and • Street light elements shall be recessed or hoods shall be used to reduce glare impacts on open space and corridor areas, and • All exterior lighting shall be low sodium lights, low intensity, shielded, and directed away from the drainage/wildlife corridors corridor.	Less than significant.
Impact BIO-5 Build out of the Specific Plan area would potentially affect wildlife corridors. This is considered a Class III, *less than significant* impact.	None required.	Less than significant without mitigation.
Impact BIO-6 Build out of the Specific Plan area has the potential to damage or destroy Coastal Sage Scrub habitat. This impact is considered Class II, *significant but mitigable.*	Although the Specific Plan would implement several general natural resource protection standards, build out under the proposed Specific Plan could potentially generate adverse impacts on Coastal Sage Scrub. Therefore, in addition to those measures outlined in the Specific Plan, the following mitigation measures would be required to reduce impacts to a less than significant level. **BIO 6(a) Coastal Sage Scrub Habitat Survey.** As part of the sensitive plant surveys required under Mitigation Measure BIO-1(a), prior to approval of individual development applications within the residual natural areas of Zones A south, B, E, and F, surveys for sensitive plant species shall also include surveys and consideration of adjacent areas of Coastal Sage Scrub habitat. A qualified biologist shall determine the condition of such habitat and whether it would be considered of “high value.” Any areas identified as “high value” Coastal Sage Scrub habitat shall mitigate for disturbed (including disturbance for fuel modification) or removed CSS habitat at a minimum 1:1 ratio. Coastal Sage Scrub habitat with known occurrences of sensitive (endangered or threatened) species shall be mitigated at a minimum 2:1 ratio. **BIO 6(b) Fuel Modification Areas.** Landscaping within fire clearance zones shall include native species indigenous to the area of disturbance. Modification of fire hazard fuels shall be limited to hand thinning of individual shrubs, clearing dead fuel, replanting with fire-resistant plants indigenous to the area, or other methods to attain fire safety while producing a viable natural and native vegetation community. No species identified as invasive on the CNPS, Channel Islands Chapter Invasive Plants List (1997) shall be utilized in the landscape plans and all landscaping plans shall be approved by the City and the County Fire Department.	Less than significant. Less than significant.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
GEOLOGY		
Impact GEO-1 Seismically induced ground shaking could destroy or damage structures and infrastructure, resulting in loss of property or risk to human safety. This is considered a Class II, *significant but mitigable* impact.	**GEO-1(a) Building Design.** All buildings shall be engineered to withstand the expected design basis ground acceleration that may occur at the project site. All critical facilities shall be designed to withstand the upper bound earthquake ground motion. The design shall take into consideration the most current and applicable seismic attenuation methods that are available. All onsite structures shall comply with applicable provisions of the California Building Code and Chapter 1 of Article 8 of the Agoura Hills Municipal Code. Compliance with these requirements shall be verified by the City Building Official prior to issuance of a Building Permit or Grading Permit. **GEO-1(b) Geotechnical Recommendations.** Future development shall require, and comply with, all recommendations contained in site-specific geologic, geotechnical, and structural design studies prepared for subsequent development activities. Subsequent subsurface investigations shall determine the possible presence of seismically induced hazards and appropriate means of mitigating such hazards. Recommendations contained in these site-specific studies shall be reviewed and approved by the City Building Official and incorporated in to final grading and structural design plans, as deemed appropriate by the City Building Official. At a minimum, any buildings considered essential facilities, as defined in the Uniform or California building codes, shall be designed to withstand upper bound earthquake ground motion. All on-site structures shall comply with applicable provisions of the 1997 Uniform Building Code and the 1998 California Building Code. The calculated design base ground motion for the site shall take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available.	Less than significant.
Impact GEO-2 Future seismic events could result in liquefaction of soils within the Specific Plan area. Specifically, new development near the eastern boundary of the Specific Plan area would be most susceptible to liquefaction hazards. This is considered a Class II, *significant but mitigable* impact.	To more accurately determine the potential for liquefaction, site-specific geologic studies are required. Implementation of the following mitigation measure for all individual developments within the Specific Plan area would reduce impacts related to liquefaction hazards. **GEO-2 Liquefaction Studies**. Prior to construction of new development within the Specific Plan area, site-specific geologic and soils studies shall be performed. The studies shall include site-specific depth to groundwater and soil composition identification, with minimum boring depths as set forth in CDMG 1997 (California Department of Conservation, Division of Mines and Geology, 1997, Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117). Areas having liquefiable sediments shall be identified, and structures shall be properly designed to Uniform Building Code and California Building Code standards to withstand the conditions. Such studies shall be conducted and submitted for review and approval by the City prior to issuance of a Grading Permit. Suitable measures to reduce liquefaction include, but are not limited to: • Specialized design of foundations by a structural engineer; • Removal or treatment of liquefiable soils to reduce the potential for liquefaction; • In-situ densification of soils;	Less than significant.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	• Other alterations to ground characteristics.	
Impact GEO-3 Slope instability can pose a geologic hazard onsite. The creation of unstable slopes is considered a Class II, *significant but mitigable*, impact.	The following measures are required to reduce slope stability hazard impacts, in addition to compliance with applicable requirements of the Uniform Building Code (UBC) and California Building Code (CBC): **GEO-3(a) Geotechnical Evaluation.** Individual developments shall provide site-specific geotechnical evaluations and geological reports that address onsite soils and slope stability hazards as part of the initial application process. Prior to approval of a specific development plan, these studies shall be submitted to the City Planning and Community Development Department and/or consultants hired by the City for review and approval as part of the initial application process. These evaluations shall determine the potential for adverse soil stability impacts and shall identify appropriate mitigation techniques. All mitigation recommendations identified in site-specific studies shall be implemented as a condition of future development. Such measures may include avoidance of development in areas found to have unmitigable soil or geologic hazards, soil or grading modifications to ensure acceptable slope stability on manufactured slopes, structural measures to ensure slope stability, drainage control facilities to collect and direct water off of slopes, removal of loose cobbles and boulders from adjacent slopes, and/or other measures deemed appropriate to ensure proper slope stability. If site-specific geologic mitigation measures are found to cause secondary environmental effects not addressed herein (excessive import or export of soil material, retaining walls, blasting, etc.), subsequent environmental analysis, may be required. **GEO-3(b) Erosion Control Plan**. A site-specific erosion control plan that incorporates best management practices shall be prepared by individual applicants and approved by the City prior to the granting of any grading permits for an individual development within the project area. Measures identified in such plans shall be implemented. Such measures may include slope protection measures, netting and sandbagging, landscaping and possibly hydroseeding, temporary drainage control facilities such as retention areas, etc. Landscaping shall be designed by a licensed landscape architect with final landscaping plans to be reviewed and approved by the City Building Official prior to project approval.	Less than significant.
	GEO-3(c) City Oversight and Approval. The City Engineer or equivalent shall inspect a project after the final grading report has been filed. The project shall not be approved for construction by the City Engineer or equivalent until all hazards either caused by project grading or associated with adjoining geologic and soils conditions, such as erosion and slope instability, are mitigated to the City's specifications.	

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
Impact GEO-4 The project is underlain by Conejo Volcanics which would be difficult to excavate and blasting may be an option to perform some excavations. This is considered a Class II, *significant, but mitigable* impact.	**GEO-4(a) Test Blast/Vibration Study & Blasting Plan.** Blasting shall be discouraged. However, if a site-specific geologic, geotechnical, or structural design study deems blasting necessary for grading and excavation onsite, the applicant must perform a test blast/vibration study to evaluate the variation in vibratory ground motion intensity with respect to distance from the blast site. It must be shown that the blasting can be done safely with respect to existing improvements. A blasting plan shall be provided as part of the vibration study, and submitted as part of the initial application submittal to the City Planning and Community Development Department, City Council and Fire Marshall for approval. Blasting permit approval would be subject to the City's discretion and may be denied. If the City were to approve the blasting plan, at a minimum it should be designed to minimize ground shaking away from the blast area. Any areas having unstable slopes or rockfall hazards shall be secured to prevent injury or property damage. If approved, the permittee shall provide sufficient supervisory control as determined by the building official during the grading operation to ensure compliance with approved plans and with the municipal code. When found necessary by the City Building Official, the permittee shall employ a qualified geologist and foundation engineer to assist in supervising the grading operation. If a blasting permit is denied by the City, the applicant shall prepare an alternative application for development which excludes the need for blasting.	Less than significant.
Impact GEO-5 The proposed project is located in an area underlain by expansive soils. Impacts relating to expansive soils are considered Class II, *significant but mitigable.*	**GEO-5(a) Foundations and Project Infrastructure Design.** As provided in mitigation measure GEO-3(a), a site specific geotechnical evaluation shall be conducted for individual projects and submitted to the City Planning and Community Development Department for review and approval as part of the initial application. If the project site is identified to be in a high expansive soil zone based on the site specific Geotechnical Investigation, the foundations and project infrastructure shall be designed by a structural engineer to withstand the existing conditions or the site shall be graded in such a manner as to address the condition. Suitable measures to reduce impacts from expansive soils could include one or more of the following techniques, as determined by a qualified geotechnical engineer: • excavation of existing soils and importation of non-expansive soils; and • foundation design to accommodate certain amounts of differential expansion such as posttensional slab and/or ribbed foundations designed in accordance with Chapter 18, Division III of the UBC; • imported fill shall be tested to ensure it is suitable to be used as fill.	Less than significant.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	GEO-5(b) Soils and Foundation Report. To avoid soil-related hazards, the individual project applicants shall provide a soils/foundation report as part of the initial project application to the City Planning and Community Development Department (standard requirement). Plan Requirements: The required report shall be provided with building plans and shall evaluate soil engineering properties and provide foundation design recommendations. If site-specific measures are found to cause secondary environmental effects not addressed herein, subsequent environmental analysis may be required. Timing: The soils/foundation report shall be provided to the Building Division for review and approval prior to issuance of Building Permits. Monitoring: Building Division staff shall review and approve the required report (and the foundation design) prior to issuance of the Building Permit. Building inspectors shall make site inspections to assure implementation of approved plans.	
Impact GEO-6 Portions of onsite soil materials consist of fill materials and may not be suitable for compaction. Cut from the project site may also not be suitable for reuse as fill onsite as it could settle during earthquakes or due to construction-related loading. This is considered a Class II, *significant but mitigable*, impact.	**GEO-6(a) Settlement Related Mitigation.** Future development shall comply with all recommendations contained in site-specific geologic, geotechnical, and structural design studies as required to be prepared for subsequent development activities. Subsequent subsurface investigations shall determine the required degree of compaction and the proper moisture content and appropriate means of mitigating settlement related hazards. Recommendations contained in these site-specific studies shall be reviewed and approved by the City Planning and Community Development Department and City Building Official and incorporated into final grading and structural design plans, as deemed appropriate by the City Building Official prior to issuance of a Grading Permit and/or Building Permit. At a minimum, suitable measures to reduce settlement impacts shall include, but not be limited to: • Removal of organic material in the area of the proposed grading • Removal of non-engineered artificial fill in areas to receive engineered fill or in areas where structural support is required • Placement of a keyway at the bottom of all fill slopes a minimum depth of 3 feet and down to the bedrock with the keyway a minimum of 10 feet wide (unless otherwise determined by the site-specific geological study) • Fill soils shall be benched into the hillside • Removal of upper soils to the bedrock After excavation: • All bottoms of the excavations and areas to receive slabs shall be scarified and compacted to 90% • All fills and backfills should be placed in horizontal layers less than 8 inches in loose thickness • Soils shall be compacted to a minimum of 90% of the maximum density rendered by the latest ASTM version • Moisture content should not vary more than 2% from the optimum moisture content, although the grading process will be more easily accomplished with the soils being 1 – 2 % wetter than optimum moisture content	If the required mitigation measures are implemented, impacts relating to soil settlement would be reduced to a less than significant level. If developers are unable to process cut suitable for fill, or can not find a disposal facility within 12.5 miles of the project site, additional analysis would be required in order to determine the potential significance of offsite disposal.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	• Any utility trenches will need to be properly backfilled as detailed above • Any import soils should be approved by a qualified geologist • Slope faces shall be compacted to at least 90% of maximum compaction **GEO-6(b) Additional Environmental Review.** If individual developers are unable to find a disposal site for construction cut within 12.5 miles of the Specific Plan area, or if processed soil is not suitable for fill, then individual projects may require additional environmental analysis. Individual developers must demonstrate a means for disposal of excess cut materials, within 12.5 miles of the project site, prior to approval by the City.	
HAZARDOUS MATERIALS		
Impact HAZ-1 Future development in the Specific Plan area, and specifically future development in the hillside areas south of Agoura Road, are in a wildland fire hazard area could create a public safety hazard. New development within the Specific Plan area would be required to comply with existing regulations intended to minimize the potential effects associated with wildfires. This is considered to be a Class III, *less than significant* impact.	None required.	Less than significant without mitigation.
Impact HAZ-2 A release of hazardous materials associated with the use, storage, and transport of hazardous materials related to existing and new development within the Specific Plan area has the potential to result in adverse impacts to human health and safety and the environment. Existing regulations and hazardous materials management programs are in place to minimize the effects associated with unauthorized or accidental releases of hazardous materials. This is considered to be a Class III, *less than significant* impact.	None required.	Less than significant without mitigation.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
Impact HAZ-3 The potential presence of hazardous materials on both developed and undeveloped properties within the project area has the potential to adversely affect future users, construction workers, and/or the environment. This is considered to be a Class II, potentially *significant but mitigable* impact.	**HAZ-3 Phase I ESA**. As part of the initial project application submittal for a new project or for revitalization of an existing development, a project applicant shall be required to prepare a Phase I Environmental Site Assessment (ESA) to examine the potential for onsite contamination issues. For redevelopment of existing structures, the Phase I ESA shall include examination of the possible presence of asbestos containing materials and lead based paint. In the event that recognized adverse environmental conditions are identified, additional Phase II environmental testing shall be performed and recommended mitigation requirements implemented. If necessary, remediation activities (i.e. excavation and removal of contaminated soils, vapor extraction, removal of contamination source) shall be performed under the supervision of a lead oversight agency to be determined based on the nature of the issue identified. If remediation activities are required, the lead oversight agency shall provide confirmation to the City that onsite environmental issues have been mitigated to a level that is suitable for the anticipated site use or reuse.	Less than significant.
HISTORICAL AND ARCHAEOLOGICAL RESOURCES		
Impact HA-1 New development within the project area has the potential to cause a substantial change to identified cultural resources located in the project area, and could expose previously undiscovered, buried cultural resources. This is considered a Class II, *significant but mitigable,* impact.	**HA-1(a) Protection of Known Cultural Resources.** Prior to development, as part of the initial project application, a qualified archaeologist and Native American Monitor shall make a reasonable effort to identify archaeological resources from known archaeological sites (as listed above in Section 4.6.1.b) within the project area. If it can be demonstrated that a project will cause damage to a unique archaeological resource, a reasonable effort shall be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. As part of the applicant's initial project application, the preferred method of protection/treatment shall be submitted to the City's Community Development Department for review and approval. The Planning and Community Development Department shall determine the most appropriate method of protection/treatment. Examples of that treatment, in no order of preference, may include, but are not limited to, the following: • Planning construction to avoid archaeological sites where feasible. • Deeding archaeological sites into permanent conservation easements. • Planning parks, greenspace, or other open space to incorporate archaeological sites. • Dedication of informational booth which explains Native American cultural heritage and displays recovered artifacts from the project site. • Salvage and recordation of resources by a qualified archaeologist. These resources shall be preserved onsite in an interpretive center, designed under the review of both the Native American Heritage Commission and the City of Agoura Hills, or at another appropriate facility, such as the Fowler Museum of Cultural History at UCLA. Pursuant to Public Resources Code 21083.2.c., the project applicant shall provide a guarantee to the lead agency to pay one-half the estimated cost of mitigating the significant effects of the project on unique archaeological resources. In determining payment, the lead agency shall give due consideration to the in-kind value of project design or expenditures that are intended to permit any or all archaeological resources or California Native American culturally significant sites to be preserved in place or left in an undisturbed	Less than significant.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	state. When a final decision is made to carry out or approve the project, the lead agency shall, if necessary, reduce the specified mitigation measures to those which can be funded with the money guaranteed by the project applicant plus the money voluntarily guaranteed by any other person or persons for those mitigation purposes. In order to allow time for interested persons to provide the funding guarantee referred to in this subdivision, a final decision to carry out or approve a project shall not occur sooner than 60 days after completion of this environmental impact report. For time and cost limitations refer to 21083.2(e). **HA-1(b) Construction Monitoring**. Initial grading activities near archaeological sites CA-LAN-1436, CA-LAN-1352, and CA-LAN-41 shall be monitored by a qualified archaeologist and Native American Monitor. If cultural resource remains are encountered during construction or land modification activities, the applicable procedures established under CEQA (CEQA Guidelines §15064.5). In this event the City 's Department of Planning and Community Development shall be notified at once and work shall stop within a 100 ft radius until a qualified archaeologist satisfactory to the City has assessed the nature, extent, and potential significance of any cultural remains. If such remains are determined to be significant, appropriate actions to mitigate impacts to the remains shall be implemented per Section 21083.2 of the Public Resources Code. Depending upon the nature of the find, mitigation could involve avoidance, documentation, or other appropriate actions, to be determined by a qualified archaeologist. **HA -1(c) Archaeological Discovery.** If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will then identify the person(s) thought to be the Most Likely Descendent (MLD) of the deceased Native American, who will then help determine what course of action should be taken in dealing with the remains.	
HYDROLOGY AND WATER QUALITY		
Impact HYD 1 During construction activities, the soil surface would be subject to erosion and temporary sedimentation and discharges of various pollutants to the downstream watershed. However, the federal Clean Water Act requires development of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of appropriate best management practices (BMPs). Therefore impacts are considered Class III, *less than*	Regulations under the federal Clean Water Act and the State require projects disturbing greater than one acre during construction to comply with the State General Construction NPDES Permit. Build out of individual properties in the Specific Plan area is likely to include disturbance of project sites greater than one acre in size that would be subject to this permit requirement. The NPDES Permit requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP) that contains specific actions, termed Best Management Practices (BMPs), to control the discharge of pollutants, including sediment, into local surface water drainages. A Notice of Intent (NOI) to perform work under the Permit must be filed with the State. The preparation of a SWPPP requires the individual developer to implement BMPs that are designed to specifically address the potential pollution risks that would be incurred during project construction. BMPs are selected from an approved list of documents (i.e., the California Storm Water BMP Handbook, the Caltrans Storm Water Handbook, the EPA database, and the ASCE database), which describe practices	Less than significant.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
significant.	that have a proven track record of effectively preventing stormwater pollution from construction sites. BMPs appropriate for construction activities are organized into four major categories: 1. Erosion Control: Measures that prevent erosion and keep soil particles from entering stormwater, lessening the eroded sediment that must be trapped, both during and at completion of construction. 2. Sediment Control: Feasible methods of trapping eroded sediments so as to prevent a net increase in sediment load in stormwater discharges from the site. 3. Site Management: Methods to manage the construction site and construction activities in a manner that prevents pollutants from entering stormwater, drainage systems or receiving waters. 4. Materials and Waste Management: Methods to manage construction materials and wastes that prevent their entry into stormwater, drainage systems or receiving waters. The BMPs to be implemented within the Specific Plan area would be developed as part of each SWPPP required for individual parcel construction. Implementation of the SWPPP is the responsibility of the construction site contractor with oversight and inspection by the City of Agoura Hills and the LARWQCB. Effective implementation of the specific measures in the SWPPP would comply with the General Construction Permit requirements and therefore would not violate applicable waste discharge requirements. No further mitigation is necessary.	
Impact HYD-2 The proposed project would substantially alter the existing drainage pattern of the Specific Plan area. This would increase peak storm water flows and would contribute runoff water which may exceed the capacity of existing or planned stormwater drainage systems. These impacts are considered Class II, *significant but mitigable*.	**HYD 2 Final Drainage Plans.** Individual project applicants shall be required to prepare and submit a final drainage plan, prior to issuance of a grading permit, to the City's Planning and Community Development Department and Los Angeles County Flood Control for approval. Plans shall include detailed design and hydraulic analysis of the drainage facilities that capture and convey on- and off-site runoff. Each developer shall be required to evaluate the extent of potential flood hazards present utilizing the Modified Rational Method (or the latest model approved by Los Angeles County Flood Control) and to implement mitigation measures required to reduce such impacts to a level of insignificance. The drainage plan for each project shall include post development designs for runoff detention and on site infiltration to reduce 50-year frequency storm peak discharge to the pre development level. These drainage facilities shall meet the design requirements and capacities of the Master Plan of Drainage for the City of Agoura Hills, The Los Angeles County Department of Public Works Hydrology Manual and the Hydrology and Sedimentation Appendix, or other revised hydraulic analyses as determined by the City Engineer, and shall not increase the base flood elevation above or below the project site. Additionally, mitigation shall meet all interim peak flow standards, or the most up to date standards, as established by the LACDPW. The plans shall be subject to review and approval by the City Engineer.	Less than significant.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
Impact HYD-3 Specific Plan buildout may place structures within the 100-year floodplain, and may alter the existing conditions of Medea and Lindero Canyon Creeks. . These are considered Class II, *significant but mitigable.*	**HYD-3(a) Hydrology Study**. If any onsite open channels are altered, a channel bed erosion study shall be conducted as part of a hydrology report submitted to the City as part of the initial application submittal. The erosion study shall determine if additional grade stabilization structures are necessary for any restored areas within Medea Creek or within Lindero Canyon Creek. Recommendations of this study shall be fully implemented subject to review and approval by the City of Agoura Hills and Los Angeles County Public Works Department. Design of modifications to Medea Creek shall meet the standards of the City of Agoura Hills and Los Angeles County Public Works Department, and shall be approved by the City prior to the issuance of grading permits. **HYD-3(b) Public Facilities Flood Protection.** Any trunk sewer manholes located adjacent to Lindero Canyon Creek and Medea Creek shall be protected from peak flows laden with debris by further armoring via cement casing, piering, or other appropriate method. A plan to protect the sewerline and exposed manholes from erosion and flooding and from construction activity shall be submitted to the Las Virgenes Municipal Water District for review, comment, and approval prior to the issuance of grading or building permits.	Less than significant.
Impact HYD-4 Urban land uses could adversely affect the quality of surface runoff because of increased pollutant loading, including such pollutants as oil, pesticides, herbicides, and organic waste (horse manure). This is considered a Class III, *less than significant.*	None required.	Less than significant.
Impact HYD-5 Groundwater near the project site is not utilized for consumption and is not anticipated to be adversely affected by the project. Therefore, impacts related to groundwater are considered Class III, *less than significant.*	None Required.	Less than significant without mitigation.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
LAND USE		
Impact LU 1 Buildout of the Specific Plan would introduce residential land uses south of US 101, an area that is generally commercial in nature. While this would not physically divide an established community, it would allow for residential uses that are separated from other more traditional residential areas of the community, north of US 101. This is considered a Class III, *less than significant.*	None required.	Less than significant
Impact LU 2 The proposed Specific Plan would generally be compatible with the existing surrounding commercial, freeway, and open space land uses and over time is intended to enhance the existing commercial uses within the project area. However, buildout of mixed uses (including possible density bonuses if specific criteria are met) as an integral part of the Specific Plan would potentially result in land use conflicts between planned new commercial and residential land uses and between proposed equestrian uses and residential uses. This is considered a Class II, *significant but mitigable*, impact.	Mitigation measures identified in Sections 4.1, Aesthetics, 4.2, Air Quality, 4.9, Noise, and 4.10, Traffic and Circulation would reduce land use compatibility impacts associated with mixed uses to less than significant.	Less than significant

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
Impact LU 3 The proposed project requires modification of the City's General Plan and zoning designations for the project area. On balance, these changes could be found to be consistent with the intent of the General Plan and other land use policies that apply to the project area. Impacts relating to consistency with City land use policies are considered Class III, *less than significant*.	As discussed above, the proposed Specific Plan (including the proposed amendment to the Agoura Hills General Plan and Zoning Ordinance described above and in Section 2.0, Project Description), in combination with mitigation measures recommended in the technical sections identified above, appears to be consistent with locally adopted City plans and policies.	Less than significant
Impact LU 4 In general, the proposed project would implement a majority of the applicable policies of SCAG's Regional Comprehensive Plan and Guide. However, since the City already exceeds locally recognized population and housing forecasts, any addition of new population or housing is considered potentially significant. Therefore, impacts related to consistency with a regional plan are considered Class II, *significant but mitigable*.	Mitigation measures included in 4.2, Air Quality, 4.3, Biological Resources, Sections 4.4, Geology and Soils, 4.7, Hydrology and Water Quality, 4.10, Public Services and 4.11, Traffic and Circulation are required in order to reduce impacts related to compliance with SCAG policies to the degree feasible. Additionally, the following measure would be required in order to reduce impacts related to consistency with SCAG's Regional Comprehensive Plan to a less than significant level. **LU-4 Regional Forecast Update.** The City shall provide population, housing, and job data to the Forecasting Section, under the Community Development Division, Planning and Policy Department, of the Southern California Association of Governments prior to development of SCAG's next 5-year socio-economic forecast update. The City shall provide the most current data at the time of baseline development for future forecasts.	Less than significant
NOISE		
Impact N-1 Project construction, including possible blasting along the bases of the hillside areas within the project area during site preparation, would create temporary noise levels that would be audible to nearby residents. This is considered a Class II, *significant but mitigable* impact.	**N-1 Construction Hours.** On-site construction activity, including blasting, or involving the use of equipment or machinery that generates noise levels in excess of the 55 dBA standard shall be limited to between the hours of 7 AM and 8 PM, Monday through Saturday pursuant to City Ordinance 9656 and City Municipal Code Section 9666.4. No construction activity shall occur between 8 PM and 7AM that generates noise in excess of the 50 dBA standard. No construction activity shall take place on Sundays or legal holidays.	Less than significant

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
Impact N-2 Project-generated traffic would incrementally increase noise levels on roads in the project vicinity. The increase in noise due to project traffic exceeds the significance threshold for Agoura Road between Kanan Road and Cornell Road. Project traffic noise impacts are considered Class II, *significant and mitigable.*	**N-2(a) Rubberized Asphalt.** In potentially noise impacted areas within the Specific Plan, the City shall consider and, if feasible, use rubberized asphalt paving material for street re-paving projects. Studies have demonstrated that this type of paving materials can substantially reduce roadway noise. A 1992 noise study in the City of Thousand Oaks by Acoustical Analysis Associates, Inc. indicated that the use of an asphalt rubber overlay can achieve a noise reduction of from 2 to 5 dBA as compared to standard asphalt. **N-2(b) Sound Wall.** If traffic-related noise problems from U.S. 101 arise within the Specific Plan area, the City shall investigate and, if feasible, implement appropriate measures to reduce noise impacts at affected receptor locations. Such measures may include, but are not limited to, the use of a sound wall along the northern boundary of the Specific Plan area, between Roadside Drive and U.S. 101. It is estimated that a 10-foot high sound wall located adjacent to the southern edge of U.S. 101 would decrease noise levels at the property boundaries on the southern side of Roadside Drive from 78.8 dBA to 69.3 dBA (refer to Appendix E for Sound Barrier Loss Estimation Spread Sheet).	Less than significant
Impact N-3 Some of the new residences planned for the site would be in a noise environment that exceeds the normally acceptable range for interior and exterior noise. This is considered a Class II, *significant but mitigable,* impact.	**N-3(a) Acoustical Study.** A site-specific acoustical study shall be submitted to the City Planning and Community Development Department as part of the initial application for any residential project located within the project area that is exposed to freeway or arterial traffic noise. This study shall contain specific structural and site design recommendations to be incorporated into the project design to mitigate any noise levels that exceed the City's residential exterior standard of 65 CNEL and interior standard of 45 dBA. **N-3(b) Operating Hours.** Loading dock and delivery truck (i.e. refrigerator trucks, trash and recycling pick-ups) and parking lot sweeping hours shall be restricted to daytime operating hours (7:00 AM to 7:00 PM). Delivery trucks entering and leaving the site shall not block driveways and shall be allowed to idle no more than 15 minutes in any half hour period. **N-3(c) Loading Dock Location.** To the degree feasible, loading docks and delivery areas shall be located out of line of sight and/or oriented away from nearby residences. **N-3(d) Ventilation Noise.** Parapets that reduce noise from rooftop ventilation systems shall be installed on all project structures. **N-3(e) Parking Lot Noise**. Surface-texturing materials and landscaping shrubs and trees shall be used in the parking areas to reduce parking lot related noise. **N-3(f) Mechanical Equipment.** All exterior mechanical equipment shall be oriented away from adjacent residential uses and shall be fitted with sound-rated parapets. **N-3(g) Interior Noise.** At a minimum, all on-site structures shall include the following or equivalent to achieve an acceptable interior noise level of 45 CNEL:	Less than significant

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	• Air conditioning or a mechanical ventilation system so tat windows and doors may remain closed • Double-paned windows and sliding glass doors mounted in low air infiltration rate frames (0.5 cubic feet per minute, per ANSI specifications) • Solid core exterior doors with perimeter weather stripping and threshold seals • Roof and attic vents facing away from Highway 101 Incorporation of these design requirements would be expected to achieve an interior noise level reduction of 25 dB or greater.	
Impact VIB-1 Potential blasting in areas underlain by Conejo Volcanics may cause vibrations at existing commercial and residential uses within the AVSP area. This is considered a Class II, *significant, but mitigable* impact.	Mitigation Measure GEO-4(a), identified in Section 4.4, Geology, would reduce impacts associated with blast vibrations to a less than significant level.	Less than significant
PUBLIC SERVICES		
Impact PS-1 Build out of the proposed Specific Plan would generate an estimated 144,031 gallons per day (gpd) of wastewater. The Tapia Water Reclamation Facility has sufficient capacity to accommodate this level of new development; therefore, this impact is considered Class III, *less than significant*.	None required.	Less than significant
Impact PS-2 Build out of the Specific Plan would generate demand for an estimated 165,994 gallons of water per day (gpd). The LVMWD would be able to supply the projected volume of water. With implementation of mandated water conservation methods throughout the project area, impacts would be considered Class III, *less than significant*.	None required.	Less than significant

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
Impact PS-3 Build out of new development within the Specific Plan area would incrementally increase demands on the LACFD, but is not anticipated to require new Fire Department personnel or equipment. However, because the project area is in a high severity wildfire zone and would potentially interfere with an emergency access route, impacts to fire protection are considered Class II, *significant but mitigable*.	**PS-3(a) Fuel Modification Plan (FMP).** Individual project applicants shall develop a Fuel Modification Plan for all development areas within or adjacent to wildland fire hazard areas. These plans shall be subject to review and approval by the Los Angeles County Fire Department Fuel Modification Unit. The FMP shall be submitted to the City Planning and Community Development Department for approval prior to issuance of a grading or building permit. Funding and execution of all measures required in the FMP shall be the responsibility of individual developers or land owners. Prior to approval of the FMP the City shall confirm that appropriate easements have been secured and that long-term funding mechanisms area in place to ensure successful implementation of the FMP. **PS-3(b) Landscape Palette.** The landscape palette for the project shall prohibit the use of highly flammable species near areas of open space. **PS-3(c) Roundabout Engineering**. Further detailed engineering design shall be performed for the proposed roundabout at the intersection of Agoura Road and Kanan Road. The study shall incorporate the applicable geometric features required to accommodate the forecast vehicular, bicycle and pedestrian movements, and safety personnel/emergency access. The study should determine the sufficient capacity and safety at the roundabout for both pedestrians and motorists. **PS-3(d) Emergency Access.** The proposed roundabout at the intersection of Kanan and Agoura Road has the potential to restrict access to safety personnel and emergency vehicles. Public education should include information on driver behavior in the event of an emergency vehicle, which is similar to the driver behavior required at conventional intersections. All approaches to the roundabout shall contain two lanes. Vehicles in queue in front of an emergency vehicle would either move to another lane or move through the roundabout to facilitate passage of the emergency vehicle. The design of the roundabout shall include a mountable apron on the island and mountable splitter islands. In the event of blockage of the circulatory roadway, these elements would provide for sufficient width within the roundabout for passage of emergency vehicles.	Less than significant
Impact PS-4 Build out of the proposed Specific Plan would incrementally increase demand upon the Los Angeles County Sheriff's Department Lost Hills Substation and would potentially interfere with an emergency access route. This is considered a Class II, *significant but mitigable,* impact.	**PS-4(a) Design Approval.** Project plans shall be submitted to the Los Angeles County Sheriff's Department Lost Hills Substation for review and comment. All recommendations made by the Department, including, but not limited to, those pertaining to site access, site security, lighting, and requirements for onsite security, shall be incorporated into the design of the project, prior to approval of final building permits. **PS-4(b) Roundabout Engineering.** Refer to Mitigation Measure PS-3(c). This measure shall also be subject to review and approval by the Los Angeles County Sheriff's Department.	Less than significant

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
Impact PS-5 Build out of the proposed Specific Plan would be expected to generate about 181 students at the Las Virgenes Unified School District. This would contribute to the current over-capacity condition at local schools. This is considered a Class II, *significant but mitigable* impact.	Due to provisions of State law, the City is strictly limited in the mitigation measures it may impose against developers of residential projects to address school overcrowding issues. The presumption of State law is that the developer's payment of school impact fees to the local school district, in an amount established by the school district, would address school capacity impacts. The following mitigation measures are intended to reduce the adverse effects of the Specific Plan build out to less than significant. **PS-5(a) In Lieu Fees.** Individual project applicants shall pay the statutory school fees in effect at the time of issuance of building permits to the appropriate school districts. If permissible, at the time the application is processed, these fees shall include additional District costs associated with impacts to student transportation or other measures to alleviate student transportation overcrowding (e.g. pro-rata contribution to new school transportation systems, student carpooling bulletin boards, etc.) **PS-5(b) School District Noticing**. The applicant shall notify the Las Virgenes Unified School District of the expected buildout date of the project as soon as possible to allow the District to plan in advance for new students.	Less than significant
Impact PS-6 Build out under the proposed Specific Plan would generate an estimated 2.87 tons of solid waste per day. Because the Calabasas Landfill has adequate capacity to accommodate such an increase, impacts related to solid waste are considered Class III, *less than significant*.	Compliance with the City's Source Reduction and Recycling Element (SRRE) and Construction and Demolition Debris Program would reduce the amount of waste disposed of in landfills to the degree feasible. Compliance with the City's SRRE would ensure that adequate areas are provided for collecting and loading recyclable materials within the project area. Compliance with the City's Construction and Demolition Debris Program would ensure that construction waste diverted to local landfills is reduced to the degree feasible. No further mitigation is necessary.	Less than significant
Impact PS-7 The City currently has a shortage of parks and recreational facilities to meet the needs of its population. The population increase associated with build out of the Specific Plan area would exacerbate this shortage and increase demand for recreational facilities. However, because the Specific Plan would dedicate more land than is required by the City and individual development would be required to dedicate and/or pay an in-lieu fee, recreational impacts are considered a Class II, *but mitigable*	Based on the City's land dedication requirements, described above in the Setting, developers within the Specific Plan area would be required to provide a minimum of 2.64 acres of land for parks or in lieu fees. The Specific Plan would dedicate about 32 acres of open space lands. Therefore, the Specific Plan would provide more than the required open space dedication and no further mitigation is necessary.	Less than significant

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
impact.		
TRANSPORTATION AND CIRCULATION		
Impact T-1 Full buildout of the Specific Plan will result in the addition of 17,593 new average daily trips onto the local circulation network. This would cause one street segment to operate below the City's LOS C standard. Impacts to street segments are considered a Class I, *significant unavoidable impact*.	Successful accomplishment of the objectives of the project requires that a pedestrian oriented atmosphere be created to the extent possible within the project area. This includes traffic calming as proposed in the Specific Plan. Therefore, while traditional road widening approaches could be implemented to avoid or mitigate this project impact, these measures are considered infeasible in the context of the overall project objectives. Given the unavailability of road widening as a mitigation option, this is considered a significant and unavoidable impact of the proposed project.	Unavoidable and Significant
Impact T-2 Full buildout of the Specific Plan will result in the addition of 804 A.M. peak hour trips and 1,633 P.M. peak hour trips to the study-area intersections. This would generate adverse impacts at two intersections during the A.M. peak hour and at eight intersections during the P.M. peak hour. This is considered a Class II, *significant but mitigable* impact.	The following text identifies improvements that would reduce the intersection impacts to a less than significant level, except at the Kanan Road/U.S. 101 Southbound intersection, where the level of service would exceed the City's LOS standard. Implementation of these measures may occur incrementally over the build out of the AVSP, with the timing of the particular to be determined as specific development projects are proposed that would trigger the need for the particular mitigation measure. All mitigation measures that are deemed to be necessary for a specific project shall be completed prior to an issuance of a Certificate of Occupancy. **T-2(a) Kanan Road/Canwood Street - U.S. 101 Northbound Ramps intersection (A.M. and P.M. peak hour)**: Additional capacity will need to be provided at this intersection to obtain acceptable operations. As part of the Kanan Interchange Projects, the future geometry for the southbound approach of the intersection includes three southbound through lanes and a separate right-turn lane. One southbound through lane is a trap lane onto the Northbound On-Ramp, and two through lanes would continue onto the overpass. Future cumulative peak hour volumes on the southbound through approach would exceed 2,000 vehicles per hour (vhp) during the A.M. peak hour and would exceed 1,700 vph during the P.M. peak hour. These volumes indicate the need for additional southbound capacity. Additional measures that would be necessary include restriping of the southbound approach to three through lanes and a shared through/right –turn lane would improve the intersection operations to LOS D during the A.M. peak hour and LOS C during the P.M. peak hour. This mitigation would require that the Northbound on-ramp approach be moved 16 feet (4.9 m) to the west and the overpass be restriped from two southbound lanes to three southbound lanes. The southbound direction on the overpass contains 43.5 feet (13.3 m), which is sufficient to accommodate three 11.8 feet (3.6 m) wide lanes and a 4 feet (1.2 m) wide bike lane.	Unavoidable and Significant

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	Additional widening on the eastbound approach (Canwood Street) is required to provide LOS C during the A.M. peak hour. The eastbound approach would need to be widened from one left-turn lane and one right-turn lane to one left-turn lane, a shared left/right-turn lane, and a right-turn lane. The mitigated geometry is shown below and the mitigated levels of service are shown below in Tables 4.11-9 and 4.11-10. **T-2(b) Palo Camado Canyon Road/U.S. 101 Northbound Ramps intersection (A.M. and P.M. peak hour):** This intersection is currently controlled by a stop sign on the U.S. 101 Northbound Off-Ramp approach. Signalizing this intersection would result in LOS C in the A.M., therefore mitigating the project's impact to a level of insignificance. For the P.M. peak hour to achieve an LOS C and thereby reduce the project's impacts to a level of insignificance, the westbound approach (Northbound Off-Ramp) would need to be widened to provide dual left-turn lanes and a right turn lane, in addition to the signal. Any future improvements for this intersection would likely need to be processed through Caltrans and require Caltrans permitting. City staff have indicated that several improvement options for the intersection are being evaluated as part of the traffic study underway for a school site proposed east of Palo Camado Canyon Road within County limits. Improvement options include installation of a signal, widening of the overpass and/or approaches, or construction of a roundabout at this location. **T-2(c) Reyes Adobe Road/Canwood Street intersection (P.M. peak hour):** The City has programmed the widening of the northbound approach as part of the U.S. 101/Reyes Adobe interchange improvement project. After implementation of the proposed improvements, the intersection would operate at LOS A during the P.M. peak hour, thereby reducing the project's impact to a level of insignificance. It is noted that no implementation schedule has been developed for this project at this time. The mitigated level of service is shown below in Table 4.11-10. **T-2(d) Reyes Adobe Road/U.S. 101 Southbound Ramps intersection (P.M. peak hour):** The City has programmed the widening of this intersection as part of the U.S. 101/Reyes Adobe interchange improvement project. After construction, the intersection would operate at LOS C during the P.M. peak hour, thereby reducing the project's effect to less than significant. It is noted that no implementation schedule has been developed for this project at this time. The mitigated level of service is shown below in Table 4.11-10. **T-2(e) Reyes Adobe Road/Agoura Road intersection (P.M. peak hour):** Restriping the southbound approach to provide dual left-turn lanes and a right-turn lane, and providing additional capacity on the westbound approach would result in LOS C during the P.M. peak hour, thereby reducing the project's impact to less than significant. There are two receiving lanes on all three legs of this intersection. The southbound approach contains one left-turn lane and the right-turn lane which are separated by a wide striped channelization island. There is sufficient pavement width between the raised median and the	

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	western curb (43 ft) to restripe the approach to two left-turn lanes and a right-turn lane. In addition, the westbound approach should be restriped to a shared through/right-turn lane and a dedicated right-turn lane, or be widened to include an additional lane (through, through-right, and right-turn lane) to provide LOS C during the P.M. peak hour. The mitigated level of service is shown below in Table 4.11-10.	
	T-2(f) Kanan Road/Canwood Street (E) intersection (P.M. peak hour): This intersection was recently reconstructed as part of the Kanan Road/U.S. 101 interchange improvement project. Kanan Road contains two northbound through lanes and a right-turn lane; the southbound approach contains a left-turn lane and three through lanes. A third northbound through lane (two through lanes and a through-right-turn lane) is required to provide LOS C during the P.M. peak hour. This mitigation measure would require some widening of the north side of the intersection for 200 ft or more to provide three receiving lanes. The mitigated level of service is shown below in Table 4.11-10. **T-2(g) Kanan Road/Roadside Drive - U.S. 101 Southbound Ramps intersection (P.M. peak hour):** Additional capacity on the northbound and southbound approaches will need to be provided at this intersection to provide LOS C operations. The required improvements are outlined below: There are three northbound receiving lanes provided on the north side of the intersection. Under the proposed intersection design, two lanes continue onto the overpass and one lane traps into the U.S. 101 Southbound On-Ramp. The northbound approach would contain one through lane and one shared through/right-turn lane. This approach should be widened to provide two through lanes and one shared through/right-turn lane. Under the proposed intersection design, the southbound approach would contain one left-turn lane, two through lanes and one right-turn lane. To provide LOS C during the P.M. peak hour, a second southbound left-turn lane is needed. There is sufficient roadway width provided on the north leg of the intersection and the overpass to provide dual left-turn lanes, two through lanes and a right-turn lane on the southbound approach, and retain the three northbound receiving lanes provided on the north side of the intersection. The bike lane on the southbound approach shown on the proposed intersection design may need to be eliminated. It is noted that the lane widths on the north leg (11-foot left-turn lanes, 11-foot through lanes and 12 to 13-foot right-turn lanes) would be less than the lane widths specified by Caltrans (12-foot left-turn lanes, 12-foot through lanes and 16-foot right-turn lanes), and would require approval of a design exception. Additionally, the east leg of the intersection (Roadside Drive) would need to be widened to the south to provide two receiving lanes. Implementation of the above improvements would result in LOS C (V/C 0.78). The mitigated geometry is shown below followed by the mitigated level of service as shown in Table 4.11-10.	

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	T-2(h) Dorothy Drive/U.S. 101 Southbound Ramps intersection (P.M. peak hour): This intersection is currently controlled by stop signs on all approaches. Signalizing this intersection would result in LOS C during the P.M. peak hour, therefore mitigating the project's impact to a level of insignificance. The mitigated levels of service are shown below in Table 4.11-10.	
Impact T-3 Project development would require access, circulation and parking improvements that may adversely affect pedestrian and bicycle movements and safety. In addition, the proposed Specific Plan would provide for exceptions to the City's current parking requirements, potentially resulting in the overall reduction of parking required for future development within the Specific Plan area. Individual projects within the Specific Plan area have the potential to result in short term construction impacts to adjoining land uses and roadways. These impacts are considered Class II, significant but mitigable.	**T-3(a) Roundabout Engineering.** Refer to Mitigation Measure PS-3(c) in Section 4.10, Public Services.. **T-3(b) Agoura Road/Zone A Pedestrian Crossing.** It is recommended that the final design of the intersection at the mid-block of Agoura Road (between Kanan and Cornell Road) be configured as a roundabout or a conventional intersection. It should be designed to accommodate pedestrians, bicyclists, and should contain a traversable island allowing larger vehicles such as trucks, buses and emergency vehicles to pass through the intersection. **T-3(c) Pedestrian Friendly Median**. As the use of mid-block crosswalks may create safety issues for pedestrians, the median proposed along Agoura Road should also be designed to provide a refuge area for pedestrians using the proposed crossings on Agoura Road. Consideration should be given to making the area more pedestrian friendly. **T-3(d) Pedestrian Cross Walks.** Pedestrian cross-walks should utilize textured and colored surface treatments to clearly distinguish these areas for pedestrian movement. Final design must be approved by the City's Public Works Director. **T-3(e) Individual Access.** The design and control of individual access driveways will need to be determined as individual projects are analyzed. Analysis of these individual access driveways should give consideration to traffic volumes to and from each individual site within the Specific Plan and opposing traffic volumes on the adjacent roadway system. **T-3(f) Construction Impacts.** Prior to individual project approval, short-term construction impacts shall be examined. Where necessary, a construction vehicle management plan shall be developed and implemented. This plan shall include measures to avoid conflicts with nearby businesses and other land uses (such as construction activity notification and timing so as to minimize conflicts) and to minimize the effects on the local street network.	Less than significant

1.0 INTRODUCTION

The Agoura Village Specific Plan Final Environmental Impact Report (EIR) was certified by the City Council of Agoura Hills in 2006. Per a Writ of Mandate issued in 2007 by the Superior Court of California, County of Los Angeles, the City was directed to set aside its approval of the AVSP, amendments, zone change, and the EIR, and prepare new CEQA documentation related to more specific biological data and clarification of project alternatives. The Draft Revised and Recirculated EIR (RR EIR) was released, and the 45-day public comment period began on May 8, 2008 and closed on June 23, 2008. The document included only those changes to the original Final EIR that were required by the Writ of Mandate to meet judicial review. Those changes involved Section 2.0 Project Description, Section 4.3 Biological Resources, Section 6.0 Alternatives, and the Biological Technical Appendix. Since the distribution of the Draft Revised and Recirculated EIR in May 2008, an additional area of the original AVSP boundary at the western end was surveyed for biological resources. This additional biological information has been added to the Draft Revised and Recirculated EIR, and the new document is referred to as the Updated Draft Revised and Recirculated EIR (Updated RR EIR). This was circulated for public comment between June 23rd and August 7th, 2008. This document is the Updated Revised and Recirculated Final Environmental Impact Report for the Agoura Village Specific Plan project.

This document evaluates the environmental effects of the Agoura Village Specific Plan (AVSP), a long range plan that has been developed by the City of Agoura Hills through a community planning process to guide future development at and around the intersection of Agoura Road and Kanan Road within the City of Agoura Hills. Full build out under the provisions of the AVSP would result in the development and redevelopment of approximately 96 acres of the approximate 233 acre Specific Plan area within the City with a mixed use "Village" that will include up to 575,958 square feet of new office, retail, restaurant, community center, hotel building area, up to 293 new residential units, and redevelopment of up to an existing 372,042 square feet of office and retail space. The project area includes properties on both the north and south sides of Agoura Road and will involve a broad range of public circulation and infrastructure improvements in addition to establishing the planning framework for new development that could occur within the project area.

1.1 PURPOSE AND LEGAL AUTHORITY

This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) and the *State CEQA Guidelines*. In accordance with Section 15121 (a) of the *State CEQA Guidelines* (California Administrative Code, Title 14, Division 6, Chapter 3), the purpose of an EIR is to serve as an informational document that:

> *"will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project."*

This EIR is intended to fulfill the requirements for a Program EIR for the Specific Plan. As provided in Section 15168 of the State CEQA Guidelines, a Program EIR may be prepared on a

series of actions that may be characterized as one large project. The State CEQA Guidelines state that:

> *"Where individual projects are, or a phased project is, to be undertaken and where the total undertaking comprises a project with significant environmental effect, the Lead Agency shall prepare a single program EIR for the ultimate project as described in Section 15168. Where an individual project is a necessary precedent for action on a larger project, or commits the Lead Agency to a larger project, with significant environmental effect, an EIR must address itself to the scope of the larger project."*

Since the proposed project is the adoption of a Specific Plan, it is appropriate that the EIR document examine the proposed action on a program level. This CEQA section follows the principle that the EIR must show the big picture of what is involved. If the approval of one particular activity (such as the approval of the AVSP) could be expected to lead to other activities being approved in the same general area (such as individual projects that may be proposed within the AVSP area), the EIR should examine the expected effects of the ultimate environmental changes. Section 15168 of the *State CEQA Guidelines*, further defines when it is appropriate to prepare a Program EIR. This section states that:

> A program EIR may be prepared on a series of actions that can be characterized as one large project and are related either:
>
> *(1) Geographically,*
>
> *(2) As logical parts in the chain of contemplated actions,*
>
> *(3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or*
>
> *(4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.*

The AVSP project meets all of the above criteria, which further confirms that preparation of a Program EIR is the appropriate approach for CEQA compliance for the AVSP, a long range planning project. Further, the use of a Program EIR can allow a Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts.

Pursuant with the California Environmental Quality Act (CEQA) and the *State CEQA Guidelines* Section 15088.5, recirculation of an EIR is appropriate when "significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term information can include changes in the project or environmental setting as well as additional data or other information." Section 15088.5 further states that "if the revision is limited to a few chapters or

portions of the EIR, the lead agency need only recirculate the chapters or portions that have been modified."

The Updated Revised and Recirculated Draft EIR included only those changes to the original Final EIR that were required by the Writ of Mandate to meet judicial review. Those changes involved Section 2.0 Project Description, Section 4.3 Biological Resources, Section 6.0 Alternatives, and the Biological Technical Appendix. As the City had previously circulated a draft of the AVSP EIR in 2006 and responded to comments on that draft, CEQA provides for and the City requested that reviewers limit their comments only to the revised portions of the EIR being recirculated. This Updated Final Revised and Recirculated EIR incorporates the Updated RR EIR sections, those sections of the 2006 Final EIR which did not change and were not recirculated (including the 2006 comments and response to comments), and comments and responses to comments made on the Updated RR EIR.

1.2 SCOPE AND CONTENT

The 233-acre AVSP area is located within the City of Agoura Hills. The area existed as unincorporated Los Angeles County until the City was incorporated in 1982. Without specific guidance, early development lacked infrastructure and vision. In 1997, City staff developed the "Village Concept," which embraced a pedestrian-friendly, vibrant, and entertainment-oriented vision for the area. From 2001-2003, a planning team contracted by the City (RRM Design Group) drafted urban design and planning principles, land use and circulation plans, streetscape improvements themes, and implementation recommendations that would lead to the establishment of the "Village Concept."

Known as the Agoura Village Strategic Action Plan (AVSAP), this community-planning endeavor contemplated about 576,000 square feet (sq ft) of development, but did not specifically dictate development limits. The AVSAP describes shops, restaurants, a hotel, apartments, theatres, and other entertainment uses. The eventual implementation of the plan's vision would result in a new downtown for the community that is intended to become a unique destination within the City of Agoura Hills.

To streamline implementation of the AVSAP, the City proposed preparation of a Specific Plan for the project area in 2004. If adopted, the Agoura Village Specific Plan (AVSP) would become the underlying General Plan land use designation and zoning for the area and therefore no General Plan Amendments or zone changes would be required to implement subsequent development, provided that such development was found to be consistent with the provisions of the Specific Plan.

As noted above, this Updated Final Revised and Recirculated EIR incorporates those sections of the 2006 Final EIR which have not changed since its certification (this includes the final response to comments as provided in the 2006 Final EIR); those sections of the 2006 EIR which have been updated, revised and recirculated; and comments and responses to comments made on the Updated RR EIR. The following illustrates those sections incorporated from the 2006 EIR which have not changed and those sections which were revised and recirculated. Note that all recommended changes that were adopted in the 2006 Final EIR have been accepted within this

document for the purposes of reading clarity. This document illustrates (in underline format) only those changes made between the Updated Draft RR EIR and the Updated Final RR EIR.

Issue sections that have not changed from the 2006 Final EIR

- *Aesthetics*
- *Air Quality*
- *Geology*
- *Hazardous Materials*
- *Historic and Archaeological*
- *Hydrology and Water Quality*
- *Land Use*
- *Noise*
- *Public Services*
- *Transportation and Circulation*

Issue sections from the 2006 Final EIR which have been updated, revised and recirculated

- *Biological Resources*
- *Alternatives*

This EIR addresses the issues referenced above and identifies potentially significant environmental impacts of the project and cumulative development in the City in accordance with provisions set forth in the *CEQA Guidelines.* The EIR also recommends feasible mitigation measures, where possible, that would reduce or eliminate adverse environmental effects.

In preparing the EIR, pertinent City policies and guidelines, existing EIRs and background documents prepared by the City were used. A full reference list is contained in Section 7.0, *References and Preparers.*

The Alternatives section of the EIR was prepared in accordance with Section 15126.6 of the *CEQA Guidelines* and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic objectives of the project. In addition, the EIR identifies the "environmentally superior" alternative from the alternatives assessed. The alternatives evaluated include the CEQA-required "No Project" Alternative and four alternative development scenarios for the project area. The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. The *CEQA Guidelines* provide the standard of adequacy on which this document is based. The Guidelines state:

> *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 the 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.*

1.3 LEAD, RESPONSIBLE AND TRUSTEE AGENCIES

The *CEQA Guidelines* define "lead," "responsible" and "trustee" agencies. The City of Agoura Hills is the lead agency for the project because it has principal responsibility for approving the project.

A "responsible agency" refers to a public agency other than the "lead agency" that has discretionary approval over the project. Since the AVSP is a City planning document and does not specifically address a proposed development plan, there are no other regulatory agencies that have discretionary authority over the plan. Subsequent development projects will be subject to discretionary approval of the City as well as potentially several other public agencies. For example, the California Department of Fish and Game (CDFG) has jurisdiction within the bed, bank, and channel of streams and lakes under Section 1600 of the California Fish and Game Code, and any alterations within such areas are subject to Fish and Games discretionary decisions regarding a Lake or Streambed Alteration Agreement. Discretionary approval from the Los Angeles County Flood Control District (LACFCD) would be required for restoration of Medea Creek and its long-term maintenance. Therefore, CDFG, LACFCD, and the Los Angeles Regional Water Quality Control Board will likely be responsible agencies for future projects within the AVSP area.

A "trustee agency" refers to a state agency having jurisdiction by law over natural resources affected by a project. Similar to the discussion above for responsibilities, the AVSP is a planning document and does not involve specific development at this time. Therefore, there are no trustee agencies associated with the AVSP. As mentioned above, the CDFG has jurisdiction over biological resources, including wetlands that may be affected by future development within the AVSP area. Therefore, CDFG may be a trustee agency with respect to future development projects within the project area.

It is noted that the definition of "public agency" under CEQA does not include federal agencies (*State CEQA Guidelines* Section 15379) and consequently those agencies are neither responsible nor trustee agencies. Federal agencies nonetheless may have regulatory jurisdiction over portions of the project. Discharges of dredged material to "waters of the United States and adjacent wetlands" are under the regulatory jurisdiction of the United States Army Corps of Engineers per Section 404 of the federal Clean Water Act. Section 7 of the federal Endangered Species Act requires formal consultation between federal agencies and the US Fish and Wildlife Service and/or the National Marine Fisheries Service when a federally-issued permit (such as a Section 404 permit) may affect species listed under this law.

1.4 ENVIRONMENTAL REVIEW PROCESS

The environmental impact review process, as required under CEQA, is summarized below and illustrated on Figure 1-1. The steps are presented in sequential order.

1. **Notice of Preparation (NOP) Distributed.** Immediately after deciding that an EIR is required, the lead agency must file a NOP soliciting input on the EIR scope to "responsible," "trustee," and involved federal agencies; to the State Clearinghouse, if

one or more state agencies is a responsible or trustee agency; and to parties previously requesting notice in writing. The NOP must be posted in the County Clerk's office for 30 days. A scoping meeting to solicit public input on the issues to be assessed in the EIR is not required, but may be conducted by the lead agency.

2. **Draft Environmental Impact Report (DEIR) Prepared.** The DEIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) alternatives; g) mitigation measures; and h) irreversible changes.

3. **Public Notice and Review.** A lead agency must prepare a Public Notice of Availability of an EIR. The Notice must be placed in the County Clerk's office for 30 days (Public Resources Code Section 21092) and sent to anyone requesting it. Additionally, public notice of DEIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must consult with and request comments on the DEIR from responsible and trustee agencies, and adjacent cities and counties. The minimum public review period for a DEIR is 30 days. When a DEIR is sent to the State Clearinghouse for review, the public review period must be 45 days, unless a shorter period is approved by the Clearinghouse (Public Resources Code 21091). Distribution of the DEIR may be required through the State Clearinghouse.

4. **Notice of Completion.** A lead agency must file a Notice of Completion with the State Clearinghouse as soon as it completes a DEIR.

5. **Final EIR (FEIR).** A FEIR must include: a) the DEIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments.

6. **Certification of FEIR.** The lead agency shall certify: a) the FEIR has been completed in compliance with CEQA; b) the FEIR was presented to the decision-making body of the lead agency; and c) the decision-making body reviewed and considered the information in the FEIR prior to approving a project.

7. **Lead Agency Project Decision.** A lead agency may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted.

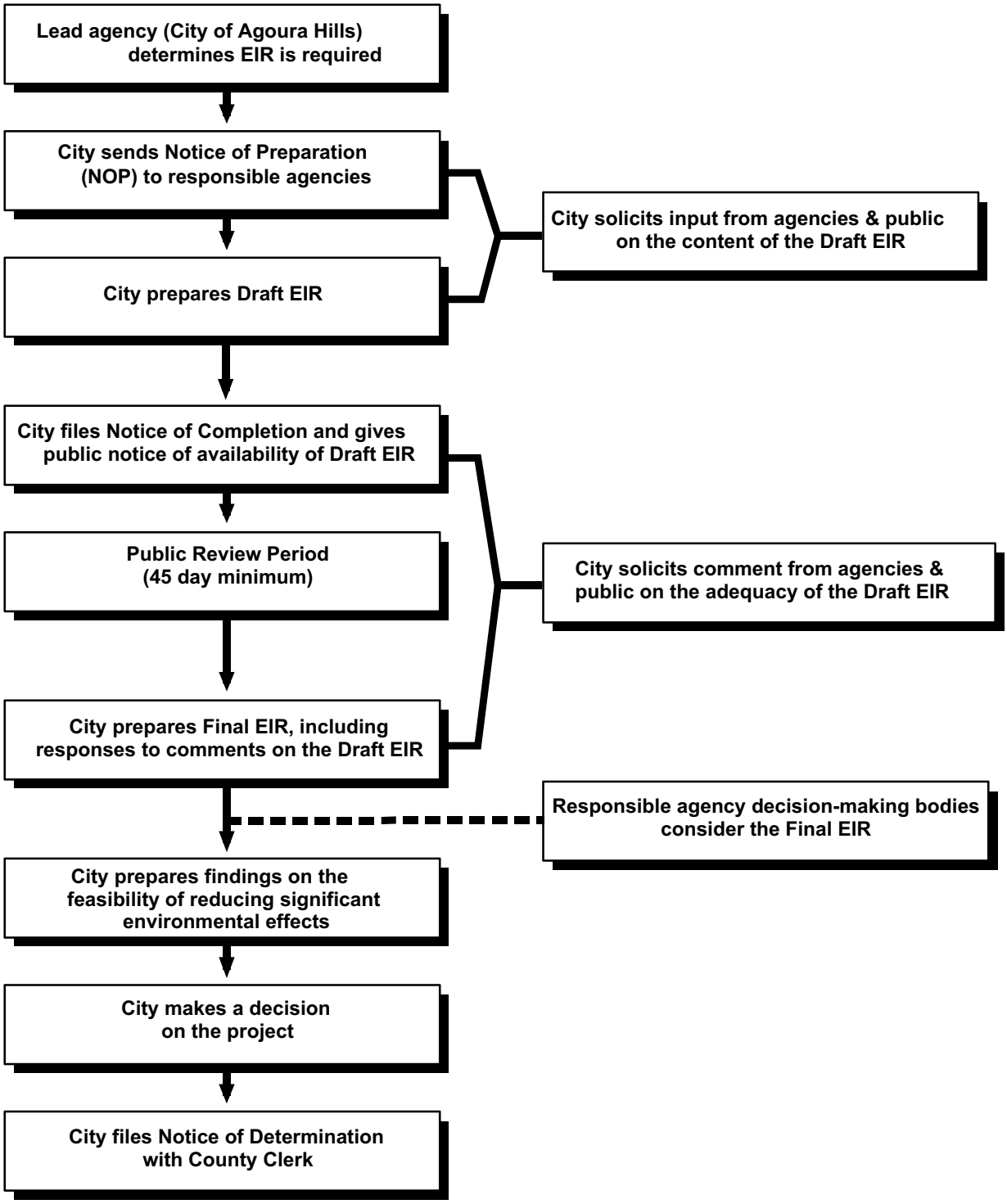
8. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead or responsible agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are

within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible. If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that set forth the specific social, economic or other reasons supporting the agency's decision.

9. **Mitigation Monitoring/Reporting Program.** When an agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.

10. **Notice of Determination.** An agency must file a Notice of Determination after deciding to approve a project for which an EIR is prepared. A local agency must file the Notice with the County Clerk. The Notice must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA challenges.

THE EIR PROCESS



CEQA Environmental Review Process

Figure 1-1

2.0 PROJECT DESCRIPTION

2.1 PROJECT APPLICANT

City of Agoura Hills
30001 Ladyface Court
P0 Box 20250
Agoura Hills, California 91301

2.2 PROJECT LOCATION

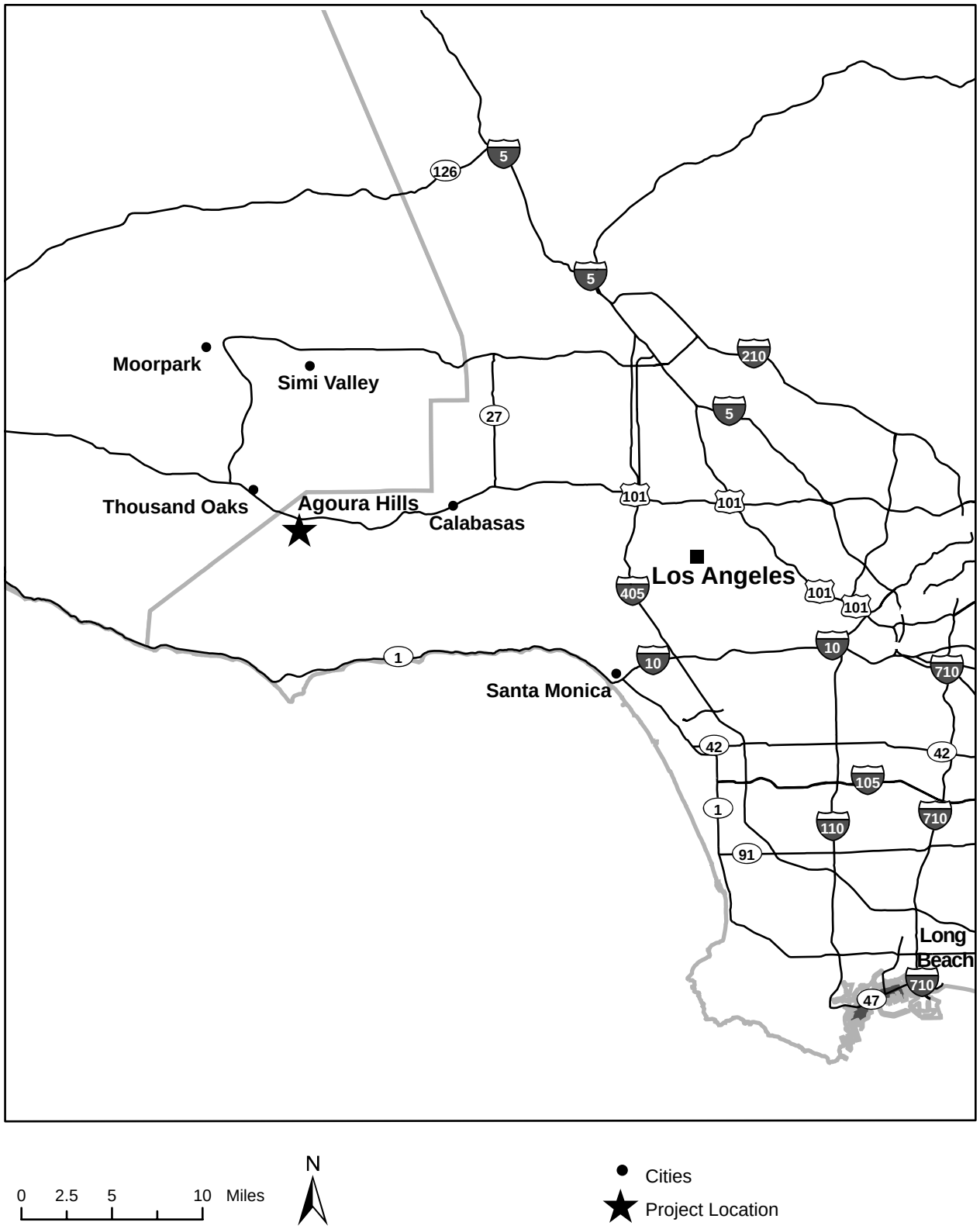
The 233-acre project area is located in the City of Agoura Hills, in western Los Angeles County. Agoura Hills is located along U.S. Highway 101, about 30 miles west of downtown Los Angeles and 4 miles east of the Ventura and Los Angeles County boundary. The project area is located around the intersection of Agoura and Kanan Roads. The project area involves property on both the north and south side of Agoura Road, from about 2,400 feet west of Kanan Road to about 750 feet east of Cornell Road. Roadside Drive and U.S. Highway 101 border much of the project to the north. Figure 2-1 shows the regional location of the project area, while Figure 2-2 shows the area within its local context.

2.3 EXISTING CHARACTERISTICS OF THE PROJECT AREA

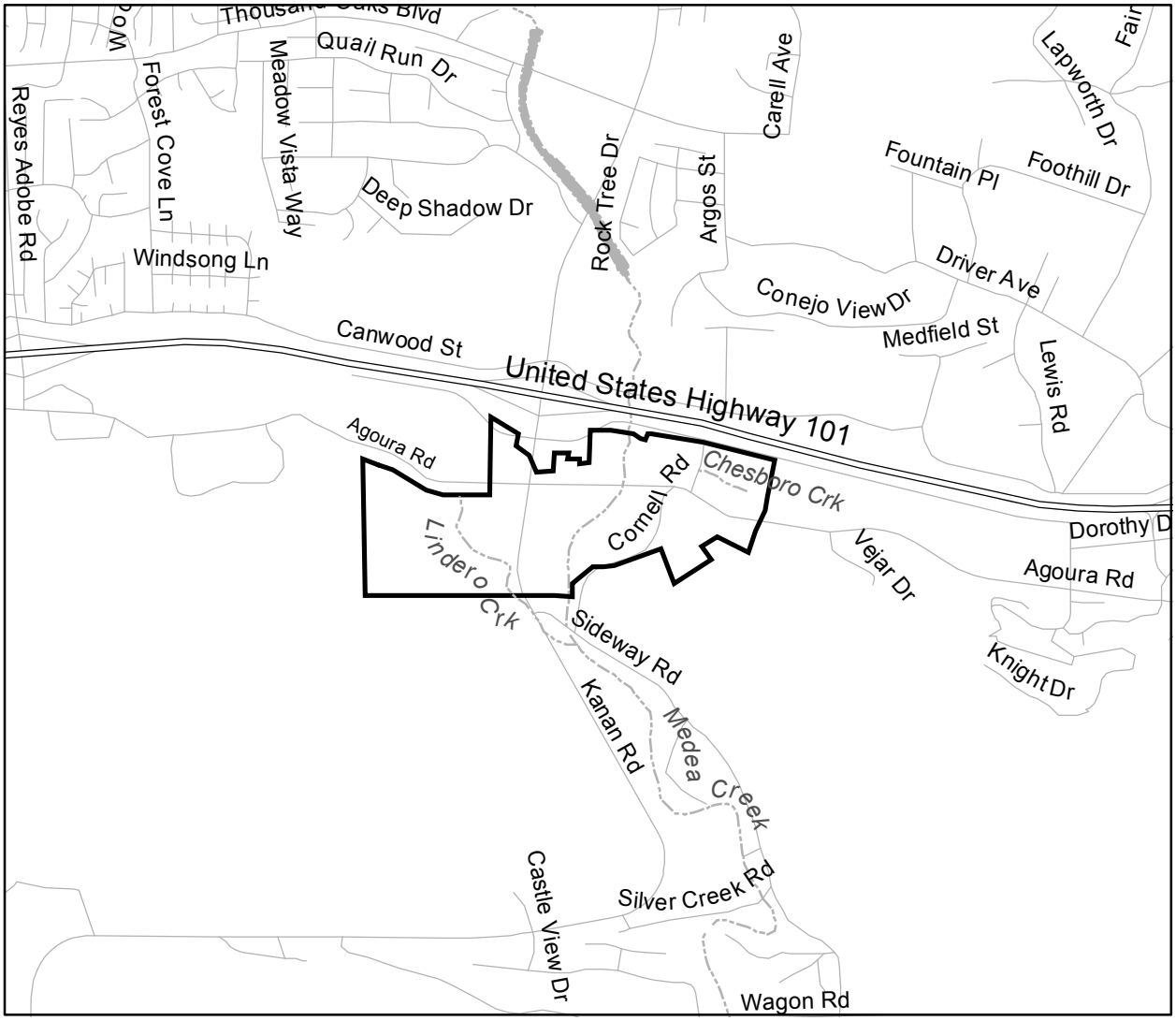
The project area currently contains about 32 acres developed with approximately 372,042 square feet (sf), of various commercial uses including retail, restaurant, office, theatres, and services and another approximately 14 acres of public infrastructure (roads and flood control channel). Table 2-1 outlines existing land uses within the developed portion of the project area in more detail and Figure 2-3 shows the locations of those developments and existing conditions at the site.

About 190 acres of the total planning area is vacant and currently undeveloped. As shown in Figure 2-3, the existing project area can be characterized as generally developed and undeveloped. The northern portion of the project area is largely developed with various types of retail, commercial, and office uses. The southern portion of the project area consists of predominantly vacant lands and a few single-family residential dwellings. The northern portion of the area is bounded by U.S. Highway 101 and the southern half of the project is bounded Ladyface Mountain and areas designated as open space.

The project area contains variable topography. From its prominent ridgeline, Ladyface Mountain descends dramatically in a northerly direction from an elevation of about 1,790 feet above sea level to Agoura Road, presently aligned at an 860-foot elevation. The western portions of the project area are relatively flat adjacent to Agoura Road but ascend quickly south towards Ladyface Mountain. The areas north of Agoura Road are predominantly built out, are relatively flat, and devoid of significant native flora and fauna. The areas south of Agoura Road generally descend in a southeasterly aspect from a hilltop located just east of Kanan Road to natural portions of Medea Creek and open space.



Regional Location Figure 2-1



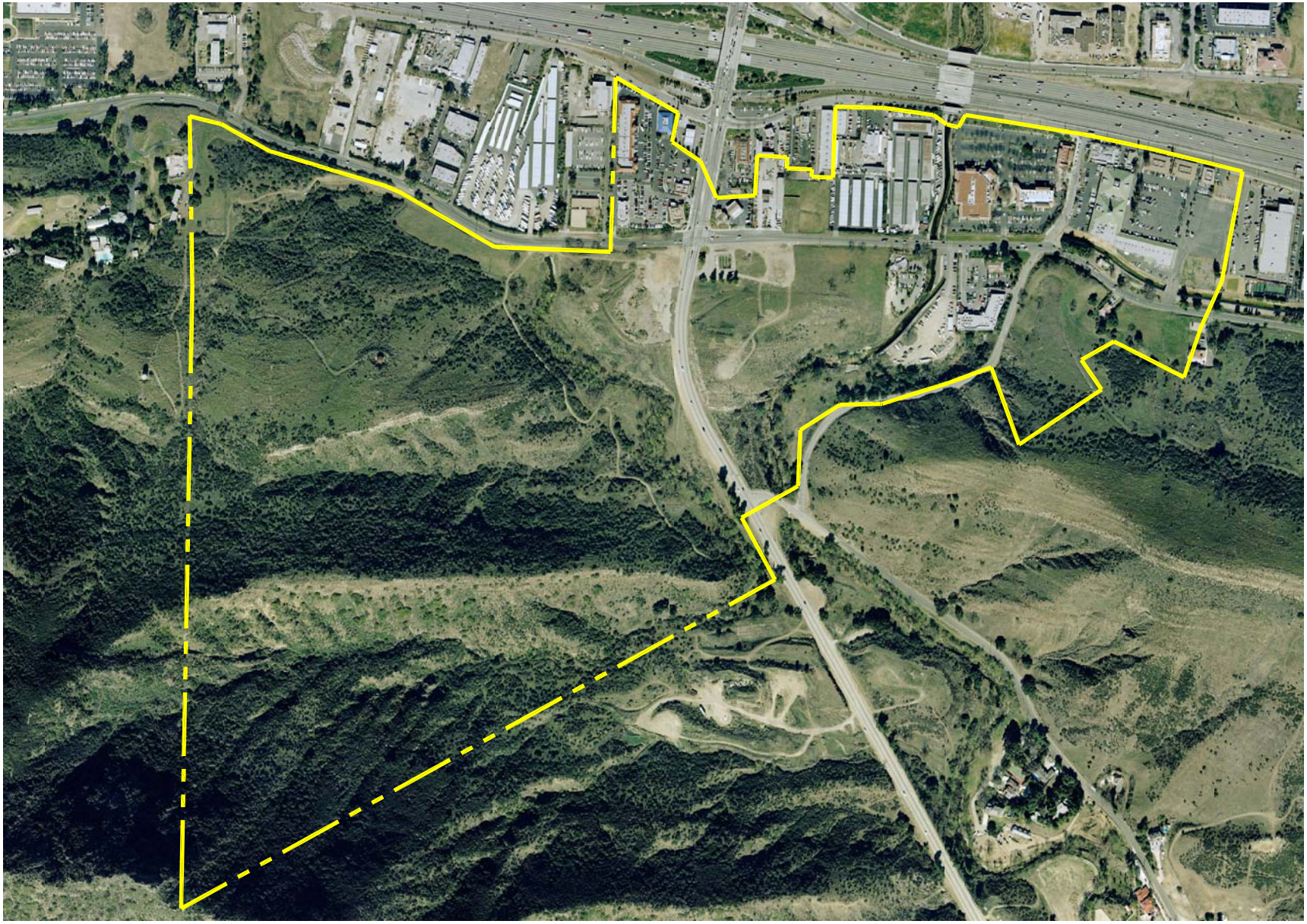
Source: US Bureau of the Census TIGER 2000 data.

Project Location

N

0 0.25 0.5 Miles

Project Vicinity Figure 2-2



Existing Conditions

Figure 2-3

Aerial Source: City of Agoura Hills, 2005

Three creeks, Medea, Lindero (both are blue line streams), and Chesebro Creek flow through the western and central portions of the project area. Two tributaries flow to Medea Creek. The western tributary is located in the southwest portion of the project area and flows south just west of Kanan Road to Medea Creak. The eastern tributary is located within the south-central portion of the project area. The creeks onsite provide well-developed wetland and riparian ecosystems. The flora of the project area is a mixture ornamental landscaping (primarily north of Agoura Road), natural willow riparian forest, valley and coast live oak savannah, Venturan coastal sage scrub, and annual grassland (primarily south of Agoura Road). Table 2-1 summarizes existing conditions and land use characteristics of the area.

Table 2-1 Current Land Use Information for the Project Area

Site Characteristic	Description
General Plan Designation	Ladyface Mountain Specific Plan, Restricted Open Space (OS-R), Commercial-Retail Service (CG), and Business Park - Office/Retail (BP-O/R)
Zoning	Specific Plan – Agoura Village Overlay (SP-AV); Open Space – Agoura Village Overlay (OS-AV); Retail Service Commercial –Freeway Corridor-Agoura Village (CRS-FC-AV); Retail Service Commercial – Drainage Way, Flood Plain, Watercourse – Agoura Village (CRS-D-AV); Business Park Office Retail – Agoura Village (BP-OR-AV); Retail Service Commercial - Freeway Corridor- Old Agoura Design - Agoura Village (CRS-FC-OA-AV)
Site Size	233 acres with approximately 96 acres in proposed development zones (inclusive of public infrastructure)
Current Land Use	190 acres vacant, 46 acres developed with commercial uses including retail, restaurant, office, theatres, and services and public infrastructure
Surrounding Land Use	*North:* Roadside Drive and US Highway 101 *South:* Ladyface Mountain and unincorporated Los Angeles County Open Space *East:* Business park (northeast) and open space (southeast) *West.* Conejo Valley U-Store-It (northwest) and Ladyface Mountain (southwest)
Regional Access	From US HWY 101
Local Access	From Kanan Road, Agoura Road, and Roadside Drive
Utilities and Public Service Providers	*Water:* Las Virgenes Municipal Water District *Sewer:* Los Angeles County Department of Public Works *Gas* : Southern California Gas Company *Electric:* Southern California Edison *School District:* Las Virgenes Unified School District

As shown in Table 2-1, most of the proposed development zones have Agoura Hills General Plan land use designations of Commercial-Retail Service (CG) and Business Park-Office/Retail (BP-OR). The remainder of the project area is designated in the General Plan as the Ladyface Mountain Specific Plan area, with a small area designated Restricted Open Space. Zoning within the project area is varied; however, the largest portion of the development area is zoned for Retail Service Commercial (CRS-FC-AV, CRS-D-AV, and CRS-FC-OA-AV). The remainder of the site is zoned for Specific Plan, Business Park-Office Retail, and Open Space (SP-AV, OS-AV, or BP-OR-AV).

Potential buildout under the existing land use designations would allow for up to 580,828 square feet (sf) of new development in the undeveloped portions of the project area. It is also anticipated that under the current General Plan designations the developed portion of the study

area (existing 372,042 sf) could realize additional development through redevelopment or revitalization efforts that would occur in this area. In total, full buildout of the study area under the existing General Plan would result in about 952,870 sf of general commercial/retail/office development within the project area. For this analysis, a buildout density of 0.35 was chosen as an average of the General Plan and General Plan EIR buildout densities. Although the General Plan allows for a buildout density of 0.55 FAR, the General Plan EIR used a buildout density of 0.15 FAR. Therefore, a more realistic density is an average of the two, 0.35 FAR.

Figure 2-4 divides the project area into six development zones (Zones A-F) and Table 2-2 outlines the potential buildout that could occur within each zone under the current General Plan land use designations. The approval of the Agoura Village Specific Plan and certification of the FEIR by the City Council on June 14, 2006 included a change to the zone area map, consistent with implementation of Mitigation Measure BIO-1(A) in the 2006 FEIR, that shifted the line of Zone G (now G-B) to the north side of Lindero Canyon Creek. This map change was reflected in the Final AVSP, which was revised per the June 14, 2006 City Council hearing (as identified in the errata sheet for the AVSP and provided to the City Council). The adjustment to the boundary of Zones G and B is reflected in Figure 2-4, incorporating the southern half of Lindero Canyon Creek into Zone G. This change in the project description is reflected throughout this document and analysis. Also, note that most illustrations in the Specific Plan, the 2006 FEIR, and the Draft Revised and Recirculated EIR truncated the Specific Plan Area to focus on the developable zones and core of the Specific Plan consistent with the intent of Section 15126.6(a) of the *State CEQA Guidelines* to "identify and focus on the significant environmental effects of the project." The southern boundary of Zone G-B was truncated and shown in illustrations in the EIR with a hatched line to indicate that the Specific Plan boundary extended southward to the City's southern limits. Due to its size, showing this parcel (which is now open space recently acquired by the Santa Monica Mountains Conservancy) in full would have lowered the resolution of the illustrations unless unnecessarily large and bulky figures were produced. In addition, the Specific Plan (see Figure 1.2 of the Specific Plan) focuses on the central portion of the Plan Area and did not illustrate the extent of the western boundary, which includes two parcels that extend westward from Kanan Road approximately 2,400 feet. For consistency with the Specific Plan Area legal description, which includes the two parcels west of Kanan Road in their entirety, Figure 2-4 illustrates the full extent of the Specific Plan. The Updated Revised and Recirculated EIR now illustrates the full extent of these two parcels. The total amount of development permitted under the Specific Plan for the individual Development Zones remains the same as described in the Specific Plan and previously analyzed in the 2006 EIR.

Table 2-2 Projection of Full Buildout of Project Area Under Current General Plan Land Use Designations

Project Zone	Total Developable Area of Zone (sf)	Land Uses within Zone	Existing Development Within the Project Area (sf)	New Development Potential Within Project Area (sf)	Full Buildout Potential of Project Area (sf)
A South	600,000	Retail / Office / Restaurant / Community Center/ Hotel	-	119,000[5]	119,000
A North	250,000	Retail / Office / Restaurant	58,192 [1]	29,308[5]	87,500
B	700,000	Retail / Office / Restaurant/Hotel	-	202,220[5]	202,220
C	135,000	Service Commercial / Office	43,750 [2]	3,500[5]	47,250
D West	210,000	Retail / Office / Restaurant	36,900 [3]	36,600[5]	73,500
D East	1,100,000	Retail / Office / Restaurant	233,200 [1]	78,300	311,500
E	320,000	Office / Restaurant	-	112,000 [5]	112,000
F	315,000	Office	-	0 [6]	0
TOTAL	**3,630,000**		**372,042**	**580,928**	**952,970**

[1] Currently at an FAR of .25, [2] Currently at an FAR of .30, [3] Currently at an FAR of .20, [4] Based on a FAR = .35, [5] Based on maximum allowed s.f. in Ladyface SP, [6] Square footage included in Zone B

2.4 PROJECT CHARACTERISTICS

The proposed project involves adoption of a Specific Plan (the Agoura Village Specific Plan) to guide future development within an approximately 233-acre area in the southern portion of the City in and around the intersection of Agoura Road and Kanan Road. The project would be primarily implemented and funded by private developers owning parcels in the Specific Plan area.

The proposed land uses within the Specific Plan area are shown in Figure 2-5, Specific Plan Map. The proposed Specific Plan has been developed to guide the implementation of the vision described in the Agoura Village Strategic Action Plan (AVSAP). The AVSAP planning process involved a comprehensive public and stakeholder program that ultimately led to development of the Specific Plan itself. The AVSAP involved three volumes as follows: 1) Agoura Village Strategic Action Plan Opportunities and Constraints Analysis; 2) Agoura Village Strategic Action Plan Urban Design Guidelines; and 3) Agoura Village Strategic Action Plan Architectural Design Guidelines. Copies of these documents are on file at the City Planning Department located at 30001 Ladyface Court, Agoura Hills, California.

Under the proposed Specific Plan, the northern developed areas of the project area would ultimately be revitalized in accordance with the land use development standards and design guidelines contained in the Plan. This area includes the Whizin's Shopping Center, Mann Theater complex, self-storage facilities, and building supply facilities. Future development that could occur on the undeveloped property within the Specific Plan area would be subject to the provisions of the Specific Plan.

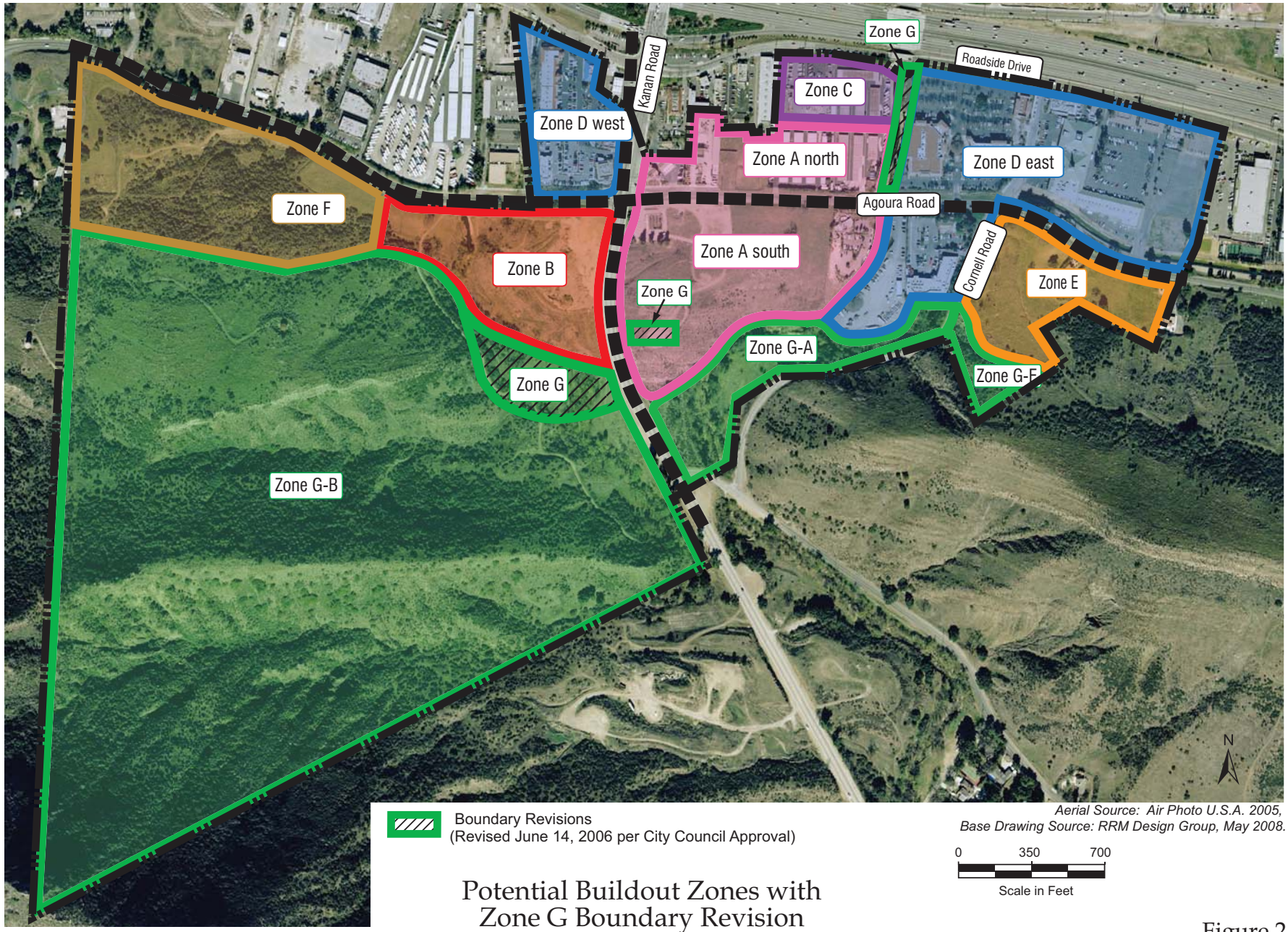
Upon adoption, the "Specific Plan" designation would become the underlying General Plan designation for the project area. While future projects within the Specific Plan area would be required to be processed through the City's development review and approval procedures, no future General Plan Amendments or zone changes would be required to implement subsequent development, provided that such development was consistent with the provisions of the Specific Plan. The Specific Plan would change the current Commercial-Retail Service (CG), Ladyface Mountain Specific Plan, and Business Park - Office/Retail (BP-O/R) land use designations to Agoura Village Specific Plan designation.

The proposed Specific Plan area includes approximately 153 acres that are currently located within the Ladyface Mountain Specific Plan area. The approval of the Agoura Village Specific Plan would in effect amend the Ladyface Mountain Specific Plan (LMSP) and supersede the LMSP plan for this area.

All development applications within the Specific Plan area must follow the requirements and provisions of the City's Agoura Village Development Permit (AVDP) process. Appeals will be regulated pursuant to the City of Agoura Hills Municipal Code. The Agoura Village Development Permit is designed and intended to provide for the orderly development of land in conformance with the vision contemplated by the Agoura Village Specific Plan. The Development Permit allows for innovations and special features in site development, including the location of structures, conservation of natural land features, and efficient utilization of open space. The permit would allow a flexible design approach to the establishment of an environment equal to or better than that resulting from the application of the minimum standards of the Zoning Ordinance.

Any new development or renovation of existing property shall require an Agoura Village Development Permit. An application for a Development Permit shall be processed in the same manner as an application for a Conditional Use Permit pursuant to Division 3 Conditional Use Permit in the Zoning Ordinance. Approval of any new development or renovation of existing property shall require that the Planning Commission make all the following findings:

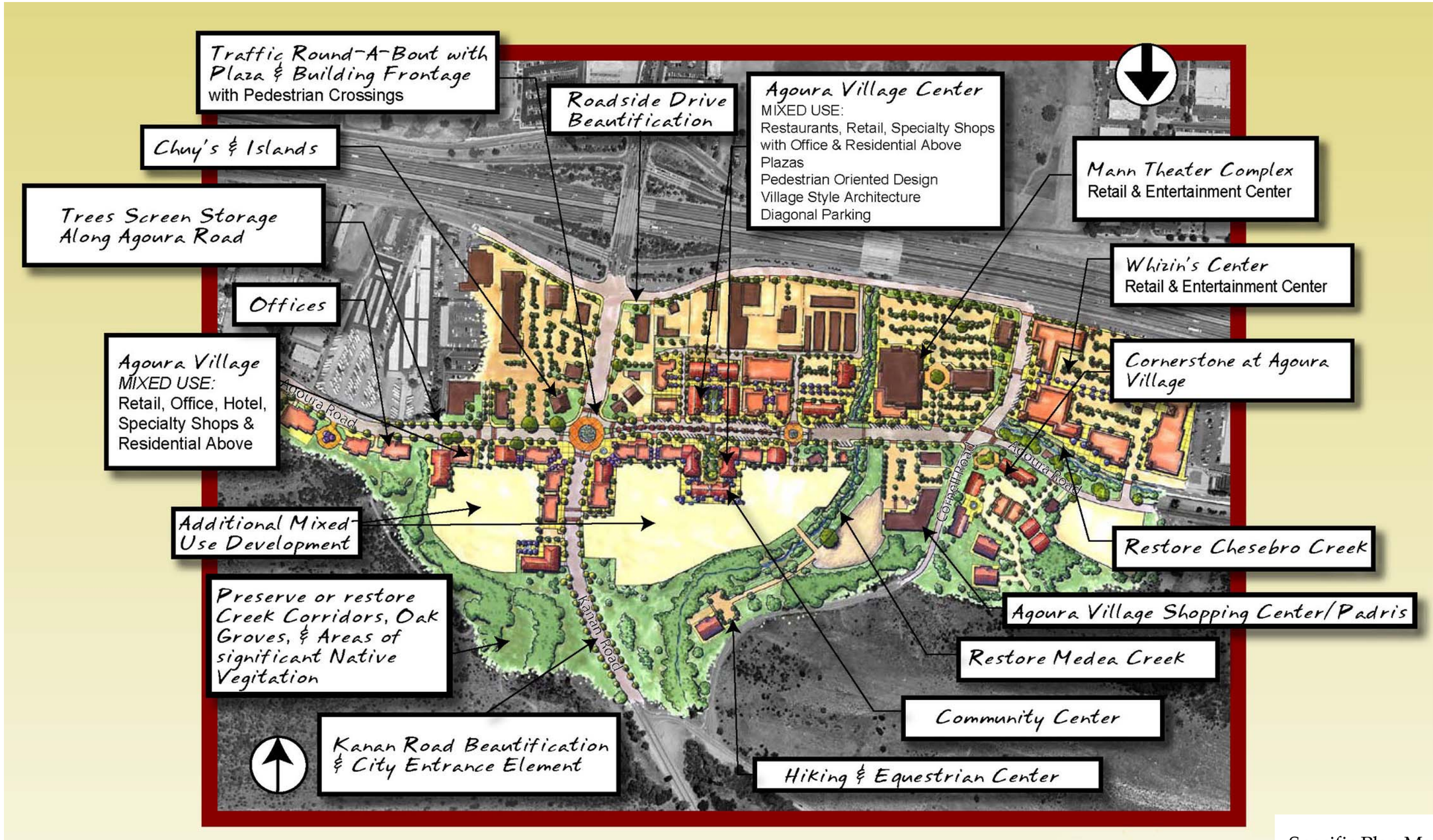
- The proposed project complies with relevant provisions of the adopted Specific Plan.
- The proposed project incorporates design measures to ensure maximum compatibility with the vision of the Agoura Village Specific Plan.
- The proposed project incorporates architectural and landscaping elements that enhance the area.
- The project's vehicular access and parking plan minimizes conflicts and promotes efficient internal circulation and shared use of facilities wherever feasible.



Potential Buildout Zones with Zone G Boundary Revision

Figure 2-4

This Page Intentionally Left Blank



Specific Plan Map

Figure 2-5

Source: RRM Design Group, September 1, 2005.

All development must comply with the standards and guidelines established in the Agoura Village Specific Plan with the exception of requests for density bonuses, maximum building heights, parking reductions/shared parking, maximum building coverage and building size. An increase of up to twenty five percent of the maximum dwelling units allowed for each Zone may be requested by an applicant and granted in consideration of extraordinary contribution of public spaces and/or facilities or contribution to Transportation Impact Fees beyond required minimums by the City Council on the recommendation of the Planning Commission. This would be subject to provisions as specified in greater detail in the Specific Plan.

Any future development would undergo individual project review in accordance with locally adopted City policies and procedures and State law. Area-specific development standards, design guidelines and policies are further defined and illustrated in the Specific Plan.

2.4.1 Specific Plan Development Potential

Full buildout of the proposed Specific Plan would involve a mixed-use "village" development comprised of residential, office, retail, entertainment and restaurant uses within the project area. As a planning document, the Specific Plan provides a framework that would guide future development within the project area. Based on land use designations and development standards within the Specific Plan, full buildout of the Plan is projected to involve new development of between 235 and 293 residential units[1]; a total of up to 576,458 square feet of new office, retail, restaurant, community center, and hotel building area; and revitalization of the existing 372,042 square feet of office and retail space with a higher density development within the same footprint. Total new commercial development within the study area is estimated at 948,500 square feet (includes new development on vacant land and potential increased square footage in currently developed areas that may be revitalized). Therefore, full buildout under the Specific Plan would involve an estimated 948,500 sf and up to 293 residential units.

In order to more effectively plan and analyze the effects of the Specific Plan, the project area was divided into six analysis zones. Figure 2-4 shows the allowable land uses for each of the seven zones (Zones A-G) in the study area. Figure 2-5 illustrates the buildout potential for each analysis zone. It has been assumed that each zone in Figure 2-4 would be developed at a maximum floor area ratio (FAR) of 0.35. An FAR is a ratio used to identify onsite building intensity. A 0.35 FAR assumes that onsite building area would total 35% of the total site area. Note that this does not assume 35% lot coverage if multiple story buildings (in this case up to three stories) are allowed. Table 2-3 summarizes the potential buildout under the Specific Plan by zone. Specific uses that are allowed under the Specific Plan are summarized in Table 2-4, Uses Allowed under the Specific Plan.

Development of the Agoura Village according to the Agoura Village Specific Plan will transform the Agoura Road corridor into a pedestrian-oriented center with retail shops, restaurants, theatres, and entertainment uses. The Plan provides guidance as to the appropriate concentration of residential units as secondary uses that will provide suitable support for the new retail development targeted along the Agoura Road corridor. However, the Specific Plan is designed to accommodate a broad range of densities and uses. Land uses range from

[1] Depending upon density bonus allocations.

residential and office/retail to community center and hotel. The range of densities identified in the Plan could accommodate such development as three pending development applications, each of which is described below in subsection *2.5 Pending Projects*.

Discussion of Specific Plan Components by Analysis Zone.

a. Zones A and B. Zones A and B make up the Village core. The majority of the land within this area is currently undeveloped and would be used to establish the mixed use, pedestrian-oriented environment that is necessary to complete the Village Concept. Commercial development would front onto Agoura Road, establishing a shopping environment with sidewalk cafes. An important objective is to focus redevelopment and investment activity in Zones A and B to increase the vitality of the resulting urban environment. Thus uses and activities that are attractive to people and help support a 24-hour pedestrian oriented village are desired. Zones A and B contain a broad range of uses targeted to specialty retail, life-style entertainment, visitor serving and residential in both horizontal and vertical formats. Residential uses are allowed on the second floor and multi-family stand-alone units are encouraged along the creeks and at the site's periphery so as to create a place where people live, work, and are entertained. The density of development within this area has been assumed to be at a FAR of 0.35. The Plan allows 2 to 3 story development. In order to comply with the project specific parking demands, the Plan acknowledges that parking structures or other innovative parking solutions may be necessary in the future.

b. Zones C and D. Zones C and D have a unique character in that much of the area contains existing buildings and ongoing successful business uses. Additionally, Zones C and D are largely freeway oriented, less pedestrian oriented and contain more service commercial, office space and no residential uses. Development within these areas will primarily involve revitalization and infill development. The zones are adjacent to Roadside Drive and the freeway. Site design and pedestrian and vehicular connectivity will be important to link the areas to the village core. The Plan acknowledges that development should be enhanced by this connectivity and new buildings should be oriented to encourage people to walk from one part of the village to another. It is anticipated that redevelopment within these zones would be at an equal or greater density than what is currently onsite.

Table 2-3 Maximum Buildout Potential for the Agoura Village Specific Plan

Project Zone	Total Developable Area of Zone (sf)	Developable Envelope (sf)	Land Uses per Zone	Existing Development Within the Project Area (sf)	New Development Potential Within Project Area (sf)[2]	Full Buildout Potential of Project Area (sf)	Full Residential Buildout Potential of Project Area (DU)[7]
A South	600,000	340,000	Retail / Office / Restaurant / Community Center/ Hotel[4]	-	119,000	119,000	118
A North	250,000	250,000	Retail / Office / Restaurant	58,192 [3]	29,308	87,500	19
B	700,000	350,000	Retail / Office / Restaurant/Hotel[8]	-	122,500	122,500	112
C	135,000	135,000	Service Commercial / Office	43,750 [5]	3,500	47,250	
D West	210,000	210,000	Retail / Office / Restaurant	36,900 [6]	36,600	73,500	
D East	1,100,000	890,000	Retail / Office / Restaurant	233,200 [3]	78,300	311,500	
E	320,000	320,000	Office / Restaurant	-	112,000 [5]	112,000	44
F	315,000	215,000	Office	-	75,250 [7]	75,250	
G		-	Open Space	-	-	-	-
TOTAL	**3,630,000**	**2,710,000**		**372,042**	**576,458**	**948,500**	**293**

[1] Developable envelope depicts only the buildable area within each zone. Does not include designated open space areas; [2] Based on a FAR = .35 (net); [3] Currently at a FAR = .25; [4] Total s.f. includes a 100-120 room approximately 70K s.f. Hotel.; [5] Currently at an approximate FAR of .30; [6] Currently at an approximate FAR of .20; [7] Includes 25% density bonus for contributions to transportation improvement, Agoura Village shared improvement, and/or in-lieu parking fees, [8] Option to locate 50 stand alone residential units in place of 100 -120 room approx. 70,000 s.f. Hotel.

Table 2-4 Uses Allowed Under the Specific Plan

Uses	Zone A	Zone B	Zone C	Zone D	Zone E	Zone F
Residential						
Apartments, condominiums, retirement homes, or living quarters (above the ground floors only)	CUP	CUP	-	-	CUP	-
Stand alone residential (such as apartments, condominiums, retirement homes, or living quarters)	CUP	CUP	-	-	CUP	-
Retail						
Antique store	X	X	X	X	X	-
Art gallery	X	X	X	X	X	-
Bicycle sales, rent, service	X	X	X	X	X	-
Beauty supply	X	X	X	X	X	-
Book store	X	X	X	X	X	-
Candy store	X	X	X	X	X	-
Clothing and apparel store	X	X	X	X	X	-
Costume shop	X	X	X	X	X	-
Drug store / pharmacy	X	X	X	X	X	-
Electronic equipment	X	X	X	X	X	-
Eyewear	X	X	X	X	X	-
Florist	X	X	X	X	X	-
Footwear	X	X	X	X	X	-
Game arcade	CUP	CUP	CUP	CUP	CUP	-
Gift store / card store	X	X	X	X	X	-
Hobby shop	X	X	X	X	X	-
Jewelry store	X	X	X	X	X	-
Lapidary store	X	X	X	X	X	-
Luggage store	X	X	X	X	X	-
Miscellaneous apparel	X	X	X	X	X	-
Movie theatre	CUP	CUP	CUP	CUP	CUP	-
Music store (including instrument repair and lessons)	X	X	X	X	X	-
Newspaper / magazine stand	X	X	X	X	X	-
Novelty store	X	X	X	X	X	-
Pet store (no kennel)	X	X	X	X	X	-
Photo development	X	X	X	X	X	-
Picture framing shop	X	X	X	X	X	-
Specialty retail store (consistent with purpose of this district)	X	X	X	X	X	-
Specialty grocery	X	X	X	X	X	-
Sporting goods store	X	X	X	X	X	-
Stamp / coin store	X	X	X	X	X	-
Stationery	X	X	X	X	X	-
Tailor / dressmaking shop	X	X	X	X	X	-
Tobacco store	X	X	X	X	X	-
Toy store	X	X	X	X	X	-
Variety store	X	X	X	X	X	-
Watch sales and repair	X	X	X	X	X	-

	Zone A	Zone B	Zone C	Zone D	Zone E	Zone F
Restaurant						
Bakery / pastry	X	X	X	X	X	-
Bar / tavern	X	X	X	X	X	-
Coffee shop / coffee house	X	X	X	X	X	-
Delicatessen	X	X	X	X	X	-
Family restaurant	X	X	X	X	X	-
Formal dining	X	X	X	X	X	-
Ice cream shop	X	X	X	X	X	-
Juice bar	X	X	X	X	X	-
Microbrewery	X	X	X	X	X	-
Pizza parlor	X	X	X	X	X	-
Wine tasting / Sales	X	X	X	X	X	-
Sidewalk café	X	X	X	X	X	-
Specialty foods	X	X	X	X	X	-
Professional Offices/Services						
Accounting office	X*	X*	X	X	X*	X
Advertising business office	X*	X*	X	X	X*	X
Architect office	X*	X*	X	X	X*	X
Art studio	X*	X*	X	X	X*	X
Consultant office	X*	X*	X	X	X*	X
Day spa	X*	X*	X	X	X*	X
Dentist / Medical office	X*	X*	X	X	X*	X
Financial institution	X*	X*	X	X	X*	X
Health clubs / Gymnasium	CUP	CUP	CUP	CUP	CUP	CUP
Interior decorator's office	X*	X*	X	X	X*	X
Law office	X*	X*	X	X	X*	X
Photography studio	X*	X*	X	X	X*	X
Veterinary office (no kennel)	X*	X*	X	X	X*	X
Services Miscellaneous						
Art festival	TUP	TUP	TUP	TUP	TUP	TUP
Banquet facility / Catering	-	-	CUP	CUP	CUP	CUP
Barber shop	X	X	X	X	X	X
Beauty / nail shop	X	X	X	X	X	X
Child care center	CUP	CUP	CUP	CUP	CUP	CUP
Community / Senior center	CUP	CUP	CUP	CUP	CUP	CUP
Dance studio / Martial arts	CUP	CUP	CUP	CUP	CUP	CUP
Educational services / Training	X	X	X	X	X	X
Farmer's market	CUP	CUP	-	CUP	CUP	-
Hotel / Inn	CUP	CUP	CUP	CUP	CUP	CUP
Library	CUP	CUP	CUP	CUP	CUP	CUP
Mailbox services / Photocopy services	X	X	X	X	X	X
Museum	X	X	X	X	X	X
Live entertainment including dancing	CUP	CUP	CUP	CUP	CUP	CUP
Office support (data processing)	X	X	X	X	X	X
Performing arts center	CUP	CUP	CUP	CUP	CUP	CUP
Sidewalk vendor	TUP	TUP	TUP	TUP	TUP	TUP
Ticket agency	X	X	X	X	X	X
Travel agency	X	X	X	X	X	X

X = permitted use, X* = permitted use - in key locations, CUP = conditional use permit, TUP = temporary use permit, - = prohibited uses

c. Zones E and F. Zones E and F are more limited in terms of allowable uses and have less residential use than Zones A and B. Zone E will primarily be made up of retail, offices (all types), mixed-use (residential/office over retail), stand alone attached residential (non-street fronting), and apartments (upper floors only). These uses are typically comprised of attached units with common facilities such as parking, open space and recreation areas. Zone F will be professional office and lodging with no residential uses. New development density within these zones would be 0.35 FAR.

d. Zone G. Zone G is currently undeveloped and would be designated as open space under the Specific Plan.

2.4.2 Planning Components

Agoura Village Strategic Action Plan

The proposed Agoura Village Specific Plan (AVSP) is the planning document that will guide future development within the Agoura Village area. The AVSP is intended to implement the vision developed as part of the Agoura Village Strategic Action Plan (AVSAP) planning process. The AVSAP consisted of three key planning documents for the project area. These inlcude: 1) the Opportunities & Constraints Analysis, 2) the Urban Design Plan, and 3) the Architectural Design Guidelines. A summary of these documents is provided below:

a. Opportunities and Constraints Analysis. This study identified the strengths and weaknesses of utilizing the proposed project area, a recap of the demand for specialty stores, market area demographics, and a summary of market opportunities. The Opportunities and Constraints Analysis established a clear understanding of proposed Agoura Village project's regulatory environment, existing and future physical development potential, traffic considerations, and overall economic issues and conditions.

b. Urban Design Plan. This plan articulated architectural character concepts, circulation patterns, and streetscape enhancements contemplated within the project area. The plan articulates a strong vision statement for the Agoura Village and identified urban design goals and development criteria for the village center. The plan was flexible and allowed creativity and variation to meet the operational needs of individual property owners. The plan created a "pedestrian oriented" development pattern for the village core along Agoura Road that would reduce auto travel through the provision of a mix of services, entertainment opportunities, and housing in close proximity to each other. A phasing strategy was incorporated to ensure that the required development and public improvements would be completed to create a cohesive village center.

c. Architectural Design Guidelines. This document provided specific architectural guidelines were developed to provide clear and useful direction for the renovation of existing buildings and the construction of new buildings within the planning area.

Agoura Village Specific Plan

The Specific Plan incorporated the AVSAP by adopting its overall vision and utilizing planning principles and design concepts which support that vision. These major planning principles

include: mixed-use development, creation of flexible building space, urban and environmental design, pedestrian orientation, and circulation and parking. These are further explained throughout the document as the following individual chapters: Mobility, Land Use and Development Standards, Design Guidelines, Street Beautification and Public Improvements, Infrastructure and Public Services. A summary of the main planning principles and design concepts is provided below:

a. Mixed-Use Development. The AVSP achieves diversity and character by including designs for a mixed-use environment within Agoura Village. The intent of the Plan is to create a mix of land uses that will generate great places in which people can live, work, and play. A mixing of uses adds variety and vitality to commercial centers, neighborhoods, and streets. Additionally, it is intended to make the setting more attractive and interesting, contributing to a balance of different types of activities. The AVSP also calls for a vertical and horizontal mix of uses in the project area to help achieve an interesting visual dynamic (see Figure 2-6). The proposed land uses include new commercial development (retail and office), residential development, visitor services, and civic uses.

Figure 2–6: Example of Mixed Use

b. Creation of Flexible Building Space. Flexibility in the design of buildings is intended to allow businesses to evolve over time and to continue mixing desirable businesses together in the village. This principle maintains that tenant spaces should be designed to allow for an easy transfer of uses and tenants. This would allow businesses to turnover and transition with minimal impact to the remaining business community.

c. Urban and Environmental Design. Innovative urban and environmental design techniques are to be used in the creation of the Agoura Village. The AVSP features planning methods that will externally integrate the project area with its natural surroundings and to internally integrate the project's mix of land uses. The project is designed to tell visitors of Agoura Village that they have entered a place of importance.

Programmed streetscape improvements include new district monumentation and signage, decorative paving features, angled street parking, paseos, and landscaping (see Figure 2-7: Example of Public Space). These improvements will help increase the quality of the pedestrian environment and help slow down automobile traffic in the project area. A unified streetscape will also help bring together the visual and thematic experience of the Agoura Village. To achieve a unified streetscape, new improvements will be included along Agoura Road, such as decorative street furnishings, banners, and light standards reflecting the desired aesthetic character.

Two- to three-story development and massing is encouraged by the AVSP within the Agoura Village to bring a comfortable scale to the street and reduce the impact of the existing large right-of-way. The increased height at the street edge should be enhanced with additional articulation. Architectural features, such as awnings or trellises will be used to create a human scale and a

Figure 2–7: Example of Public Space

pedestrian friendly environment. Development will be required to relate with the project area's natural surroundings. Individual project development shall reflect the significant value of local creeks and provide for their rehabilitation. In addition, project development shall respect the area's natural geographic contours as much as possible by minimizing grading. Graded slopes will also need to be rounded and contoured in order to blend with the existing terrain. Development within the project area will endeavor to maintain view corridors, retain oak trees, and utilize native plant landscaping schemes. The AVSP requires that significant natural vegetation be incorporated into the project whenever possible.

d. Pedestrian Orientation. Improvements to the Agoura Road streetscape in the project area will be required to encourage pedestrian orientation and movement throughout the Agoura Village. This includes making enhancements to the street environment with features such as new bulb outs (enlargement of the sidewalk near an intersection), crosswalk paving, and sidewalks. Locating bulb outs at key points will help minimize pedestrian crossing times. Embellished crosswalks are proposed to aid the visual appeal of the area as well as to direct pedestrians where they should cross Agoura Road.

To create a pedestrian scaled street environment, storefronts along Agoura Road are sited close to the street to better define the street edge. A continuous storefront experience and attractive walkways are needed to maximize the quality of the pedestrian environment. Some variation in front setbacks will be encouraged by the AVSP to allow for outdoor dining opportunities, which will also bring vitality and interest to the street edge. Consistent wayfinding signage will also be used to tie together the project area.

e. Circulation and Parking. Circulation improvements for both auto and pedestrian needs are an important objective for realizing the vision for the Agoura Village. The AVSP calls for the heart of the Village, Agoura Road (between Kanan Road and Cornell Road), to be reduced to two lanes by a landscaped median in the center and diagonal parking on either side of the street as space allows. Roundabouts are to be constructed at each end of Agoura Road to provide better traffic flow, and provide visual interest to the area. Parking strategies are to be employed utilizing different lengths of time and varied users for the viability and success of the area. New diagonal parking on Agoura Road is to provide short-term parking needs for the area while at the same time reducing the crossing distance for pedestrians (see Figure 2–8: Example of Parking Concept). New off-street public parking areas are to be created to allow for longer term parking for visitors, residents, and people who work in the area.

Figure 2–8: Example of Parking Concept

2.4.3 Phasing Schedule

Buildout of the undeveloped portions of the Specific Plan area, along the south side of Agoura Road, is anticipated to occur within 1 to 8 years. Although existing financing mechanisms are in place to provide some funding, the primary capital funding mechanisms for the short-term improvements include private development, County Proposition A and C funds, loans and grant programs. County Proposition A and C are two half-cent sales tax measures approved by Los Angeles County voters to finance a Transit Development Program. Proposition A funds must be used exclusively to benefit public transit. Proposition C funds must be used exclusively to benefit public transit, but can be applied to a wider list of eligible project expenditures, including Congestion Management Programs, bikeways and bike lanes, street improvements supporting public transit service and Pavement Management system projects. Currently, traffic improvement fees and redevelopment funds are not available for funding capital projects.

In the mid-term, the vacant property on the north side of the Village, as well as the adjacent sites would likely be developed or redeveloped. Additionally, visual improvements along Roadside Drive would continue to be a goal of the City in improving its image from the freeway. Longer-term improvements would be subject to funding sources and project prioritization relevant to other City projects. Funding sources for public improvements five to twenty years in the future may include general obligation bonds, redevelopment tax increment and additional traffic improvement fees.

At this time, priorities for the phasing of roadway improvements, sidewalks, median, landscaping and streetscape improvements have not been defined. The phasing and successful buildout of Agoura Village is a dynamic process and requires continued involvement between the City and development community.

2.5 PENDING PROJECTS

At present, three major preliminary mixed-use development applications have been filed with the City and constitute the most likely near term development scenario within the project area during the next five years. The three main development proposals are known as the Ted Moore Project, the Cornerstone Project, and the Symphony Project. These projects have not yet been analyzed for AVSP consistency, as they were submitted prior to preparation of the AVSP. Additionally, the Ted Moore and Symphony projects continue to evolve as they consult with City staff and revise their project plans. Further staff analysis of each project's consistency with the Specific Plan will be required.

The proposed Ted Moore project is for an undeveloped site currently zoned for commercial retail service and open space (CRS-FC-AV and OS-AV). A remnant foundation and parking lot from previous commercial development are located at the northwest corner of the site. This project site is located in and comprises 67% of the buildable area in Zone A south of the proposed Specific Plan. The Specific Plan allows for a developable envelope (buildable area) of 340,000 sf for this zone, or 119,000 square feet of commercial/retail and 118 units of residential development. The most recent preliminary plans for this project include 128 residential units and 102,937 sf of office/retail. Therefore, the preliminary development proposal for this area would exceed the residential development assumptions identified in the Specific Plan; however, as stated above, the Agoura Village Development Permit process provides flexibility and increased density may be provided through the process.

Additionally, the most recent plans for this project include about 845 parking spaces. The property is currently vacant and slopes upward from north to south to a small knoll located at the southwest corner. The elevation of the site ranges from 840 feet above sea level to approximately 920 on top of the knoll. Some un-vegetated dirt parking areas are located on the north side of the property adjacent to Agoura Road. A dirt road connects these dirt parking areas to the top of the knoll. Although preliminary plans proposed removing this knoll, the applicant has revised the project plans to retain the knoll onsite. Current land uses around the site consist of commercial development to the north and east, a dirt parking area to the west (across Kanan Road) and the Medea Creek riparian area to the south.

The proposed Cornerstone project is for an undeveloped site located at the southeast corner of Agoura Road and Cornell Road. The project site is located within Zone E of the proposed Specific Plan and rests on a large knoll overlooking the remaining Specific Plan area. This project site is located in and comprises approximately 27% of Zone E. The Specific Plan allows for a developable envelope of 320,000 sf for this zone. The applicant has proposed 41 residential units and 41,935 sf of office/retail use (a total of 84,071 sf). The preliminary plans for this site include stand alone residential and mixed-use, residential, and commercial uses. Therefore, the preliminary development proposal for this area would be consistent with the general assumptions identified in the Specific Plan.

Additionally, the applicant has proposed 289 parking spaces. The northwest corner of the project site is elevated on a knoll which ascends north into the foothills of the Santa Monica Mountains. The entire project site is vegetated with ruderal grasslands and oak woodlands.

The proposed Symphony project site is located in a previously undeveloped portion of the existing Ladyface Mountain Specific Plan area. The project area consists of approximately 35 acres located on seven parcels, south and west of the intersection of Agoura and Kanan Road. These parcels are located in Zones B and F which have a total developable envelope of 565,000 sf. The applicant has proposed stand alone residential and mixed-use, residential, and commercial uses, as well as an option to develop a hotel. The preliminary plans for this project include 106 residential units and 55,100 sf of office/retail. Thus, the project's building envelope would comprise approximately 30% of Zone's B and F developable area. Therefore, the preliminary development proposal for this area would be consistent with the general assumptions identified in the Specific Plan.

Additionally, the applicant has proposed 516 parking spaces. Lindero Canyon Creek winds through the central and eastern portions of the site and currently ponds just south of a culvert located beneath Agoura Road. The site has been heavily disturbed through past uses, including stockpiling of soils; however this is generally confined to the northern portion of the site. The south and western portions of the site consist of a series of northerly and northeasterly descending natural slopes. Except for the leveled area in the northern section of the site, the project area is vegetated with numerous oak trees across the site.

The City is currently working with the three major applicants, but has indicated that the projects cannot proceed through formal City review until the AVSP is adopted. At that time, the projects will be analyzed in detail, pursuant to the requirements of the AVSP, and consistency with the Specific Plan determined.

2.6 PROJECT OBJECTIVES

The City's primary objective for the proposed project is to achieve the community's vision for the project area. This vision involves a transition from the area's current state toward a pedestrian-oriented "Village" center with retail shops, restaurants, theatres, entertainment uses and complementary residential uses that serve the City and the larger Conejo Valley region. Other objectives for the project are:

- To encourage a pedestrian-oriented, mixed-use "Village" development;
- To foster the appropriate balance of development within the area;
- To utilize the project area's natural surroundings by protecting view and riparian corridors, retaining oak trees, planting native landscaping, and maintaining the major topography of the area;
- To provide shared parking and encourage pedestrian activities;
- To provide a central community plaza with rich landscaping, plaza furniture, and public art to enhance the pedestrian experience; and encourage other outdoor gathering places;
- Establish a generally consistent design theme;
- Guide appropriate land uses within the Agoura Village project area;
- Steer revitalization of the area and promote continuing private sector investment to prevent the loss of, and to facilitate, commercial sales activity;
- Create and develop local job opportunities and preserve the City's existing employment base; and
- Provide adequate infrastructure and other public improvements.

2.7 REQUIRED APPROVALS

The project would require an amendment to the City of Agoura Hills General Plan and Zoning Ordinance and map, and approval of the Specific Plan as the underlying land use designation for the project area. The project would change the current Commercial-Retail Service (CG), Ladyface Mountain Specific Plan, and Business Park - Office/Retail (BP-O/R) land use designations to an Agoura Village Specific Plan designation. So, an amendment to the Ladyface Mountain Specific Plan will be required. Plan amendments and ordinance changes are legislative actions that will require review by the City's Planning Commission and approval by the City Council.

In addition to being required to undergo approval through the AVDP process, individual projects that are proposed within the Specific Plan area may also require discretionary approvals from the following agencies. However, it is important to note that because the Specific Plan is a planning policy and framework document and does not involve specific development at this time, the proposed Specific Plan does not require discretionary approval from any of these agencies:

- U.S. Army Corps of Engineers (Corps)
- Los Angeles County Flood Control District (LACFCD)
- Regional Water Quality Control Board (RWQCB)
- California Department of Fish and Game (CDFG)
- Federal Emergency Management Agency (FEMA)

3.0 ENVIRONMENTAL SETTING

This section provides a brief description of the current environmental conditions in the project area. Additional details about the project site setting for specific issue areas can be found in the analysis discussions in Section 4.0.

3.1 REGIONAL SETTING

The project is located in the City of Agoura Hills, which is within the boundaries of Los Angeles County. Agoura Hills is located between the urban areas of Los Angeles to the east and Oxnard/Ventura to the west and north. U.S. Highway 101 bisects Agoura Hills and connects the City to these two urban areas. In addition to Highway 101, four main arterial roads provide circulation throughout the City. Reyes Adobe Road and Kanan Road both run north-south through Agoura Hills and provide access to Hwy 101 via their on- and off-ramps. Reyes Adobe Road is a four-lane secondary arterial road for the majority of its length, while Kanan Road is a six-lane major arterial road. Kanan Road also provides a regional linkage to Malibu and other coastal areas via its connection with Highway 1 to the south. Thousand Oaks Boulevard and Agoura Road run east-west and are both four-lane primary roads.

Agoura Hills is located in the eastern portion of the Conejo Valley. The City is bordered on the north by an unincorporated area of Ventura County and on the south by an unincorporated area of Los Angeles County. The City of Calabasas is located immediately to the east and the cities of Thousand Oaks and Westlake Village are immediately to the west.

Land use patterns in Agoura Hills, with a few exceptions, have focused commercial development around U.S. Hwy 101. Most of the residential areas consist of single-family neighborhoods, while "Old Agoura" area provides a more rural setting for residents. The majority of the existing residential development is located on the north side of the freeway. The outlying, unincorporated areas are occupied by open space and low density residential uses.

The City has a topographical character that is very hilly, with some major ridgelines within the jurisdiction of the City. The slopes of the ridgelines limit the density of development in these hillside areas. The Santa Monica Mountains Recreation Area, which is adjacent to the City, contains other major ridgelines, as well as valuable wildlife habitat, large canyons, and some riparian areas. Oak woodland and riparian habitats are also present to some extent along the waterways located within the City.

Agoura Hills generally has a mild climate. Summer high temperatures tend to be in the 90s (F) while the high winter temperatures are typically in the 60s. The area receives approximately 15 inches of rainfall per year, with the majority of the rainfall concentrated between the months of October and April.

3.2 PROJECT SITE SETTING

The project area encompasses about 135 acres located immediately south of U.S. Highway 101 (US 101) and is centered around the intersection of Kanan Road and Agoura Roads. The project area is located on both the east and west sides of Kanan Road in the City of Agoura Hills. The project area is bounded on the south, southeast, and southwest by mostly vacant and undeveloped lands. The area is bounded to the east and west by commercial and retail developments, and U.S. Highway 101 to the north. The project area is characterized by an eclectic mix of land uses and parcels of various shapes and sizes. At present, there are several small restaurants, a movie theater complex, a self-storage operation, a gas station, a lumberyard, and several home improvement businesses on the northern half of the site between US 101 and Agoura Road. The southern portion of the project site is generally undeveloped with the exception of three restaurants and parking areas located adjacent to Cornell Road and Medea Creek.

3.2.1 General Site Characteristics

The project area contains variable topography. The northern portion of the project area, north of Agoura Road, is relatively flat. The topography south of Agoura Road ascends quickly towards Ladyface Mountain.

The area north of Agoura Road is largely built out and is generally devoid of significant native flora and fauna. In contrast, the area south of Agoura Road encompasses undeveloped lands and supports relatively undisturbed natural areas including portions of Medea Creek.

Steep slopes and volcanic rock are present and limit the developable area of the vacant parcels on the south side of Agoura Road. Local bedrock formations consist primarily of Conejo Volcanics, a generally stable, andesitic conglomerate composed of cobbles and bedded rock. The Ladyface landforms are relatively pristine south of Agoura Road, but are heavily modified on the northern side of the corridor. Much of the northern project area has been graded or developed for prior uses. Three creeks (Medea, Lindero, and Chesebro) run through the project site, framing the southeastern and western boundaries of the project area, and resulting in portions of the area being within the floodplain of the 100-year storm. During 100-year storm conditions, both the western and eastern portions of the site may be subject to flooding. No known faults exist in the immediate project area.

3.2.2 Natural Resources

Undeveloped portions of the project area support coastal sage scrub, native grasslands, valley and coast live oak savannah, valley and coast live oak riparian woodland, and willow riparian woodland. Medea Creek and Lindero Creek (designated blue line streams) flow through the western and central portions of the project area, and Chesebro Creek flows parallel to Agoura Road from the eastern boundary of the project area. Currently Medea and Chesebro Creeks flow within covered concrete lined drainage channels along Agoura Road south of the Whizin Center and the Mann Theater Complex. South of Agoura Road, the creek bed and slopes support riparian and wetland habitat that includes willows and oak trees on the upper slopes, and other riparian vegetation.

Rare, threatened, endangered or sensitive plants as listed by state and federal regulatory agencies are known to occur within the project boundaries. However, continuing disturbances such as disking, historical road widening activities along Kanan and Agoura Roads, and disposal of deleterious construction debris have substantially reduced the potential for significant impacts to special interest plants or animals within the majority of the project area. However, suitable native habitat for special interest plants and animals is present within the surrounding open space areas and the remaining natural portions of Medea Creek.

3.3 CUMULATIVE PROJECTS SETTING

CEQA defines "cumulative impacts" as two or more individual events that, when considered together, are considerable or will compound other environmental impacts. Cumulative impacts are changes in the environment that result from the combined impact of development of the proposed project and other planned and pending projects. For example, traffic impacts of two nearby projects may be insignificant when analyzed separately, but could have a significant impact when analyzed together. This method of cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

The *CEQA Guidelines* suggest two methods for analyzing cumulative effects: 1) use of a projection contained in an adopted General Plan; or 2) use of a list of planned and pending projects in the area. The cumulative analysis in this EIR is based upon the list of planned and pending projects in the area at the time of the NOP submittal, as listed in Table 3-1.

Table 3-1 Cumulative Projects List

ID #	Map No.*	Project Proponent/Name	Land Use	Size (SF)	DU	Status
1	20	Levy, Moshe	General Office	20,830		Approved/Complete
2	24	Reyes Adobe Partners, L.P.	Furniture Store	14,500		Approved/Complete
3	25	Leader Carpets	Retail	14,080		Approved/Complete
4	37	Chesebro Properties, LLC	Office	8,000		Approved/Complete
5	4	Palo Camado Ranch	Single Family		8	Approved/Construction Pending
6	8	Chabad of the Conejo	Classrooms/Office for Church	6,442		Approved/Construction Pending
7	10	Temple Beth Haverim	Synagogue	31,000		Approved/Construction Pending
8	11	Scheu Development	General Office	81,000		Approved/Construction Pending

Table 3-1 Cumulative Projects List

ID #	Map No.*	Project Proponent/Name	Land Use	Size (SF)	DU	Status
9	13	Schneider	Condominium		4	Approved/Construction Pending
10	26	So. Cal. Food Services for Wendy's	Drive-Thru Fast Food	3,200		Approved/Construction Pending
11	27	Realty Bancorp Equities	Commercial	76,750		Approved/Construction Pending
12	30	Alesco Development	Office	63,208		Approved/Construction Pending
13	31	BBA Properties LLC for Michael Browers	Office	9,000		Approved/Construction Pending
14	32	Zaghi	Warehouse/Manufacturing	11,636		Approved/Construction Pending
15	33	HBF Holdings	Hotel/Homewood Suites	75,000	(125 Rooms)	Approved/Construction Pending
16	36	Stockton	Apartments		4	Approved/Construction Pending
17	2	J.H. Snyder Co	Office	40,000		Approved/Under Construction
18	2		Restaurant	19,000		Approved/Under Construction
19	2		Apartments		336	Approved/Under Construction
20	9	Silagi-Canwood Corporate Center	General Office	22,896		Approved/Under Construction
21	12	LA County Fire Department Sta.#89	Fire Station/Training Facility	12,500		Approved/Under Construction
22	14	Silagi Development	General Office	49,350		Approved/Under Construction
23	18	Development Partners	General Office	31,160		Approved/Under Construction
24	19	Adler Realty	Furniture Stores	118,162		Approved/Under Construction
25	21	Wickman-Agoura Furniture Center	Furniture Store	38,760		Approved/Under Construction
26	22	Del Rahim	Auto Detailing Service	10,333		Approved/Under Construction

Table 3-1 Cumulative Projects List

ID #	Map No.*	Project Proponent/Name	Land Use	Size (SF)	DU	Status
27	1	Ball Propertied (Centerpointe)	Office	61,040		Approved/Under Construction
28	23	Minder	Condominium		19	Approved/Under Construction
29	28	Stockton for Levy	Furniture Store	10,000		Approved/Under Construction
30	28		General Office	6,700		Approved/Under Construction
31			Office	11,000		Under Review
32	3	Adobe Cantina	Restaurant	1,142		Under Review
33	6	Burgundy Creek Bistro	Restaurant/Reception Hall	11,000		Under Review
34	16	Agoura Business Center	Warehouse/Manufacturing/Office	19,810		Under Review
35	34	Heathcote for Buckley	Commercial/Medical	14,075		Under Review
36	38	Riopharm	Single Family		28	Under Review
37		Heschel School	School	166,450	750 students and 97 staff	Approved
38		Triangle Ranch	Single Family		81	Under Review
TOTAL				**1,058,024**	**479**	

4.0 ENVIRONMENTAL IMPACT ANALYSIS

This section discusses the possible environmental effects of the proposed project for the specific issue areas that were identified through the Initial Study process as having the potential to experience significant impacts. "Significant effect" is defined by the *State CEQA Guidelines* §15382 as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant."

The assessment of each issue area begins with an italicized introduction that summarizes the environmental effects considered for that issue area. This is followed by the setting and impact analysis. Within the impact analysis, the first subsection identifies the methodologies used and the "significance thresholds," which are those criteria adopted by the City, other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text, with the discussion of the effect and its significance following. Each bolded effect listing also contains a statement of the significance determination for the environmental effect as follows:

> ***Class I, Significant and Unavoidable:*** *An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the State CEQA Guidelines.*
>
> ***Class II, Significant but Mitigable:*** *An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings to be made under §15091 of the State CEQA Guidelines.*
>
> ***Class III, Not Significant:*** *An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.*
>
> ***Class IV, Beneficial:*** *An effect that would reduce existing environmental problems or hazards.*

Following each environmental effect discussion is a listing of recommended mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measures. In those cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed as a residual effect. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other future development in the area.

4.1 AESTHETICS

The project area is located along an urban boundary and includes two main visual components, a flat predominantly freeway commercial urban area and a generally undeveloped hillside area north of Agoura Road. The planning area can be visually characterized as an urban/rural transitional area. Prominent visual characteristics within the project area include the peaks of LadyFace Mountain; arboreal growth along the banks of Medea, Chesebro, and Lindero Canyon Creeks; a knoll located north of the intersection of Kanan and Cornell Road and a second knoll located at the southeast corner of Cornell and Agoura Road; and scattered oaks throughout the Specific Plan area.

Several roadways within or adjacent to the project area are considered visually sensitive corridors. U.S. Highway 101 is identified as a visually sensitive corridor. Agoura Road and Roadside Drive through the project area are designated as Local Scenic Highways. A portion of Kanan Road located within the project area serves as a Gateway into the City and the project area. Kanan Road is designated as both a Local Scenic Highway and a Primary County Scenic Highway south of the Ventura Freeway.

Development of the Specific Plan has the potential to alter views from visually sensitive viewing corridors. Impacts to views from U.S. 101, Kanan Road, and Agoura Road are considered potentially significant, but mitigable impacts. The project would generally improve the aesthetics of existing development through redevelopment initiatives for the area between U.S. 101 and Agoura Road. Development of a portion of the project area would transform the rural visual character of this area to a more urban environment; this is considered a significant but mitigable impact of the project if avoidance of two natural landforms is feasible. However, if avoidance is not feasible this impact would be significant and unavoidable. Development of the Specific Plan would introduce new sources of light and glare that would intensify daytime glare and night lighting within the planning area. Implementation of the proposed development standards for exterior lighting would result in Class III, less than significant, visual impacts from night lighting. However, the introduction of new sources of glare within the planning area would result in Class II, significant but mitigable, visual impacts. Buildout of the Specific Plan may remove oak trees that are considered to be an important aesthetic resource; this is considered a potentially significant but mitigable impact.

4.1.1 Setting

a. Existing Visual Characteristics. The 135-acre planning area has two distinct visual components: 1) a flat predominantly freeway commercial urban area located between Agoura Road and US Highway 101 (US 101); this area forms the foreground view of the project area from US 101; 2) and a generally undeveloped hillside area north of Agoura Road. This undeveloped hillside area is situated at the base of Ladyface Mountain, which forms the visual backdrop for views from US 101 and the general project area to the south.

The project area straddles a confluence zone of Medea, Chesebro , and Lindero Canyon Creeks. Medea Creek and Lindero Canyon Creek consist of semi natural creeks with riparian habitat, while the Cheseboro drainage functions as a rectangular concrete open–channeled flood control facility.

Given its physical location and mix of urban and prominent natural visual features in the vicinity, the planning area can be visually characterized as an urban/rural transitional area, with Lindero Canyon providing a visual break in the topography and undeveloped hillside

areas and Ladyface Mountain dominating the natural views and the distinct urban freeway corridor that facilitates the east-west flow of activity through the greater Conejo Valley. Refer to Figures 4.1-1 through 4.1-5 for a photo survey of the site and a reference map of the locations of each photo.

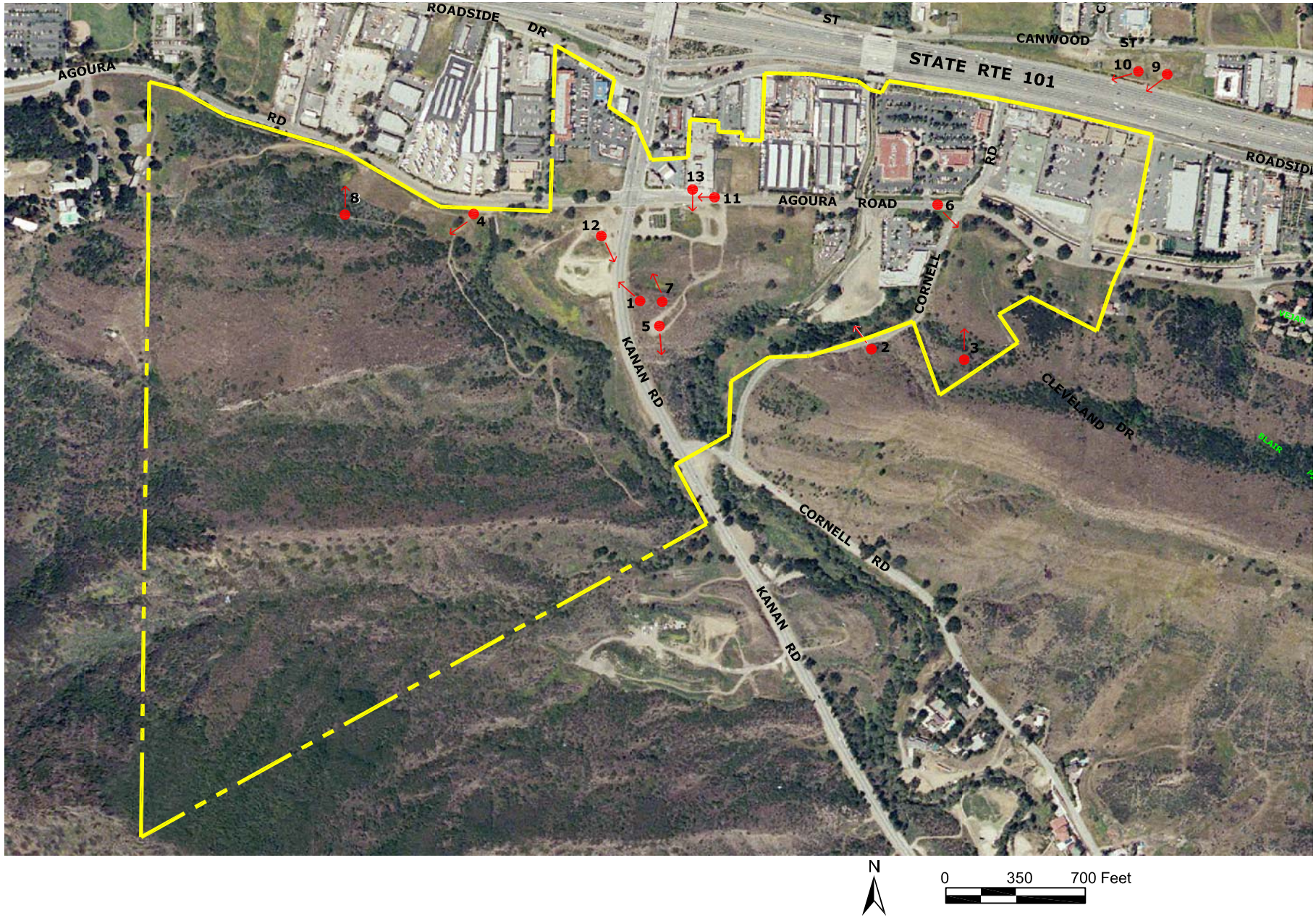
The planning area is centered around the intersections of Agoura and Kanan Roads and Agoura and Cornell Roads. Photos 1 through 3 demonstrate the contrast between the less developed areas south of Agoura Road and the more developed commercial development to the north of Agoura Road. Photo 1 was taken from a knoll east of Kanan Road looking northwest over the western Specific Plan boundaries, towards Zones B, F, and D west. Photos 2 and 3 were taken from the hillsides south of the Specific Plan, looking north over the central "core" of the project area and over the eastern most Zones E and D east, respectively. The area's most prominent visual features are the peaks of Ladyface Mountain and other ridgelines that rise steeply from the project area (Refer to Photo 4).

Within the project area, the most prominent visual features to the south of Agoura Road, aside from the peaks of Ladyface Mountain, are the arboreal growth along the banks of the creek systems (Refer to Photo 5) and a handful of mature oak trees in the southeast quadrant of the planning area (Refer to Photo 6). Photo 5 is an elevated view looking over Zone B and Lindero Canyon Creek. This figure shows the riparian growth associated with the Lindero Canyon drainage and its confluence with Medea Creek, near the intersection of Kanan and Cornell Road. Photo 6 was taken from Agoura Road looking to the southeast towards the hillsides south of the Specific Plan and shows the mix of chaparral and scrub oaks along the southern boundary of Zone E.

North of Agoura Road, urban development dominates, supported visually by the paved street and parking areas. As shown in Photo 7, vehicle traffic and roadways comprise a large portion of the visual component of the area. The urban design is low profile and generally lacking in architectural distinction (Refer to Photo 8). Pre-1980s structures are generally undecorated, rectilinear, and faced in earth tone colors with masonry or painted stucco. Post 1980s structures generally exhibit more façade and roofline variation, and include more generous landscaping.

The primary public viewing corridor from which the site is visible is U.S. 101. The existing commercial development, eastern knoll, upslope open space areas, and the Medea Creek riparian vegetation dominate views of the planning area from the freeway. The steeply sloped and chaparral-vegetated hillsides dominate background views from this vantage point. Photo 9 shows an approximate view of the eastern Specific Plan boundary as seen from northbound traffic on U.S. 101. Photo 10 shows a view of the western Specific Plan boundary as seen from northbound traffic on U.S. 101. These photos provide some idea of how travelers perceive the Specific Plan area from the freeway.

Views of the planning area from Kanan Road south of Agoura Road and from the length of Agoura Road through the planning area (Photo 11) are scenic, owing to their urban edge circumstance: views of the still largely natural landforms (Photos 12 and 13) and vegetation of the Santa Monica Mountains contrast dramatically with the suburban-scaled urban form to the immediate north of Agoura Road. Photos 12 and 13 offer views of the large knoll in Zone A



Aerial Source: City of Agoura Hills, 2002

Photo Survey Locations

Figure 4.1-1

This page intentionally left blank

Photo 1. View from knoll located east of Kanan Road, looking NW over Zone B to the west and the intersection of Kanan and Agoura Road to the north.

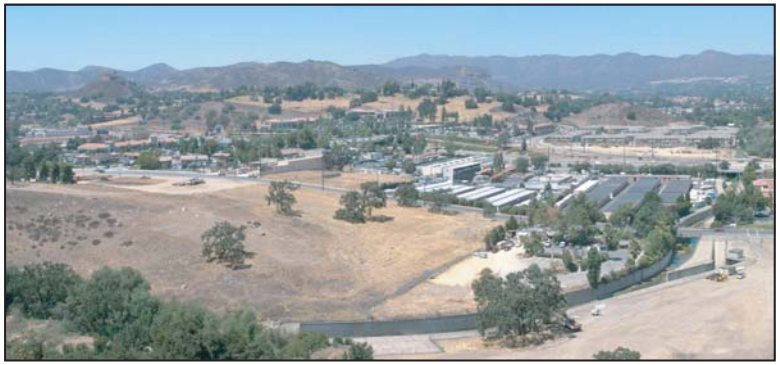


Photo 2. View from hillsides south of Cornell Road and West of Zone G, looking northwest over Zone A.

Photo 3. View from hillsides south of and overlooking Zone E.

Source: Planning Corporation, August, 2004

Views of the Planning Area (Facing North)

Figure 4.1-2

This page intentionally left blank

Photo 4. View from intersection of Kanan and Agoura Road looking over Zone B toward Ladyface Mountain.

Photo 5. View from Knoll (Zone A south) looking SW toward Lindero Canyon Creek at the base of Ladyface Mountain with Kanan and Cornell Road intersection to the south and Zone F and B and Agoura Road to the west.

Photo 6. View from Agoura Road looking through the intersection with Cornell Road SW toward Zone E.

Views of Prominent Natural Features

Source: Planning Corporation, August, 2004

Figure 4.1-3

This page intentionally left blank

Photo 7. View from knoll located east of Kanan Road (Zone A south) looking north over existing Kanan and Agoura Road intersection.

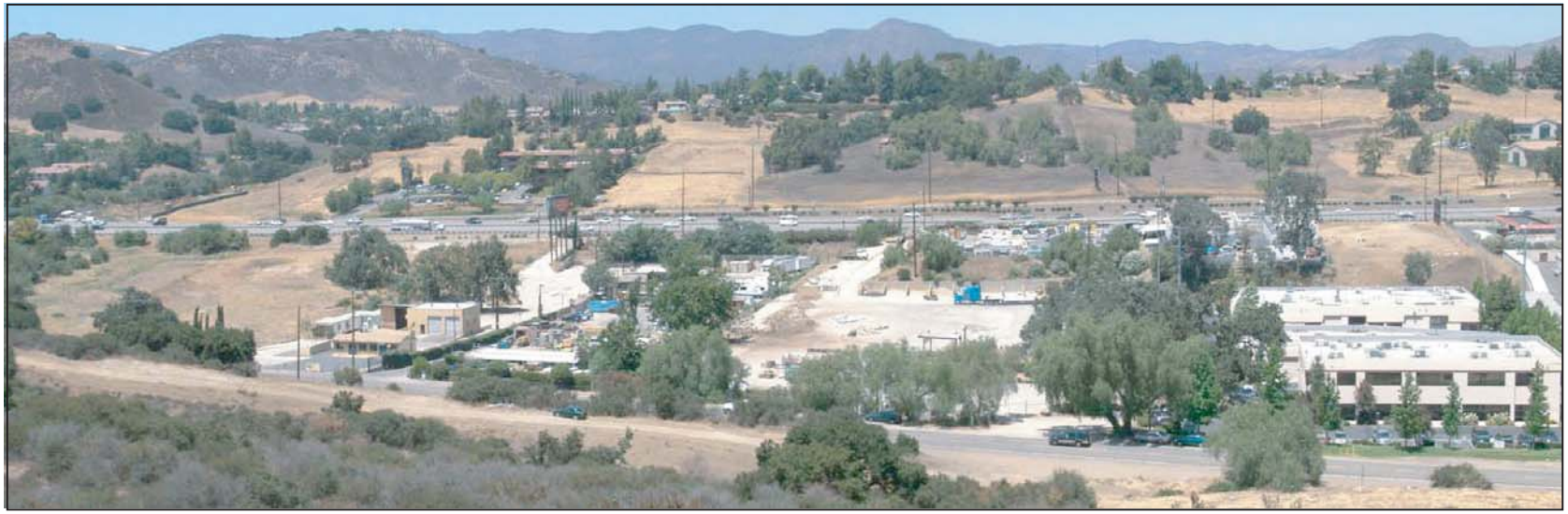


Photo 8. View from Zone F looking north toward U.S. 101.

Source: Planning Corporation, August, 2004

Existing Development and Urban Features

Figure 4.1-4

This page intentionally left blank

Photo 9. View from U.S. 101 looking southwest toward the Specific Plan eastern boundary.

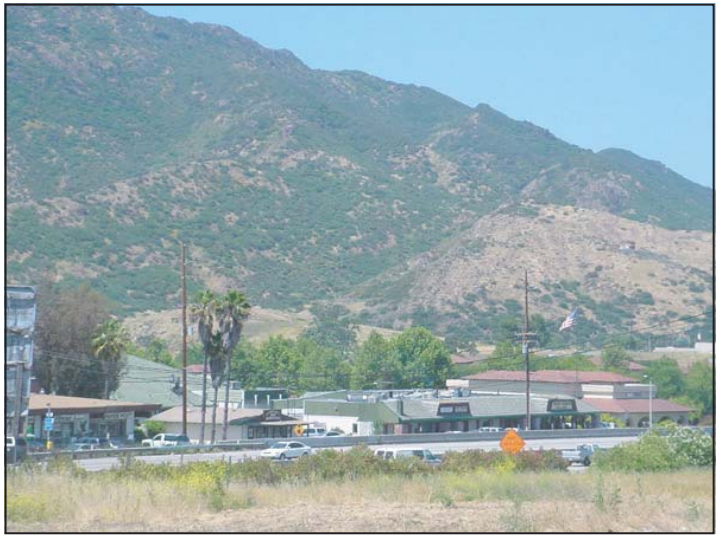


Photo 10. View from U.S. 101 looking southwest toward the Specific Plan western boundary.

Photo 11. View from Agoura Road looking west toward Zone B, through intersection with Kanan Road.

Source: Planning Corporation, August, 2004

Views of Specific Plan Area from Scenic Roadways

Figure 4.1-5

This page intentionally left blank

south from Kanan Road looking southeast and from Agoura Road looking south, respectively. Figures 4.1-1 through 4.1-4 provide views of the project site and its surroundings.

Nighttime aesthetic conditions are dominated by lighting associated with the street lighting system, parking lots, building lighting, and illuminated signage. Public street lights are the dominant source of nighttime sky lighting in the planning area, and are generally typical cobra-head styled protruding lens styled lights. This style is known to be a source of unwanted nighttime lighting spillage.

b. Regulatory Setting. The City of Agoura Hills has adopted various policies within separate policy documents that are designed to ensure a high quality visual environment. The various policy documents are described below.

Scenic Highways and Community Design Elements of the Agoura Hills General Plan. The City's Scenic Highways Element identifies U.S. 101 as a visually sensitive corridor and specifies a number of needs to maintain and improve the aesthetic quality of the corridor. Agoura Road and Roadside Drive through the project area are designated as a Local Scenic Highways. A portion of Kanan Road located within the project area serves as a Gateway into the City and the project area. Kanan Road is designated as both a Local Scenic Highway and a Primary County Scenic Highway south of the Ventura Freeway. The Scenic Highways and Community Design Elements specify various policies intended to improve the visual quality of new and existing development throughout the City.

Ladyface Mountain Specific Plan Design Guidelines. The southwestern portion of the proposed Agoura Village Specific Plan area, which is bounded by Agoura Road to the north and Kanan Road to the east, includes a portion of the Ladyface Mountain Specific Plan Area. The Ladyface Design Objectives, which are included in the Community Design Element, are designed to maintain clear views of Ladyface Mountain from nearby areas and from a distance, and to promote development that is compatible with the natural terrain.

Agoura Hills Zoning Ordinance. Portions of the Specific Plan area are within the Freeway Corridor Overlay District (FC), the purpose of which is to recognize the importance of the land use, architectural design, and appearance of development within the corridor to the City's image and to establish guidelines for all development within the area. The areas within the corridor are seen as gateways and are important in establishing the City's identity in the minds of visitors and residents.

1992 Architectural Design Standards & Guidelines. The underlying goal of the 1992 Architectural Design Standards & Guidelines, hereafter referred to as the 1992 Guidelines, is to promote higher quality design that is sensitive to Agoura Hills' natural setting, surrounding environment, and community design goals.

Agoura Village Overlay District. Adopted in 1997, this interim control measure is intended to protect against inappropriate development in the planning area.

Lighting Ordinance and Policies. Section 9654.3 of the City Zoning Ordinance places restrictions on parking lot illumination. This section directs lot illumination to be directed away from residential areas and public streets so as not to produce glare as seen from such areas.

This is in order to ensure the general safety of other vehicular traffic and the privacy and well being of the residential areas. In addition, the Ordinance limits the height of all light poles, standards, and fixtures to a maximum of 16 feet. Also, illumination at the property line of a project site must not exceed one-foot candle.

4.4.2 Impact Analysis

a. Methodology and Significance Thresholds. Environmental assessment of a proposed project's impacts to the aesthetic and visual resources of a site begins with identification of the existing visual resources onsite, including the site's physical attributes, its relative visibility, and its relative uniqueness. The aesthetic assessment must also review the proposed project in the context of the City's identified visually important features and corridors. The City's General Plan identifies both significant visual resources and scenic highways. In general, the significant visual resources and scenic highways identified in the General Plan of particular relevance to the proposed project include: Ladyface Mountain and surrounding hillside topography; Medea Creek, Lindero Canyon Creek, and Chesebro Creek, as well as tributaries to these creeks; U.S. 101 (Secondary County Scenic Highway); Kanan Road (Primary County and Local Scenic Highway); Roadside Drive (Local Scenic Highway); and, Agoura Road (Local Scenic Highway). These features are the primary focus of the visual analysis herein.

The assessment of aesthetic impacts involves qualitative analysis that is inherently subjective in nature. Viewers react to viewsheds and aesthetic conditions differently based on personal and cultural perspectives. This evaluation measures the existing visual resource against the proposed Specific Plan's expected visual condition after buildout. It is important to emphasize that the proposed Specific Plan includes both generalized proposals for buildout and specific proposals with detailed facade and design guidelines. Therefore, the analysis is necessarily limited to a review of planned and proposed changes to roadway, grading, and building envelopes inasmuch as details are available.

The checklist in Appendix G of the *State CEQA Guidelines* suggests that significant impacts could occur if a project:

- *Has a substantial adverse effect on a scenic vista;*
- *Substantially damages scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;*
- *Substantially degrades the existing visual character or quality of the site and its surroundings; or*
- *Creates a new source of substantial light or glare which would adversely affect day or nighttime view in the area.*

For the purposes of this analysis, an aesthetic impact is considered significant if it can be reasonably argued that: (a) the change would adversely affect a viewshed from a public viewing area (such as roadways or other publicly-accessible property); (b) new light and glare sources would be introduced that substantially alter the nighttime lighting character of the area; or, (c) an existing identified visual resource would be adversely altered or obstructed. Modifications to the viewshed are considered less than significant if the modification would be

unnoticeable or visually subordinate to existing predominating features. A modification that would be visually dominant or one that would significantly and adversely modify the existing view is considered a significant impact.

b. Project Impacts and Mitigation Measures.

Impact AES-1 The proposed development would alter views from U.S. 101 and other identified scenic highways and roadways. This is considered a Class II, *significant but mitigable* impact.

U.S. 101 is both a local scenic corridor and an element of the Los Angeles County scenic corridor system. In addition, Kanan Road throughout its length in the project area has a Los Angeles County Primary County Scenic Highway designation south of U.S. 101. Agoura Road and Roadside Drive both carry Local Scenic Highway designations for their segments within the planning area east of Kanan Road. As such, the area is officially considered among the most visually sensitive subareas within Agoura Hills.

The proposed project would include development that would be visible to travelers on all of these designated scenic highways and roadways. To the extent that existing developed sites between Roadside Drive and Agoura Road are subject to new development in accordance with the proposed Specific Plan standards, foreground views from U.S. 101 could be altered by the construction of new buildings up to 45 feet (ft) in height (this height allowance is reserved for street frontage and only if the third level is residential or lodging) and roadway landscaping (i.e., development within Zones A, C, and D) (Refer to Figure 2-4 in the *Project Description*). Moreover, development of Zone A south between Kanan Road and Cornell Road, south of Agoura Road, could also be developed with buildings up to 45 ft in height and would require alteration of the natural topography from grading activities and the use of retaining walls.

However, views of Ladyface Mountain and the surrounding hillsides from the U.S. 101 are at least partially to fully obscured by existing development between Roadside Drive and Agoura Road. Similarly, the development of Zone A between Kanan Road and Cornell Road, and Zone B west of Kanan Road, both south of Agoura Road, would be at least partially obscured by existing development, as the terrain is of a similar elevation to that of areas north of Agoura Road. However, development of Zone E, which is at a higher elevation than the areas lying between Agoura Road and the freeway and, consequently, is visible from U.S. 101, would alter the landscape of the foothills due to the construction of buildings up to 45 ft in height. Construction of these buildings would require site grading and topographical changes that would likely require the use of retaining walls and removal of oak trees. Development of Zone E could result in an adverse change to views of the foothills from the U.S. 101; this is considered to be a potentially significant impact.

Impacts to Roadside Drive, the Local Scenic Highway that parallels and fronts the freeway, would be expected to be beneficial. Existing views of adjacent development to the south are generally not of high quality from an urban design perspective. Development that would be expected to gradually replace existing uses would need to conform to the detailed streetscape and building design standards required in the proposed Specific Plan. Existing views from the freeway of Ladyface Mountain and the foothills for westbound travelers, as well as existing views of the foothills for eastbound travelers, are partially to completely obstructed by existing

development between Roadside Drive and Agoura Road. New development within this area would not result in a significant adverse impact to the limited views of scenic resources from Roadside Drive.

Alteration of the foothills south of Agoura Road also would be experienced by southbound travelers on Kanan Road, as they approach the Kanan and Agoura Road intersection from the U.S. 101 bridge. Development in Zone B, located in the southwestern corner of the Kanan and Agoura Road intersection, including the grading and site preparation work, would be the most visible for these viewers due to the alignment of Kanan Road with an almost direct southerly view to the Area B hillside. The most severe alterations in views for southbound travelers on Kanan Road would occur from development of Zone B, which could result in the conversion of this vacant property to one that is developed with 25- to 45-foot tall mixed use, retail, restaurant, and retail commercial buildings. Moreover, new development within Zone A to the east, would be visible for southbound travelers on Kanan Road. The severity of the viewshed alteration would depend on the amount of grading necessary for the ultimate development plan for this site. Buildings with street frontage along Kanan Road and Agoura Road would be a minimum of 25 ft in height and would not exceed 45 ft in height. Development of the foothill areas in the southwest and southeast corners of the Kanan and Agoura Road intersection has the potential to alter the views of the foothills for southbound travelers along Kanan Road; this is considered to be a potentially significant impact.

A similar impact to views of Ladyface Mountain and the foothills would result from development planned in Zones A, D, and E for westbound travelers along Agoura Road, and to views of the foothills from development planned in Zones B and F for eastbound travelers along Agoura Road. The minimum building height for buildings fronting Agoura Road would be 25 ft and could extend up to 45 ft in height, thereby changing the current foreground to distant view environment from a rural, hillside one to a viewshed dominated by the urban and streetscape foreground. The Specific Plan includes extensive design standards for right-of-way and private development design. However, the degree to which new buildings would alter views of Ladyface Mountain for westbound travelers and views of the foothills for eastbound travelers would be contingent on existing topography relative to possible site alteration and building heights. The existing elevated terrain south of the Kanan and Agoura Road intersection partially obscures views of Ladyface Mountain and the foothills for westbound travelers, and views of the foothills for eastbound travelers, as travelers approach this intersection from Agoura Road. Development of this area with new buildings would not have a significant impact on views from Agoura Road. However, development of Zones B and F to the south of Agoura Road and west of Kanan Road, which include areas that are marked by a more gradual increase in slope, could alter views of the foothills for westbound travelers and views of Ladyface Mountain for eastbound travelers along Agoura Road. This is considered to be a potentially significant impact.

Foreground views for northbound travelers on Kanan Road south of Agoura Road would be altered, as undeveloped areas with grassland and oak trees would be transformed to mixed use developments. Northbound travelers would experience a transition from undeveloped open space areas located to the south of the Specific Plan area to more densely developed areas near the Kanan and Agoura Road intersection. The intersection would be redesigned as a roundabout, likely resulting in the addition of more landscaping. Therefore, the foreground

views would be expected to include attractive improvements in the quality of landscaping, right-of-way surface treatments, and building design along Kanan and Agoura Roads; impacts on viewsheds from this roadway would be considered potentially significant.

Mitigation Measures. The Agoura Village Specific Plan includes a number of development standards that would reduce the visual impacts related to site grading, site design, and building design on viewsheds from designated scenic roadways. As discussed above, the most dramatic impact on public views from designated scenic roadways would result from development of the portion of the planning area located to the south of Agoura Road, which has the potential to alter foreground views of the foothills, as well as more expansive views to Ladyface Mountain and the surrounding hillsides. The following Specific Plan development standards would reduce the visual impacts associated with the alteration of the natural topography due to grading activities within this area:

- *Development shall relate to the natural surroundings and grading should be minimized by following the natural contours as much as possible.*
- *Graded slopes shall be rounded and contoured to blend with the existing terrain.*
- *Significant natural vegetation shall be retained and incorporated into the project whenever possible.*
- *The natural contours of the land shall be respected when developing on sloped properties. Terraced parking lots, stepped building pads, and larger setbacks shall be used to preserve the general shape of natural landforms and to minimize grade differentials with adjacent streets and with adjoining properties.*
- *Natural amenities such as views, mature trees, creeks, riparian corridors, and similar features unique to the site shall be preserved whenever possible.*

The following Specific Plan development standard shall promote the preservation of natural landforms and resources (e.g., hillsides and oak trees) within the planning area south of Agoura Road, which contribute to the viewsheds from designated scenic roadways.

- *Prominent and distinctive natural features of the area shall be preserved and integrated as open space for the use and visual enjoyment of all village patrons and residents.*
- *Development shall be clustered on less environmentally sensitive areas of the site to maximize open space, preservation, and resource protection.*
- *Oak trees shall be preserved and incorporated into the project whenever possible.*
- *New developments shall consider, preserve, or improve natural conditions on or adjacent to the site such as wildlife habitats, streams, creeks, views, and where appropriate, preserve riparian habitats to a natural state.*
- *A transition between development and adjacent open space shall be designed to help preserve the rural character of the area. Such transitions may include buffer areas and landscaping to blend development with the surrounding open area.*

To lessen the impacts of retaining walls on views from designated scenic roadways, the following measure would be required.

AES-1 **Retaining Wall Design.** In the event any proposed retaining walls are visible from designated scenic roadways, the City's Architectural Review Board shall determine whether they are consistent with the City's Architectural Design Standard and Guidelines (1992). If any wall is found to be inconsistent with the Guidelines, the Architectural Review Board shall recommend additional design features to bring the wall(s) into compliance. Possible design features may include the use of textured retaining walls with more natural features, such as those that simulate rocks or boulders. Additionally, design features may include the planting of landscape vegetation along the wall facing south toward the freeway. This landscape vegetation should include plants that provide vertical wall coverage, in order to enhance the visual character of the wall and break up the area of the wall that is visible from scenic corridors. Such retaining wall, landscaping and other related design features shall be shown on the project plans and verified by City Planning and Community Development Department Staff prior to issuance of a Grading or Building Permit.

Significance After Mitigation. Implementation of the proposed development standards and the recommended mitigation measure would reduce the project's impact to a level considered less than significant.

Impact AES-2 Development of the portion of the Agoura Village Specific Plan area located between U.S. 101 and Agoura Road would improve the visual character of this area, thereby resulting in Class IV, *beneficial*, impacts.

As discussed above, existing development between U.S. 101 and Agoura Road generally is not of high quality from an urban design perspective. The urban design is low profile and generally lacking in architectural distinction. Pre-1980s structures are generally undecorated, rectilinear, and faced in earth tone colors with masonry or painted stucco. Post 1980s structures generally exhibit more facade and roofline variation, and include more generous landscaping. However, due to the varying architectural styles of buildings relating to the different eras in which these buildings were constructed, development within this area lacks a coordinated or unifying theme. Currently, there are no sidewalks along Agoura Road and the uses are neither visually nor physically linked. Aside from the restaurants and the movie theater, there is presently little reason to walk within the Village to get from one place to another, which is inconsistent with the goal of producing a "village" environment within this area.

Development that would be expected to gradually replace existing uses would be required to conform to the detailed building design and streetscape standards stated in the proposed Specific Plan. These standards are created to allow flexibility in the design of buildings to meet the operational business needs of individual property owners, while, at the same time, create a "pedestrian oriented" development pattern for the core of the village area along Agoura Road, and a reduction in auto travel through provision of a mix of services, entertainment opportunities, and housing in close proximity to one other. Moreover, roadway improvements would include pedestrian-oriented features such as a specific furniture palette (e.g., lighting,

banners, benches, waste receptacles, bicycle racks, and tree grates), while street-front buildings would utilize wall/hardscape design elements to enhance the Village area.

Finally, landscaping development standards would be applied to existing and new development that complements the natural setting and creates a unique identity for the Village area. The proposed development standards would promote the use of landscaping to provide shade, climatic compatibility, ease of maintenance, and drought tolerant planting. Landscaping would be required to promote pedestrian and vehicular safety by clearly distinguishing walkways and access points. Therefore, implementation of the proposed development standards for the area between the U.S. 101 and Agoura Road would result in an improvement to the visual character of this area and impacts would be beneficial.

Mitigation Measures. No mitigation measures would be required.

Significance after Mitigation. Impacts would be beneficial.

Impact AES-3 Development of the Specific Plan would result in the transformation of the visual quality of the site. Implementation of the proposed AVSP development standards would result in Class III, *less than significant*, visual impacts to the rural visual character of this area. However, the potential development of two knolls onsite is considered a Class II, *significant but mitigable* impact on a substantial scenic resource.

The proposed Agoura Village Specific Plan would result in the conversion of the area south of Agoura Road extending to the proposed open space area from a primarily rural area, to one that is marked by a more urban environment. This area includes the portions of Zones A and D that are south of Agoura Road, as well as all of Zones B, E, and F. Development within these zones would result in the introduction of buildings, internal roadways, utilities, and infrastructure to accommodate retail commercial, professional office, residential, restaurant, and/or hotel development.

Development of Zones F, B, A south, and E would convert these relatively rural areas, which are marked by rolling hills, oak trees, and a lack of structural development, to a more urban form that accommodates the "village" environment envisioned in the Specific Plan. Hillsides would require grading to construct building pads, roadways, access driveways, and parking areas, as well as trenching to install necessary utilities (e.g., water, sewer, and electrical lines), thereby resulting in changes in the topography and existing contours of hillsides within this area. During construction activities, viewers within the vicinity of the planning area would witness exposed slopes, stockpiled soils and materials, and construction equipment stored on-site. Post-construction development would consist of a built environment, with buildings up to 45 ft in height adjacent to Agoura and Kanan Roads, with roadway, landscaping, and building design features that facilitate pedestrian, residential, commercial, professional office, and entertainment uses.

As stated above, viewers react to aesthetic conditions differently based on personal and cultural perspectives. The conversion of the more rural hillsides adjacent to Agoura Road to the village

urban form envisioned in the Specific Plan could be viewed by some as being an improvement to the area. However, for those who value the rural character of the foothills in this area, the conversion of this portion of the Specific Plan area to a more urban form could be viewed as a substantial adverse change to the existing visual character or quality of the site and its surroundings. As mentioned in Section 2.0, *Project Description,* the current General Plan buildout of this area allows for commercial development which would transform this area from its rural state to a more urban environment, but without the development standards and guidelines provided in the Agoura Village Specific Plan. Thus, without the project the visual character of the Specific Plan area would be transformed. Given that the Specific Plan's design standards and architectural guidelines provide for more aesthetically sensitive development than that proposed under the General Plan, impacts to rural visual character are considered less than significant.

However, of additional notable concern is the potential grading and development of a prominent knoll within Zone A south, an area that is visible from key viewing locations identified above. A portion of this site is designated Open Space under the Agoura Hills General Plan. As mentioned in Section 4.4, *Geology,* and shown in Photos 12 and 13 (Refer to Figure 4.1-5) this natural landform is located in the central portion of the Specific Plan area south of Agoura Road, between Kanan Road and Cornell Road. The knoll is a low hill, approximately 900 ft above sea level, with relatively gentle north and east slopes, and steeper south and west slopes. The Specific Plan would retain this knoll as open space (Zone G). The current project application for this site also proposes to retain this feature. However, a subsequent proposal may involve its reduction or removal. For the purposes of this analysis it is assumed that this area could require excavation and export of up to 500,000 cubic yards of cut from this general area. This grading would substantially alter a prominent and distinctive natural landform. This is considered a significant impact.

Additionally, there is a prominent knoll located at the southeastern corner of the intersection of Agoura and Cornell Road, in Zone E. The current proposal for development of this property includes only minor grading along the edge of this knoll, and would generally preserve the feature onsite. However, future development proposals could request to remove the knoll. Removal of this natural landform would also be considered a significant impact.

Mitigation Measures. As discussed above (Mitigation Measures for Impact AES-1), the proposed Specific Plan includes a number of development standards that would reduce the visual impacts associated with the alteration of the natural topography due to grading activities. Moreover, a number of development standards would promote the preservation of natural landforms and resources (e.g., hillsides and oak trees) to the extent feasible, given the proposed building densities and infrastructure (e.g., roadways) required to accommodate the proposed uses within this area. Additionally, the Specific Plan would ensure site layout and design principles which dictate the arrangement of buildings and parking areas, the size and location of pedestrian spaces and landscaping, and how these features relate to one another. These development standards would reduce the visual impacts associated with site grading and alteration of natural landforms; and, thus, would reduce impacts related to the visual character or quality of the site and its surroundings to a *less than significant* level. However, these measures would not mitigate for the loss of the two knolls onsite. Therefore, the following

mitigation is required to reduce impacts related to the removal of the knolls in Zone A south and Zone E.

AES-3 **Avoidance of Knolls.** The applicant shall avoid development, removal, or reduction (to include grading or blasting) of that knoll located south and east of the intersection of Agoura and Kanan Road. Although development of the knoll is unlikely, given that the Specific Plan would identify this area as Zone "G," the applicant shall minimize earthwork in this area in order to avoid substantially modifying a scenic resource. Additionally, the applicant shall minimize grading (subject to approval of City Community Planning and Development Department) of the knoll located south and east of the intersection of Agoura and Cornell Road. Although development and minor modifications would be allowed on the knoll, the majority of the knoll shall be preserved.

Significance after Mitigation. With the mitigation above, impacts would be reduced to less than significant. However, if avoidance and minimization are infeasible, the impacts would remain significant and unavoidable.

Impact AES-4 **The proposed project would produce new sources of light and glare that would intensify daytime glare and night lighting within the planning area. Implementation of the proposed Specific Plan development standards for exterior lighting would result in Class III, *less than significant*, visual impacts from night lighting. However, the introduction of new sources of glare within the planning area would result in Class II, *significant but mitigable*, visual impacts.**

Site illumination provides safety for traffic movement and crossings, warns of hazards, and increases security. It can also serve to emphasize the plan arrangement by giving emphasis to focal points, gathering places, and building entrances. Well-conceived lighting would give clarity and unity to development within the planning area and to each subarea within it. At present, the sources of nighttime lighting within the planning area include roadway light fixtures and vehicle headlights along roadways within the planning area and the U.S. 101, as well as parking lot, building, and security lights associated with existing development between Roadside Drive and Agoura Road.

Signs are graphical displays that are closely tied to site illumination, since the two are usually interdependent and complementary. Signs, like lighting, are best developed as a hierarchy, each sign being designed in terms of its size, color, and placement to best serve its particular purpose. When a sign is kept simple and standardized, and respects adjacent land uses, the sign can give its own sense of order and clarity to the development pattern. Back-splashed illumination is an accepted treatment for signs when adjacent land uses are sensitive to nighttime lighting impacts. Illuminated signs within the planning area are associated with existing development between Roadside Drive and Agoura Road, which are designed (in part) to attract business from travelers along the U.S. 101.

The proposed Specific Plan would include a number of development standards regulating the types, intensity, and location of night lighting. The development standards would apply to on-site lighting for private development projects in parking areas, and lights associated with new buildings. More specifically, the following Specific Plan development standards would apply to pole lights, spotlights, wall mounted sconces, parking lighting, and landscape lighting for individual projects within the planning area:

- *Sensitivity to the mix of residential / commercial uses, as well as the surrounding hillside areas, should be considered in choosing light sources and footcandle power.*
- *Lighting should be designed to provide ambiance, safety, and security without unnecessary spill over or glare onto adjacent properties. This is particularly important for the residential users who may be located on a second or third floor above a commercial use.*
- *The quality of light, level of light as measured in footcandles, and the type of bulb or source should be carefully addressed. Lighting levels should not be so intense as to draw attention to the glow or glare of the project site. The lighting plan should incorporate current energy efficient fixtures and technology.*
- *Spotlighting or glare from any site lighting should be shielded from adjacent properties and directed at a specific object or target area. Exposed bulbs should not be used.*
- *Building light fixtures should be designed or selected to be architecturally compatible with the main structure which should complement the theme of the Village.*
- *Accent lighting that is downlit and focused on key architectural elements and trees can be effective and attractive, however, light sources should be screened from view.*
- *Low-voltage lighting conserves energy and should be used in the landscape whenever possible.*
- *The height of a light pole should be appropriately scaled to the building or complex and the surrounding area. Pedestrian light poles along sidewalks or pathways and parking lot light standards should be 10 ft to 15 ft high.*
- *Landscape lighting can be used to accent walkways and entries and/or seating areas and specimen plants / trees. Landscape lighting should be done with low-level, unobtrusive fixtures and limited to areas of significant landscape resources such as oak trees and mature trees.*

Light fixtures that are identified in the Specific Plan as being appropriate for street lighting would be limited to Boulevard D650 from Sternberg Lighting. In addition, pedestrian light fixtures for sidewalk areas would be limited to Prairie 0630 from Sternberg Lighting, and would be approximately 15 ft in height and placed 100 ft apart. The Specific Plan requires the use of energy-efficient technology for these lighting fixtures, in order to direct lighting and reduce glare. Moreover, the Specific Plan encourages consideration of the following factors when designing roadway and pedestrian lighting:

- *The wattage or brightness of the light;*
- *The installation of the fixture and use of shields to minimize light spill;*
- *The type of light – sodium amber lights are softer than metal halide type; and,*
- *Placing lights on timers or motion sensors to limit their on-time as appropriate.*

In addition to the development standards for exterior lighting for buildings, parking lots,

roadways, and sidewalk areas, the proposed Specific Plan would require the submission of a sign program with a design review application for new buildings. Signs would be subject to the following development standards, which would reduce light spillover and unnecessary illumination of signs:

- *Lighting of all exterior signs should be directed to illuminate the sign without producing glare on pedestrians, autos, or adjacent residential units.*
- *Internally-illuminated sign cabinets are strongly discouraged.*

New development could include exterior building materials and surface paving materials that increase glare. This would be of particular concern for the portion of the planning area that lies south of Agoura Road, which primarily consists of vacant parcels that lack buildings or structures with reflective surfaces. New buildings that would be introduced into this area, as well as renovation of existing buildings and infill development that could occur within the area north of Agoura Road, would be subject to the following Specific Plan development standard, which would reduce glare that could be generated by brightly colored buildings:

- *Colors should be used that reduce sun glare on wall planes by using flatter, muted colors, i.e. avoiding bright whites.*

Although this development standard would reduce glare associated with the use of bright colors for new buildings that could be introduced into the planning area, the introduction of reflective surfaces (e.g., windows and reflective roofing materials) has the potential to increase glare within the area.

In short, although new development within the planning area would generate new sources of light, implementation of the development standards for exterior lighting would avoid the generation of significant lighting impacts. Similarly, restrictions on the use of bright colors for buildings would reduce the amount of glare that could be generated by new development in the planning area. However, the introduction of buildings and development that include reflective surfaces would result in the introduction of new sources of glare within the planning area; this is considered to be a potentially significant impact.

Mitigation Measures. Implementation of the development standards for street, sidewalk, sign, and exterior building lights (discussed above) would avoid the creation of significant night lighting impacts within the planning area. Moreover, restrictions on the use of bright colors for buildings would reduce the amount glare that could be generated by new development in the planning area. The following mitigation measure, in addition to Mitigation Measure BIO-4(f) in Section 4.3, *Biological Resources*, would further reduce the amount of glare generated by new development:

AES-4 **Glare Reduction.** Project design and architectural treatments shall incorporate additional techniques to reduce glare, such as:

- *Use of low reflectivity glass;*
- *Use of plant material along the perimeter of structures to soften views; and,*
- *Brush-polishing metal surfaces and/or use of metal surfaces that are*

not highly reflective.

Plans for new development shall indicate the architectural treatments and/or landscaping to be used in order to reduce glare that could be generated by new development. Plans shall be reviewed by City staff and the Architectural Review Panel, for compliance with this standard prior to issuance of a Grading Permit or Building Permit.

Significance after Mitigation. Impacts would be less than significant.

Impact AES-5 Development of the Agoura Village Specific Plan could result in the removal of oak trees that are considered to be an important aesthetic resource, pursuant to the City's Oak Tree Preservation Guidelines. This is considered a Class II, *significant but mitigable*, impact.

The City of Agoura Hills Oak Tree Preservation Guidelines provide for the protection and replacement of trees that have the potential to be disturbed by development. All oak trees of the genus Quercus are considered to be "protected trees" that are subject to the tree protection and preservation standards of the Oak Tree Preservation Guidelines. As discussed in detail in Section 4.3, *Biological Resources*, the planning area is marked by oak woodland vegetation consisting of Valley Oaks *(Quercus lobata)*, Coast Live Oaks *(Quercus agrifolia)*, and Scrub Oaks (*Quercus berberidifolia*), all of which are protected trees pursuant to the Oak Tree Preservation Guidelines. Oak Woodlands onsite are primarily located along the southern and eastern Specific Plan boundaries, near the riparian areas of Medea Creek, and south of Zone E. A few oaks are scattered around the project area and along Agoura Road. Several oaks are located north of Agoura Road that—although they no longer comprise oak woodlands—are protected trees pursuant to the Oak Tree Preservation Guidelines (§II.K and §II.S).

The proposed Specific Plan would include a number of development standards regulating the integration and preservation of natural resources onsite. Among these, the Specific Plan requires that individual projects consider oak trees as a natural feature to be incorporated into site design and protected according to the City's Oak Tree Preservation Guidelines. The following are the land use and development standards as provided under the Specific Plan:

- *Oak trees shall be preserved and incorporated into the project whenever possible. New developments shall preserve or improve natural conditions on or adjacent to the site such as wildlife habitats, streams, creeks, views, and restore and preserve riparian habitats to a natural state where appropriate,*
- *All projects shall comply with the regulations contained in the Oak Tree Preservation Guidelines (Sections 9657 through 9657.5 of the Zoning Ordinance).*

As discussed in detail in Section 4.3, *Biological Resources*, Impact BIO-3, an analysis of preliminary oak tree surveys of the planning area has revealed that approximately 40-50% of the oaks on-site would be affected by buildout of the Specific Plan. The removal or destruction of these trees is considered a potentially significant impact.

Mitigation Measures. Each project applicant would be required to obtain a permit from the City and to comply with the provisions of the permit, prior to the approvals of removal of oak trees. In addition, implementation of Mitigation Measures BIO-3(a) through BIO-3(d) would ensure that damage to, and removal of, oak trees would be avoided to the extent feasible. Moreover, implementation of the Oak Tree Preservation Guidelines (§C.1) and Mitigation Measures BIO-3(a) through BIO-3(d) would ensure that when development impacts to oak trees cannot be avoided, oak trees are planted or replaced such that the overall population size of oak trees within the project area is not reduced and that oaks are replaced in as close proximity to those removed as possible.

Significance after Mitigation. Implementation of the required mitigation measures would reduce the visual impacts related to the removal of oak trees to a level considered less than significant. The City would need to approve a variance for oak tree removals if individual projects would remove more than 10% of the oaks on-site for any given development.

c. Cumulative Impacts. Buildout of the Specific Plan, in combination with planned and pending development in and around Agoura Hills, would continue to alter the area's landscape from a semi-rural community to a more suburban context by adding 772 residences and about 2 million square feet of commercial/retail development (see Table 3-1 in Section 3.0, *Environmental Setting*). Of this development, the Triangle Ranch Project (81 single family homes along Kanan and Cornell Roads, just south of the City limits in unincorporated Los Angeles County), the J.H. Snyder ("Riverwalk") project (See Table 3-1), and the Corporate Point Commercial Project (Conditional Use Permit No. 98-012) (See Table 3-1), along with the proposed project, would alter the semi-rural character of Kanan Road and Agoura Road within the southern region of Agoura Hills.

The City's General Plan Land Use and Community Design Elements provide a variety of design controls specifically intended to ensure that future development occurs in an orderly manner and recognizes the area's important visual features. Compliance with each element's goals and policies for new development would be expected to achieve a unified aesthetic character for the City. However, in spite of its uniform and consistent appearance, such development would cumulatively change the aesthetic character of the community through alteration of the topographical features and a landform transition from semi-rural to a more urban form. This is considered to be a significant and unavoidable effect of Citywide buildout. The project contribution to this significant cumulative effect is considered to be cumulatively considerable given its relatively high degree of visibility from key viewing locations within the City (e.g. U.S. 101, Agoura Road, Roadway Drive and Kanan Road).

4.2 AIR QUALITY

The project site is located within the South Coast Air Basin and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD), which is a division of the California Air Resources Board (CARB). Air quality impacts associated with buildout of the Specific Plan were evaluated based on thresholds produced by SCAQMD, the CARB, and the US Environmental Protection Agency. Class I unavoidably significant impacts were projected to occur during construction and operation associated with buildout of the proposed project. Class I, unavoidably significant, impacts are associated with construction related generation of the ozone precursor NOx and of PM_{10}. Class I impacts are also associated with generation of VOC (ROG), NOx, and CO, due to long term increased vehicle trips and increased energy consumption. A Class II, significant but mitigable impact would occur due to exposure of sensitive populations to elevated levels of diesel exhaust. Mitigation has been incorporated that reduces Class II impacts to a level of insignificance, and Class I impacts to the extent feasible.

4.2.1 Setting

a. Climate and Meteorology. The semi-permanent high-pressure system west of the Pacific coast strongly influences California's weather. It creates sunny skies throughout the summer and influences the pathway and occurrence of low-pressure weather systems that bring rainfall to the area during October through April. As a result, wintertime temperatures in Agoura Hills are generally mild, while summers are warm and dry. During the day, the predominant wind direction is from the west and southwest, and at night, wind direction is from the north. These predominant wind patterns are occasionally broken during the winter by storms coming from the north and northwest and by episodic Santa Ana winds. Santa Ana winds are strong northerly to northeasterly winds that originate from high-pressure areas centered over the desert of the Great Basin. These winds are usually warm, very dry, and often full of dust. They are particularly strong in the mountain passes and at the mouths of canyons.

Daytime summer temperatures in the area average from the high 70s to mid 90s. Nighttime low temperatures during the summer are typically in the high 50s to low 60s, while the winter high temperature tends to be in the 60s. Winter low temperatures are in the 40s. Annual average rainfall in Agoura Hills ranges from about 14 to 16 inches, nearly all of which occurs between October and April.

b. Air Pollution Regulation. The federal and state Clean Air Acts regulate the emission of airborne pollutants from various mobile and stationary sources. The United States Environmental Protection Agency (USEPA) is the federal agency designated to administer air quality regulation, while the Air Resources Board (CARB) is the state equivalent in the California Environmental Protection Agency. These agencies have established ambient air quality standards for the protection of public health. Local air quality management control and planning is provided through regional Air Pollution Control Districts (APCDs) established by the CARB for the 14 statewide air basins. The CARB is responsible for control of mobile emission sources, while the local APCDs are responsible for control of stationary sources and enforcing regulations. Agoura Hills is located in the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

Federal and state standards have been established for ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulates less than 10 and 2.5 microns in diameter (PM_{10} and $PM_{2.5}$), and lead (Pb) (refer to Table 4.2-1). California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles (Appendix A). The local air quality management agency is required to monitor air pollutant levels to assure that air quality standards are met and, in the event they are not, to develop strategies to meet these standards. Depending on whether the standards are met or exceeded, the local air basin is classified as being in "attainment" or "nonattainment."

The South Coast Air Basin includes the non-desert portions of Los Angeles and San Bernardino Counties, as well as Riverside and Orange Counties. The South Coast Air Basin is a federally

Table 4.2-1. Current Federal and State Ambient Air Quality Standards

Pollutant	Federal Standard	California Standard
Ozone	0.08 ppm (8-hr avg)	0.09 ppm (1-hr avg) 0.07 ppm (8-hr avg)*
Carbon Monoxide	9.0 ppm (8-hr avg) 35.0 ppm (1-hr avg)	9.0 ppm (8-hr avg) 20.0 ppm (1-hr avg)
Nitrogen Dioxide	0.053 ppm (annual avg)	0.25 ppm (1-hr avg)
Sulfur Dioxide	0.03 ppm (annual avg) 0.14 ppm (24-hr avg) 0.5 ppm (3-hr avg)	0.04 ppm (24-hr avg) 0.25 ppm (1-hr avg)
Lead	1.5 $\mu g/m^3$ (annual avg)	1.5 $\mu g/m^3$ (30-day avg)
Particulate Matter (PM_{10})	50 $\mu g/m^3$ (annual avg) 150 $\mu g/m^3$ (24-hr avg)	30 $\mu g/m^3$ (annual avg) 50 $\mu g/m^3$ (24-hr avg)
Particulate Matter ($PM_{2.5}$)	15 $\mu g/m^3$ (annual avg) 65 $\mu g/m^3$ (24-hr avg)	12 $\mu g/m^3$ (annual avg)

ppm= parts per million
$\mu g/m^3$ = micrograms per cubic meter
*Expected effective in early 2006
Source: California Air Resources Board, ww.arb.ca.gov/aqs/aaqs2.pdf, May 6, 2005.

designated nonattainment area for ozone, PM_{10}, and carbon monoxide. Current state nonattainment designations within this basin exist for ozone, PM_{10}, and $PM_{2.5}$. Carbon monoxide levels in the basin are currently state-classified as "transitional nonattainment;" however, the CARB adopted an attainment designation for this pollutant based on the information provided during the January 2005 annual review. The potential health effects of pollutants for which the South Coast Air Basin is in nonattainment are described below.

Ozone. Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_x) and reactive organic gases (ROG). [1] Nitrogen oxides are formed during the combustion of fuels, while reactive organic gases are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it is formed primarily between the months of April and October. Ozone is a pungent, colorless toxic gas with direct

[1] Organic compound precursors of ozone are routinely described by a number of variations of three terms: hydrocarbons (HC), organic gases (OG), and organic compounds (OC). These terms are often modified by adjectives such as total, reactive, or volatile, and result in a rather confusing array of acronyms: HC, THC (total hydrocarbons), RHC (reactive hydrocarbons), TOG (total organic gases), ROG (reactive organic gases), TOC (total organic compounds), ROC (reactive organic compounds), and VOC (volatile organic compounds). While most of these differ in some significant way from a chemical perspective, from an air quality perspective two groups are important: non-photochemically reactive in the lower atmosphere, or photochemically reactive in the lower atmosphere (HC, RHC, ROG, ROC, and VOC). SCAQMD uses the term VOC, while the URBEMIS program uses ROG. For the purposes of this EIR, these two terms are used as equivalents.

health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, persons with respiratory disorders, and people who exercise strenuously outdoors.

Suspended Particulates. Atmospheric particulate matter is comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. The particulates of primary concern are fine particulate matter less than 10 or 2.5 microns in diameter (PM_{10} and $PM_{2.5}$). These small particles have the greatest likelihood of being inhaled deep into the lungs. Short- and long-term exposure to PM has been associated with increased mortality and cardiopulmonary disease in a number of epidemiological studies. Major man-made sources of PM_{10} are agricultural operations, industrial processes, combustion of fossil fuels, construction, demolition operations, and entrainment of road dust into the atmosphere. Natural sources include wind blown dust, wildfire smoke, and sea spray salt. The finer $PM_{2.5}$ particles are derived from combustion processes, and are secondary pollutants formed by chemical processes in the atmosphere.

Carbon Monoxide. Carbon monoxide (CO) is a colorless, odorless, poisonous gas that is only found in high concentrations very near its source. The major local source of CO is automobile traffic with elevated concentrations usually only found near areas of high traffic volumes and congestion. The adverse effect of CO on human health is a function of its affinity for hemoglobin in the blood. At high concentrations, CO reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity, and impaired mental abilities.

c. Current Ambient Air Quality. The SCAQMD monitors air pollutant concentrations throughout the basin at various monitoring stations. The SCAQMD has divided the basin among 38 separate monitoring stations. The nearest SCAQMD monitoring station lies 13 miles away in Reseda in the San Fernando Valley; however, the Ventura County Air Pollution Control District (APCD) monitoring station located in Thousand Oaks is closer at eight miles to the west. The air quality data gathered at the Thousand Oaks site more accurately reflects the pollutant concentrations present in Agoura Hills because both are in inter-mountain valleys north of the Santa Monica Mountains. Table 4.2-2 summarizes exceedances of the federal and/or state standards for ozone, PM_{10} and NO_x at the Thousand Oaks station.

Table 4.2-2 Ambient Air Quality Data for Thousand Oaks, Ventura County

Pollutant	2002	2003	2004
Ozone, ppm - Worst Hour	0.115	0.109	0.108
Number of days of State exceedances (>0.09 ppm)	3	13	5
Number of days of Federal exceedances (>0.12 ppm)	0	0	0
Nitrogen Dioxide, ppm - Worst Hour	0.064	0.079	0.055
Number of days of State exceedances (>0.25 ppm)	0	0	0
Particulate Matter <10 microns, $\mu g/m^3$ Worst 24 Hours	44.2	67.0	68.6
Number of samples of State exceedances (>50 $\mu g/m^3$)	0	3	1
Number of samples of Federal exceedances (>150 $\mu g/m^3$)	0	0	0
Particulate Matter < 2.5 microns, $\mu g/m^3$ Worst 24 Hours	31.7	31.9	38.3
Number of samples of Federal exceedances (>65 $\mu g/m^3$)	0	0	0

Source: CARB, 2002, 2003, & 2004 Annual Air Quality Data Summaries available at http://www.arb.ca.gov

Table 4.2-2 indicates that locally the federal standards for ozone and PM_{10} have been met the last three years; however, the state standard for ozone was exceeded at the Thousand Oaks monitoring station during the past three years, and the state PM_{10} standard was exceeded the last two years. Nitrogen dioxide and $PM_{2.5}$ have not been exceeded at the state or federal level during the past three years.

Since the project is located within the Los Angeles County jurisdiction of the SCAQMD, ambient air quality data from the Reseda and Burbank monitoring stations in the San Fernando Valley are included in this analysis as well. Reseda is the closest location with a monitoring station; however, the Reseda Station does not monitor particulate matter, so the Burbank station was used to obtain this information. Summaries of this information are presented in Table 4.2-3. As illustrated, federal and state standards for ozone are regularly exceeded in the San Fernando Valley, as is the state standard for PM_{10}.

Table 4.2-3 Ambient Air Quality Data for the San Fernando Valley, Los Angeles County

Pollutant	2002	2003	2004
[a]Ozone, ppm - Worst Hour	0.152	0.179	0.131
Number of days of State exceedances (>0.09 ppm)	42	68	54
Number of days of Federal exceedances (>0.12 ppm)	9	14	2
[a]Ozone, ppm – Maximum 8-Hour (8-hr avg)	0.121	0.127	0.115
Number of days of Federal exceedances (>0.08 ppm)	27	49	30
[a]Carbon Monoxide, ppm - Worst 8 Hours	4.83	4.13	3.47
Number of days of State/Federal exceedances (>9.0 ppm)	0	0	0
[a]Nitrogen Dioxide, ppm - Worst Hour	0.093	0.125	0.083
Number of days of State exceedances (>0.25 ppm)	0	0	0
[b]Particulate Matter <10 microns, $\mu g/m^3$ Worst 24 Hours	71.0	81.0	108.0
Number of samples of State exceedances (>50 $\mu g/m^3$)	7	7	9
Number of samples of Federal exceedances (>150 $\mu g/m^3$)	0	0	0
[a]Particulate Matter <2.5 microns, $\mu g/m^3$ Worst 24 Hours	48.8	47.5	56.2
Number of samples of Federal exceedances (>65 $\mu g/m^3$)	0	0	0

Source: CARB, 2002, 2003, & 2004 Annual Air Quality Data Summaries available at http://www.arb.ca.gov
[a]Reseda Monitoring Station
[b]Burbank Monitoring Station

d. Sensitive Receptors in the Project Area. Sensitive receptors most likely to be affected by the project include a single-family residence located within the new AVSP proposed boundary at Agoura Road approximately 400 feet east of Cornell Road; a resident family living in the storage facility caretaker unit in Zone A North, along Agoura Road; and a single-family residence at Agoura Road aligned adjacent to the eastern edge of the AVSP boundary. The closest school is Agoura High School, which is located 0.6 miles northeast of the project area on the northern side of US Highway 101. The closest hospital is Westlake Medical Center, which is located 3.4 miles west of the project area.

4.2.2 Impact Analysis

a. Methodology and Significance Thresholds. Emissions estimates for this project were calculated using URBEMIS 2002 version 8.7, which was developed by CARB to evaluate construction emissions, operational emissions and trip emissions associated with new development. Because the project does not include actual development, but will guide development within the proposed AVSP boundary, full buildout under the AVSP would involve many projects that have not been defined, and for which no development proposals are yet available. Therefore, operational and construction emissions associated with the project were evaluated based on two different scenarios. Construction emissions were calculated based on the land uses proposed in the AVSP and the incremental additional buildout allowed under the proposed plan. Operational trip generation rates were provided by the traffic consultant for this project. It is assumed that the Specific Plan Area would be fully built out by 2010.

Development would be conducted by multiple applicants with construction of each project commencing upon approval of individual applications. It is unlikely that development of the entire project area would commence simultaneously. Additionally, since the thresholds for air quality emissions require specific input with regard to project size and use, it is impossible to determine the precise amount of emissions that would be generated by each of the scenarios possible under the AVSP. Therefore, construction impacts were evaluated assuming a worst-case scenario, concurrent construction of three development proposals that comprise 28 of the 62 developable acres in the southern portion of the AVSP area. See Section 2.5 for details of these three developments currently proposed within the AVSP area. The remaining 34 acres of developable land are currently developed and would be redeveloped on a much smaller scale and individually over the life of the Specific Plan. Thus construction impacts were modeled after the "worst-case scenario," simultaneous development of three large scale projects on undeveloped land in the southern half of the Specific Plan area.

A significant adverse air quality impact may occur when a project individually or cumulatively interferes with progress toward the attainment of the ozone standard by releasing emissions that equal or exceed the established long term quantitative thresholds for pollutants, or causes an exceedance of a state or federal ambient air quality standard for any criteria pollutant. Table 4.2-4 (following page) provides the significance thresholds that have been recommended by the SCAQMD for projects within the South Coast Air Basin:

Localized significance thresholds (LSTs) have been established by the SCAQMD in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the SCAQMD's CEQA Air Quality Handbook. The LSTs were devised in response to public concern regarding exposure of individuals to criteria pollutants in local communities. The LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size, distance to the sensitive receptor, etc. However, the LSTs only apply to emissions within a fixed stationary location, including idling emissions during both project construction and operation, and LSTs have been developed only for NO_x, CO, and PM_{10}. LSTs have been developed for emissions within areas up to 5 acres in size, with air pollutant modeling recommended for activity within larger areas. Table 4.2-5 (following

page) includes LSTs for projects of five acres in size in Source Receptor Area 6 (SRA-6), which is designated by the SCAQMD as the West San Fernando Valley area and includes the City of Agoura Hills. For the purposes of this EIR, it is assumed that construction activity at any particular site within the Specific Plan would generally occur within a 5-acre area at any one time. Additionally, it should be noted that LSTs are not applicable to mobile sources such as cars on a roadway.

Table 4.2-4 SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds		
Pollutant	**Construction**	**Operation**
NO_x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
SO_x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs) and Odor Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Hazard Index ≥ 1.0 (project increment) Hazard Index ≥ 3.0 (facility-wide)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality for Criteria Pollutants [a]		
NO_2 1-hour average annual average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.25 ppm (state) 0.053 ppm (federal)	
PM_{10} 24-hour average annual geometric average annual arithmetic mean	10.4 $\mu g/m^3$ (recommended for construction) [b] 2.5 $\mu g/m^3$ (operation) 1.0 $\mu g/m^3$ 20 $\mu g/m^3$	
Sulfate 24-hour average	1 ug/m^3	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) 9.0 ppm (state/federal)	

[a] *Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, unless otherwise stated.*
[b] *Ambient air quality threshold based on SCAQMD Rule 403.*

KEY: lbs/day = pounds per day; ppm = parts per million; ug/m^3 = microgram per cubic meter; ≥ greater than or equal to

Source: SCAQMD, June24, 2005, http://www.aqmd.gov/ceqa/hdbk.html

Table 4.2-5 SCAQMD LSTs for Construction and Operation

Pollutant	Allowable emissions as a function of receptor distance in feet from a five acre site boundary				
	82	164	328	656	1,640
	lbs/day				
Gradual conversion of NO_x to NO_2	286	286	301	332	415
CO	613	745	1,239	2,696	7,892
$PM_{2.5}$ ($\mu g/m^3$)	3	8	27	45	64
PM_{10} ($\mu g/m^3$)	11	35	111	188	265

Source: http://www.aqmd.gov/ceqa/handbook/LST/LST.html#Appendix%20C; July 2005
With Links to: 1) SRA/City Table; and 2) Appendix C - Mass Rate LST Look-up Tables

Diesel particulate matter impacts associated with on-site construction were also assessed, based in part on the scenarios developed by the ARB for the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* (October 2000). The construction scenario considered was the same as that used in the URBEMIS 2002 analysis and included one typical grading spread of two bulldozers, 6 scrapers, and a water truck on a square 5-acre area. An overall emission rate was developed and the SCREEN3 model was run based on an area source scenario. SCREEN3 is a screenline model intended to determine under a worst-case basis whether or not emissions have the potential to result in concentrations of concern. Typically, this model will predict concentrations an order of magnitude (10x) or more greater than if the more detailed and complex model on which SCREEN3 is based (Industrial Source Complex [ISC] 3) were used. It should also be noted that neither SCREEN3 nor ISC3 were developed to analyze sources that move through an area over time; therefore, the use of the area methodology provides for several simplifying assumptions that may also overestimate actual concentrations.

A generic health risk analysis was conducted as part of the determination of impacts from diesel engine emissions. The health risk model used is based on the standardized equations contained in the USEPA Region 9 Preliminary Remediation Goals document (last updated November 2000). These health risk equations and methodology are based on the USEPA Human Health Evaluation Manual (1991).

b. Project Impacts and Mitigation Measures.

Impact AQ-1 Project construction would generate air pollutant emissions that exceed construction thresholds for ozone precursors NO_x, VOC (=ROG) and Fugitive Dust. Project construction is not expected to generate air pollutant emissions that exceed LSTs for the area. Because emissions cannot feasibly be reduced to below established thresholds, temporary construction impacts are considered Class I, *significant and unavoidable*.

The majority of construction related emissions result from grading due to use of heavy equipment, and during the building phase due to the evaporation of VOCs from architectural coatings. The ozone precursor NO_x is a byproduct of diesel combustion, and VOCs are released during the finishing phase of construction upon application of paints and varnishes. The computer program URBEMIS (2002) calculates construction emissions based on demolition

(Phase I), grading (Phase II) and building construction (Phase III). Given the existing conditions of development within the Specific Plan area, north of Agoura Road, it is unlikely that more than 20,000 to 25,000 square feet of development would be demolished in any given year. This represents less than 6% of the existing development square footage onsite and less than 4% of total new development proposed south of Agoura Road. Additionally, redevelopment and subsequent demolition are more likely to be extended over the life of the plan; would not likely occur in the early phases of Specific Plan development; and are anticipated to be 25,000 sf or less within a given year. Thus, redevelopment and demolition potential represent a very minor component of Specific Plan construction and therefore, were not analyzed under the (Phase I) scenario for this EIR.

During project grading (Phase II), the earth that underlies the site would be turned over and pushed around, exposing the earth to wind erosion and dust entrainment by onsite operating equipment. The three projects currently under consideration within the Specific Plan area have been proposed with substantial grading, with the proposed export of up to 667,000 cubic yards (cy) of earth (Ted Moore Project – 500,000 cy; Cornerstone project – 67,000 cy; Symphony project - 100,000 cy). This would involve about 33,350 round trips by heavy-duty trucks (assumed loaded capacity of 20 cubic yards per truck). It is estimated that about 252 truckloads of earth would need to be removed from the site per day to complete grading in a six-month time frame if all three major projects were to proceed simultaneously.

Table 4.2-6 shows worst-case estimated daily emissions during the grading (Phase II) and building (Phase III) construction tasks. NO_x emissions during grading would exceed the SCAQMD daily significance threshold of 100 pounds per day by both the onsite grading equipment and the exhaust from the trucks that would export earth off site. The NO_x emissions threshold is not expected to be exceeded during the building phase. The grading phase NO_x emissions are based on a worst-case scenario assumption that the three projects currently under consideration would all occur at the same time and that 667,000 cubic yards of earth would be moved to a location that is 12.5 miles[2] away (25 mile round trip). This assumption was necessary to evaluate worst-case scenario impacts because the development proposals on which the impacts are based are still in the preliminary stages, and earth disposal plans have not yet been determined. Other alternatives for disposal, such as sale of fill to nearby developments that require it, or disposal as cover earth to landfills that are located closer than 12.5 miles, may be available at the time of construction. In the event that no disposal option is available at a distance of 12.5 miles or less from the project site, a mitigation measure has been included in the Geological Resources Section that stipulates additional environmental review may be required prior to Agoura Village Development Plan (AVDP) approval (refer to mitigation measure GEO-6(b)). However, even in the event that nearer disposal options are identified, onsite grading would still exceed the SCAQMD threshold by more than 87%. While several mitigation options are available (use of aqueous diesel fuel, use of biodiesel fuel with retarded ignition timing, exhaust gas recirculation), these technologies would not reduce onsite grading emissions below the 100 pounds per day NO_x threshold given the scenarios considered.

[2] Travel distance for soil export was based on an applicant's proposal to sell cut and fill to a developer in Las Virgennes Canyon. The proposed location for fill delivery is approximately six miles from the Specific Plan area. However, given the uncertainty of the viability of use for this location, this distance was effectively doubled to provide a worst case scenario in case the preferred location is unavailable.

Table 4.2-6 Estimated Maximum Daily Air Pollutant Emissions During Construction

	Unmitigated Emissions (lbs/day)				
	VOC	**NOx**	**CO**	**Exhaust PM_{10}**	**Fugitive Dust**
Site Grading-Off Road	26.8	187.2	213.0	8.4	1,180.3
Worker Trips	0.2	0.3	4.6	0.0	0.0
Site Grading-On Road (Export)	8.1	180.6	30.1	3.5	0.7
Maximum Phase II Construction[1]	**35.1**	**368.3***	**247.6**	**11.9**	**1,181.0***
2nd Year Building Construction	8.2	62.3	60.5	2.8	0.0
2nd Year Worker Trips	1.8	1.0	21.9	0.0	0.3
3rd Year Architectural Coatings	151.7	-	-	-	-
3rd Year Asphalt Paving	4.4	24.8	34.2	0.8	0.0
3rd Year Worker Trips	1.7	1.0	20.6	0.0	0.3
Maximum Phase III Construction[2]	**157.8***	**63.4**	**82.3**	**2.8**	**0.3**
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*
LSTs[3]	*N/A*	*286*	*613*	*11*	*N/A*

Source: URBEMIS 2002, Version 8.7; see Appendix A for calculations.
[1]Totals include emissions associated with site grading, offsite earth export, and worker trips.
[2] Maximum daily emissions based on highest in either construction year 2 or 3.
[3]LSTs are for a five acre project in SRA-6 at a distance of 82 feet from the specific site boundary
** Indicates exceedance of the daily significance threshold*

The grading phase of construction is also expected to generate a substantial amount of fugitive dust because of the disturbance of earth materials, equipment movement on bare earth, and the loading of earth materials into trucks for offsite disposal. While standard dust control measures (watering of exposed surfaces, watering of haul roads) can substantially reduce dust emissions, use of these methods would reduce the estimated maximum daily dust emissions of 1,180 pounds to about 294 pounds, which still exceeds the 150 pounds per day threshold (see mitigated construction emissions in Appendix A).

VOC emissions are not expected to exceed SCAQMD thresholds during the grading phase (Phase II Construction), but application of architectural coatings alone is projected to generate about 152 pounds of VOC per day, bringing total VOC emissions to 158 pounds during the building phase (Phase III). This exceeds the SCAQMD's 75 pounds per day significance threshold for VOC. However, actual exceedance of the 75 pounds per day threshold is dependent on the nature of surfaces to be chosen for the various projects to be developed within the Specific Plan area and the timing of those projects. For example if the three current proposals are built out sequentially rather than simultaneously, the daily threshold would not be exceeded by any one of these proposals.

The nearest sensitive receptors with respect to the local significance thresholds (LSTs) are the residences within the Specific Plan area and adjacent to the development sites. The thresholds are relative only to those emissions that occur within a 5-acre area, such as onsite grading emissions or stationary source emissions, and not to offsite mobile emissions. Comparison of the site grading emissions with the LSTs for NO_x, CO, and PM_{10} (in terms of exhaust emissions)

indicates that no LSTs would be exceeded. PM_{10} associated with fugitive dust could potentially cause an exceedance of the LST, but this is dependent on specific grading plans and activity levels that are unknown at this time.

Mitigation Measures. The following mitigation measures are required to reduce emissions associated with construction activities to the greatest extent feasible. These measures shall be made conditions of approval for applicable individual development projects and indicated on final construction and grading plans submitted to the City prior to issuance of a Building Permit or Grading Permit.

AQ-1(a) Fugitive Dust Control Measures:

- Water trucks shall be used during construction to keep all areas of vehicle movements damp enough to prevent dust from leaving the site. At a minimum, this will require twice daily applications (once in late morning and once at the end of the workday). Increased watering is required whenever wind speed exceeds 15 mph. Grading shall be suspended if wind gusts exceed 25 mph.
- The amount of disturbed area shall be minimized and onsite vehicle speeds shall be limited to 15 mph or less.
- If importation, exportation and stockpiling of fill material is involved, earth with 5% or greater silt content that is stockpiled for more than two days shall be covered, kept moist, or treated with earth binders to prevent dust generation. Trucks transporting material shall be tarped from the point of origin or shall maintain at least two feet of freeboard.
- After clearing, grading, earth-moving or excavation is completed, the disturbed area shall be treated by watering, revegetation, or by spreading earth binders until the area is paved or otherwise developed.
- All material transported off-site shall be securely covered to prevent excessive amounts of dust.

AQ-1(b) NO_x Control Measures:

- When feasible, electricity from temporary power poles on site shall be utilized rather than temporary diesel or gasoline generators;
- When feasible, on site mobile equipment shall be fueled by methanol or natural gas (to replace diesel-fueled equipment), or, propane or butane (to replace gasoline-fueled equipment)
- Aqueous Diesel Fuel or biodiesel (B20 with retarded fuel injection timing), if available, shall be used in diesel fueled vehicles when methanol or natural gas alternatives are not available.

AQ-1(c) VOC Control Measure:

- Low VOC architectural and asphalt coatings shall be used on site and shall comply with AQMD Rule 1113-Architectural Coatings.

The following additional measure is required to further reduce emissions of construction-related ozone precursors (VOC and NO_x):

AQ-1(d) Ozone Precursor Control Measures:

- Equipment engines should be maintained in good condition and in proper tune as per manufacturer's specifications;
- Schedule construction periods to occur over a longer time period (ie lengthen from 60 days to 90 days) during the smog season so as to minimize the number of vehicles and equipment operating simultaneously; and
- Use new technologies to control ozone precursor emissions as they become readily available.

Significance After Mitigation. The required mitigation measures would reduce grading-related emissions to the extent feasible. However, these measures are not sufficient to reduce emissions of NO_x and fugitive dust to below SCAQMD significance thresholds (see Table 4.2-7). Many of the allowable VOC emissions for individual architectural coating types under Rule 1113 were substantially reduced as of January 1, 2005, with another substantial decrease slated for July 1, 2006; this is estimated to reduce VOC emissions below the SCAQMD thresholds. Therefore, construction impacts are considered unavoidably significant and would require a statement of overriding consideration.

Table 4.2-7 Estimated Mitigated Maximum Daily Air Pollutant Emissions During Construction

	Emissions (lbs/day)				
	VOC	NOx	CO	Exhaust PM_{10}	Fugitive Dust
Total Emissions	36.4	342.1*	247.6	6.6	294.3*
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*

Source: URBEMIS 2002 calculations. See Appendix A for calculations.
** Indicates exceedance of an SCAQMD significance threshold.*

Impact AQ-2 Grading equipment and diesel trucks used for earth export have the potential to expose sensitive populations in the vicinity to elevated levels of diesel exhaust. This is a Class II *significant but mitigable* impact.

The main three currently envisioned projects could result in grading of 28 acres with the export of 667,000 cubic yards of earth from the project area involving 33,350 round trips offsite. The equipment used during grading operations and on-road trucks that are used to transport earth are diesel fueled. Diesel exhaust includes hundreds of different gaseous and particulate components, many of which are toxic.

The nearest sensitive receptors are: 1) a single-family residence located within the new AVSP proposed boundary at Agoura Road approximately 400 feet east of Cornell Road (approximately 62-feet east of the boundary of the proposed Cornerstone Project); 2) a single-family residence at Agoura Road aligned adjacent the eastern edge of the AVSP boundary (approximately 500-feet east of the eastern boundary of the Cornerstone Project), and 3) a resident family living in the storage facility caretaker unit in Zone A North, along Agoura Road;. These residences would be affected by development of the Cornerstone project;

however, these receptors would be nearer to as yet undefined development that is proposed between the eastern boundary of the Cornerstone project and the eastern boundary of the AVSP. The closest school is Agoura High School, which is located 0.6 miles northeast of the project area on the northern side of State Route 101. The closest hospital is Westlake Medical Center, which is located 3.4 miles west of the project area. Substantial residential development is also located along the northern boundary of U.S. 101 opposite the project area.

Based on a generic construction spread (SCREEN 3 default assumptions), the diesel particulate emissions concentration level at the point of maximum impact was calculated to be about 23 micrograms per meter cubed ($\mu g/m^3$) at 328 feet (100 meters) from the construction area. Note that this concentration estimate is not a specific prediction of the actual concentration that would occur at any one point over the course of the construction period. Actual average concentrations are dependent on many variables, particularly the number and type of equipment working at specific distances during time periods of adverse meteorology. The SCREEN3 estimate is intended to be a worst-case concentration that is unlikely to be exceeded for use in the health risk computation.

A health risk computation was done to determine the potential risk that may result from the maximum one-hour concentration at the residences. The chronic health risk associated with diesel particulates was also estimated based on the reference dose for chronic oral exposure for diesel engine emissions (USEPA, IRIS, 2001). The chronic risk is separate from the carcinogenic risk in that it considers impacts to the respiratory system, such as the buildup of material in the lungs and inflammation of lung tissue.

The carcinogenic and non-carcinogenic health risks at the point of maximum impact (PMI) are shown in Table 4.2-8. As indicated in the table, children are more affected by diesel emissions because of the relatively greater amount of air that they breathe on a daily basis as compared to their body weight. The cancer risk associated with this generic grading scenario exceeds the SCAQMD threshold for excess cancer risk (10 in one million) for both adult and child receptors at the point of maximum impact. The chronic hazard quotient of 0.6 at that same location does not exceed the 1.0 significance threshold. Consequently, the health risk associated with emissions of diesel particulates during construction is considered a potentially significant impact for residences located within or near to the Specific Plan area. Please note that additional diesel particulate emissions would be associated with the export of earth materials from a site and would increase the degree of this impact.

Table 4.2-8 Potential Health Risks Associated With Grading Operations

Scenario	Excess Cancer Risk	Chronic Hazard Quotient
Residence at 300 feet from grading activity adult child	1.2E-05 (12 in one million) 2.8E-05 (28 in one million)	0.6
Significance Threshold	*>1.0E-05*	*>1*

The Chronic Hazard Quotient is the ratio of the potential exposure to the substance and the level at which no adverse effects are expected. If the Hazard Quotient is less than 1, then no adverse health effects are expected as a result of exposure. If the Hazard Quotient is greater than 1, then adverse health effects are possible. The Hazard Quotient cannot be translated to a probability that adverse health effects will occur, and is unlikely to be proportional to risk. It is important to note that a Hazard Quotient exceeding 1 does not necessarily mean that adverse effects will occur.

Mitigation Measures. Four options are available to reduce this health risk: (1) reducing the amount of equipment operating in proximity to nearby residences; (2) the use of biodiesel fuel, which generates fewer diesel particulate emissions; (3) the use of construction equipment with lower emission rates, or (4) use of construction equipment with either diesel particulate filters (DPFs) or diesel oxidation catalysts installed.

Reducing the number of diesel-fueled vehicles within construction areas near residences (within 300-500 feet) would substantially reduce risk as the particulate matter concentration decreases rapidly with distance (approximate 60% decrease from 300 feet to 600 feet). It is noted however that such a requirement may be difficult to enforce on a daily basis.

Biodiesel is comprised of either 100% or a blend of either new or used vegetable oils and diesel fuel and is cleaner burning then regular diesel fuel. It also changes the odor character from typical diesel smell to that of French fries. Tailpipe emissions of particulates smaller than 10 microns are 68% lower for buses that run on 100% biodiesel (compared to petroleum diesel). Tailpipe CO emissions are 46% lower and biodiesel completely eliminates tailpipe SO_x emissions; however, NO_x emissions are 8.9% higher (note that NO_x emissions associated with biodiesel can be reduced to less than that associated with a normal engine by retarding ignition). Blended diesel fuel (B20 – 20% blend with petroleum diesel fuel) is generally more readily accepted by equipment operators, but has a linearly corresponding decrease in air emission reductions.

The U.S. Environmental Protection Agency (EPA) is implementing new diesel emissions standards that will reduce particulate emissions from diesel construction equipment by more than 90%. Use of equipment that complies with the latest EPA standards (termed "Tier 2" equipment) would be expected to reduce particulate emissions to a level of less than significant.

The use of either a passive or active DPF provides the greatest reduction in diesel particulate matter from existing engines, generally 85% or greater. Use of DPFs on the larger horsepower equipment (such as the scrapers) would yield the greatest net reduction in emissions and can reduce the impact to a less than significant level. These measures shall be made conditions of approval for applicable individual development projects and indicated on final construction and grading plans submitted to the City prior to issuance of a Building Permit or Grading Permit.

AQ-2 **Decrease Emissions** of diesel particulate matter during site grading by implementing one of the following four approaches.

- Construction contractors shall not operate more than two pieces of heavy-duty diesel-powered equipment within 600 feet of any residence at any time.
- Construction contractors shall use biodiesel fuel in all on-site diesel-powered equipment. Biodiesel that is blended with low sulfur diesel fuel shall be used if available.
- Construction contractors shall use only Tier 2 diesel-powered earth moving equipment.

- At least 80% of the diesel-fueled construction equipment in terms of brake-horsepower shall have DPFs installed, or all equipment shall be equipped with diesel oxidation catalysts.
- Construction contractors shall limit the movement of large trucks to off-peak commute hours.

Significance after Mitigation. The required mitigation measure would reduce the potential for project related health risks to a less than significant level. It is noted that combinations of these approaches could also be used.

Impact AQ-3 Operation of the proposed mixed use development would generate air pollutant emissions exceeding SCAQMD operational significance thresholds. Because emissions cannot be reduced to below threshold levels, the project's operational impact to regional air quality is considered Class I, *significant and unavoidable*.

The proposed projects that could be developed under the Specific Plan would generate a long-term increase in vehicle trips to and from the plan area as well as a long-term increase in the consumption of electricity and natural gas. As such, project operation would increase emissions of air pollutants that contribute to the degradation of regional air quality. Estimates of project emissions are shown in Table 4.2-9 (following page). As indicated, overall emissions would exceed SCAQMD thresholds for VOC, NO_x, CO and PM. Operational impacts are therefore considered significant. The local area emissions associated with buildout of the Specific Plan would not exceed the local significance thresholds.

It should be noted that this analysis assumes that all project generated trips are new to the region and would therefore generate emissions that otherwise would not occur. In reality, some trips to the site would likely be diverted from another location within the region and therefore would not generate new air pollutant emissions. For this reason, this analysis likely overstates the project's actual impact to regional air quality. In addition, the SCAQMD already considers a certain amount of growth within the project site based on the current Agoura Hills General Plan designation during its preparation of air quality plans for the regional airshed. Table 2.2 in the Project Description indicates that an additional 580,928 square feet of commercial and office type uses could be constructed in the area under the current General Plan. The project would allow 576,458 square feet in new development potential. Thus, the project would reduce commercial and office buildout by 4,470 square feet, as compared with the General Plan. This reduction in commercial buildout equates to a reduction of 1% in overall traffic. However, this level of traffic would still exceed the SCAQMD significance thresholds for VOC, NO_x, and CO.

Table 4.2-9 Operational Emissions Associated with the Proposed Project (lbs/day)

Emission Source	**VOC**	**NO_x**	**CO**	**PM_{10}**
Vehicle	115*	140*	1,316*	158*
Area	28	8	9	0
Total Emissions	**143***	**148***	**1,325***	**158***
SCAQMD Thresholds	*55*	*55*	*550*	*150*
LSTs [a]	n/a	286	613	11

Source: URBEMIS 2002 calculations. See Appendix A for calculations.

[a]LSTs are for a five acre project in SRA six of the SCAQMD at a distance of 82 feet from the project boundary and are only applicable to area operational sources
** Indicates an exceedance of SCAQMD significance threshold*

Several elements of the project may increase the use of alternative forms of transportation, thus reducing the actual impacts of vehicular traffic on air quality. The mixed use Village concept that incorporates retail, entertainment, residential and business/professional uses in a pedestrian and bicycle friendly circulation system is intended to reduce vehicular flow within the area by residents. Sidewalks are currently provided along the segments of Kanan Road and Cornell Road north of Agoura Road, and partly along the north side of Agoura Road. A pedestrian circulation plan has been developed for the project and includes construction of sidewalks on both sides of Kanan Road, Agoura Road, Roadside Drive and Cornell Road within the AVSP boundary. Additionally, pedestrian crossings will be provided at all intersections and possibly at key midblock locations. Bicycle circulation is planned to tie into existing routes along Kanan Road and Canwood Street.

Additional circulation improvements are included as mitigation measures in the Traffic Section, 4.11, of this document and include recommendations for increasing capacity at the Kanan Road/U.S. 101 northbound ramps intersection (this includes restriping of the southbound approach to three through lanes and a shared through/right–turn, movement of the northbound on-ramp approach 16 feet to the west, restriping the overpass from two southbound lanes to three southbound lanes, and additional widening on the eastbound approach); installation of a signal, widening of the overpass, and/or intersection approaches at the Palo Comado Canyon/U.S. 101 northbound ramps intersection; widening of the northbound approach at the Reyes Adobe Road/Canwood Street intersection; widening of the southbound intersection of the Reyes Adobe Road/U.S. 101 southbound ramps; restriping the southbound approach to provide dual left-turn lanes and a right-turn lane, and providing additional capacity on the westbound approach at Reyes Adobe Road and Agoura Road; widening of the north side of the intersection for 200 ft or more to provide three receiving lanes at Kanan Road/Canwood Street (E) intersection; and signalizing the Dorothy Drive/U.S. 101 Southbound Ramps intersection. These circulation improvements within the AVSP area and in the surrounding vicinity will reduce overall congestion in the area, by increasing the level of service on roadway segments, thereby facilitating greater traffic flow, and reducing the number of automobiles that are idling at stops or in traffic.

Mitigation Measures. Project design encourages mixed uses and a pedestrian and bicycle friendly circulation system, thereby reducing project related vehicular contributions to existing congestion in the area, and reducing project impacts to air quality. Other mitigation measures included in Section 4.11, *Traffic and Circulation* contain recommendations for improvements to the local street system that further reduce the potential for project related congestion, and vehicular induced air quality impacts. To further reduce emissions, the following measures are required and shall be made conditions of approval for applicable individual development projects and indicated on final construction and grading plans submitted to the City prior to issuance of a Building Permit or Grading Permit.

AQ-3(a) **Energy Consumption**. Onsite structures shall reduce energy consumption by at least 20% below current Federal guidelines as specified in Title 24 of the Code of Federal Regulations. Potential energy consumption reduction measures include, but are not limited to, the use of photovoltaic roof tiles, installation of energy efficient windows, and the use of R-45 insulation in the roof/attic space of all onsite structures.

AQ-3(b) **Landscape Equipment.** Multi-family residential developments shall be encouraged to utilize electrical powered landscape maintenance equipment, and exterior outlets shall be installed at the front and rear of residences.

AQ-3(c) **Shade Trees.** Shade trees shall be planted to shade onsite structures to the greatest extent possible in summer, reducing indoor temperatures, and reducing energy demand for air conditioning. The City's ARB shall review project landscaping plans for consistency with this mitigation measure.

AQ-3(d) **Bus Stops.** Applicants shall provide bus stops within the Specific Plan Area. The number to be constructed will be determined in consultation with the City Traffic Engineer and the local transit agencies. Bus stops shall meet the requirements of the transit agency providing service to the City and shall include street furniture that provides shelter for passengers.

Significance after Mitigation. The required mitigation measures would reduce project-related air pollutant emissions to the degree feasible and resultant PM_{10} emissions would be below SCAQMD significance thresholds. Nevertheless, daily emissions of VOC, NO_x and CO would remain above SCAQMD thresholds (see Table 4.2-10). Therefore, impacts from operational emissions would be considered unavoidably significant and would require a statement of overriding consideration.

Table 4.2-10 Mitigated Operational Emissions Associated with the Proposed Project (lbs/day)

Emission Source	VOC	NO_x	CO	PM_{10}
Vehicle	108	131	1,228	148
Area	28	8	9	0
Total Emissions	**136***	**139***	**1,237***	**148**
SCAQMD Thresholds	*55*	*55*	*550*	*150*
LSTs [a]	n/a	286	613	11

Source: URBEMIS 2002 calculations. See Appendix A for calculations.
[a]LSTs are for a five acre project in SRA six of the SCAQMD at a distance of 82 feet from the project boundary and are only applicable to area operational sources
** Indicates an exceedance of SCAQMD significance threshold*

Impact AQ-4 The proposed construction of an equestrian center and trail near Medea Creek, that would connect to the existing equestrian trail along Cheseboro Creek and Agoura Road, has the potential to create nuisance odors. This is a Class II, *significant but mitigable* impact.

The AVSP includes provisions within the recreational component that would promote construction of an equestrian center and trail linking the existing equestrian trail that runs adjacent to Cheseboro Creek and Agoura Road and currently terminates at Medea Creek. The proposed equestrian trail extension would continue from the existing terminal point along Medea Creek and extend to the southern boundary of the project area. The proposed extension would terminate at the southern boundary of the AVSP area and be delineated as the access point to the Santa Monica Mountains. The equestrian center would be located within Zone G, south of Medea Creek and adjacent to Cornell Road.

Given the nature of equestrian use, organic waste may accumulate along trails, specifically near trailheads, and within the equestrian center. The accumulation of organic waste voided by horses may introduce environmental impacts such as ammonia and decaying organic waste odors, nutrient loading of nitrogen and phosphorous, and introduction of weeds. Odors of ammonia and decaying organic waste are considered nuisance odors. Although the equestrian center and trail are buffered from nearby residences by Medea Creek, the accumulation of organic waste near the trailhead and adjacent commercial uses near Agoura Road could potentially generate nuisance odors. Therefore, impacts from nuisance odors are considered potentially significant.

Mitigation Measures. The following mitigation is required to reduce nuisance odor impacts to a level of insignificance.

AQ-4(a) Equestrian Center and Trail Maintenance Plan. The feasibility study for an equestrian center within the Specific Plan area, shall include provisions for a maintenance plan of both the equestrian center and related trails. The maintenance plan shall include the following measures, at a minimum:

- Organic debris/waste shall be properly disposed of or sold offsite on a regular basis,
- BMPs shall be instituted to prevent dust from moving offsite,
- BMPs (to include necessary bioswales or erosion control measures) shall be instituted to prevent organic waste, or associated nutrients from organic waste, from entering nearby water bodies.

Significance after Mitigation. The recommended mitigation measure would reduce equestrian trail extension odor emissions to a level of insignificance.

c. Cumulative Impacts. Any growth within the Los Angeles metropolitan area contributes to existing exceedances of ambient air quality standards when taken as a whole with existing development in the region. In combination with the proposed project, buildout of the cumulative projects listed in Table 3-1 in Section 3.0, *Environmental Setting*, would involve construction of 772 residences and about 2.0 million square feet of non-residential development. Emissions associated with this development, in combination with other development throughout the South Coast Air Basin, would incrementally contribute to the degradation of regional air quality. Although such development is generally envisioned and accounted for in the Air Quality Management Plan for the region, increased emissions associated with cumulative development would potentially hinder the attainment of State and Federal air quality standards. Thus, cumulative impacts to regional air quality are considered unavoidably significant.

4.3 BIOLOGICAL RESOURCES

The 233-acre Specific Plan area contains native vegetation and natural communities, including: Coastal Sage Scrub with Non-Native Annual Grasses; Mixed Chaparral; Oak/Willow Woodlands; Riparian Woodland, Coastal and Valley Freshwater Marsh Cattail Series; Valley Grassland; and Ruderal habitats. Jurisdictional areas for the Army Corps of Engineers and Department of Fish and Game occur within the southern half of the project area.

Previous biological surveys identified 8 sensitive wildlife species and 11 sensitive plant species within the Specific Plan area. Twelve special-status wildlife species were seen during surveys conducted in 2007 and 2008. No federally or state rare, threatened or endangered species were seen at the project site. One fully protected species, white-tailed kite, was observed foraging over the project site. Two special-status plant species, Dudleya cymosa ssp. agourensis and Pentachaeta lyonii, and two plants of special interest, Orobanche fasciculata, and Juniperus californica were observed on the subject property during the 2007 and/or 2008 surveys. Impacts to locally and regionally significant sensitive plant species are considered significant, but mitigable. Full build out of the Specific Plan would impact locally and regionally significant natural communities, including Southern Arroyo Willow Riparian/Southern Willow Scrub and Valley Needlegrass Grassland. Impacts to locally and regionally significant natural communities are considered significant but mitigable. Additionally, the loss of individual oak trees and stands would be adverse, and is also considered significant but mitigable.

Full build out of the Specific Plan would reduce the populations and available habitat of wildlife in general, including sensitive species. Because of the known or potential presence of sensitive wildlife species on-site, the loss of wildlife habitat is considered a significant, but mitigable impact.

Blue line streams may be altered with implementation of the Specific Plan. Impacts due to the loss of wetland areas are considered significant, but mitigable. Development at the site would reduce open space in general and areas with connectivity to regionally significant wildlife corridors; however, the Specific Plan area is not considered a significant wildlife corridor itself. Impacts due to encroachment of residential and commercial development into wildlife corridors would be less than significant. The City of Agoura Hills considers Coastal Sage Scrub habitat to be an important biological resource. Although buildout of the Specific Plan may not place development directly within the Coastal Sage Scrub habitat, fuel modification of open space lands directly adjacent to the project development would have the potential to disturb or remove high value Coastal Sage Scrub habitat. Therefore, impacts to Coastal Sage Scrub habitat would be considered potentially significant, but mitigable.

4.3.1 Setting

Several regional biological resource studies have been prepared that address the general biological resource values within the Specific Plan boundaries and general vicinity. These studies include EIRs completed for the Ladyface Mountain Specific Plan, the Creekside Center EIR, and the City's General Plan EIR. These reports are incorporated by reference and are available for review at Agoura Hills City Hall. Additionally, a site specific Biological Assessment (Rincon Consultants, Inc., 2003) and a preliminary oak tree report (TREES, etc., 2004) were used for this analysis. These two studies were included in Appendix B of the 2006 EIR. Aerial photography was also used to further evaluate biological conditions onsite.

Rincon Consultants conducted technical biological studies in the spring and summer of 2007 and 2008 while under contract to the City of Agoura Hills. The purpose of these surveys was to update the earlier studies cited above and provide additional focused survey information for sensitive species and communities. The studies are included in a Biological Technical Appendix (BTA) attached to this Revised and Recirculated EIR. The surveys included the entire area proposed for development and most of the area proposed for open space (Zone G) under the Specific Plan. Please note that the discussion below includes revisions to the Zone G boundary that were incorporated into the Specific Plan per the June 14, 2006 City Council hearing, namely that the boundary between Zone G and Zone B is north of Lindero Canyon Creek.

a. Regulatory Setting. The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local level. Agencies with responsibility for protection of biological resources within the Specific Plan area include:

- *U.S. Army Corps of Engineers (wetlands and other waters of the United States)*
- *U.S. Fish and Wildlife Service (endangered species and migratory birds)*
- *California Department Fish and Game (waters of the State, endangered species, and other protected plants and wildlife)*
- *City of Agoura Hills (General Plan Conservation Element Goals and Policies)*

A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. The following discussion provides a summary of those laws that are most relevant to biological resources in the vicinity of the Specific Plan area.

U.S. Army Corps of Engineers. Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) has authority to regulate activities that could discharge fill or dredge material or otherwise adversely modify wetlands or other "waters of the United States." Perennial and intermittent creeks are considered waters of the United States and are within the regulatory jurisdiction of the USACE. The USACE implements the federal policy embodied in Executive Order 11990, which is intended to result in no net loss of wetlands value or acres. In achieving the goals of the Clean Water Act, USACE seeks to avoid adverse impacts and to offset unavoidable adverse impacts on existing aquatic resources. Any fill or adverse modification of wetlands may require a permit from USACE prior to the start of work. Typically, permits issued by USACE are a condition of a project as mitigation to offset unavoidable impacts on wetlands and other waters of the U.S. in a manner that achieves the goal of no net loss of wetland acres or values.

U.S. Fish and Wildlife Service. The U.S. Fish and Wildlife Service (USFWS) implements the Migratory Bird Treaty Act (16 United States Code (USC) Section 703-711), the Bald and Golden Eagle Protection Act (16 USC Section 668), and the Federal Endangered Species Act (FESA) (16 USC § 153 *et seq)*. Projects that would result in a "take" of any federally listed threatened or endangered species are required to obtain permits from the USFWS through either Section 7 (interagency consultation) or Section 10(a) (incidental take permit) of FESA, depending on the involvement by the federal government in permitting or funding the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what mitigation measures would be required to avoid jeopardizing the species.

"Take" under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect an individual, or to attempt to engage in any such conduct. Candidate species do not have the full protection of FESA; however, the USFWS advises project applicants that they could be elevated to listed status at any time.

California Department of Fish and Game. The California Department of Fish and Game (CDFG) derives its authority from the Fish and Game Code of California. The California Endangered Species Act (CESA) (Fish and Game Code Section 2050 *et, seq,)* prohibits take of listed threatened or endangered species. Take under CESA is restricted to direct killing of a listed species and does not prohibit indirect harm by way of habitat modification.

California Fish and Game Code Sections 3503, 3503.5, and 3511 describe unlawful take, possession, or needless destruction of birds, nests, and eggs. Fully protected birds (Section 3511) may not be taken or possessed except under specific permit. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

Species of Special Concern (CSC) is a category conferred by CDFG for those species which are considered to be indicators of regional habitat changes or are considered to be potential future protected species. Species of Special Concern do not have any special legal status except that afforded by the Fish and Game Code. The CSC category is intended by the CDFG for use as a management tool to take these species into special consideration when decisions are made concerning the development of natural lands.

The CDFG also has authority to administer the Native Plant Protection Act (Fish and Game Code Section 1900 *et seq*). The Act requires CDFG to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the Act, the owner of land where a rare or endangered native plant is growing is required to notify the Department at least 10 days in advance of changing the land use to allow for salvage of the plant. CDFG and local governmental agencies may also recognize special listings developed by focal groups (i.e., Audubon Society Blue List; California Native Plant Society (CNPS) Rare and Endangered Plants; U.S. Forest Service regional lists).

Vegetation in California is accorded sensitivity rankings by the CNPS and CDFG within the community classification of Holland (1986, 1990), modified as appropriate to conform to more recently accepted series concepts of Sawyer and Keeler-Wolf (1995). Statutes within the Clean Water Act, California Fish and Game Code, and local and Regional Water Quality Control Boards (RWQCB) protect wetlands and riparian habitat.

Perennial and intermittent streams also fall under the jurisdiction of the CDFG. Section 1600 *et. seq*. of the Fish and Game Code (Streambed Alteration Agreements) gives the CDFG regulatory authority over work within the stream zone (which could extend to the 100-year flood plain) consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake.

City of Agoura Hills. The City's General Plan provides the framework for evaluating potential biological impacts. The Conservation Element as well as other elements of the General Plan includes policies to protect biological resources. The City of Agoura Hills Oak Tree

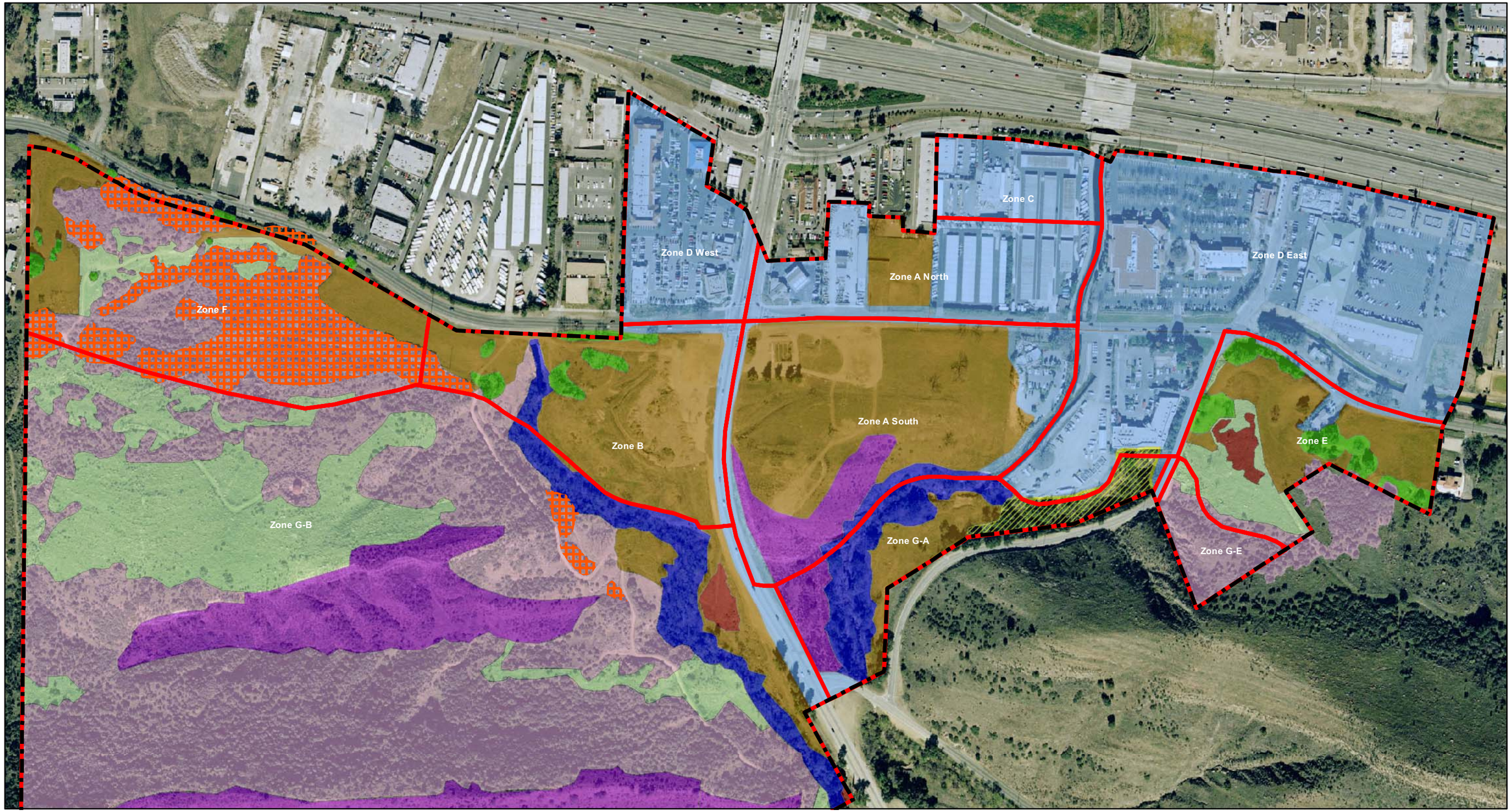
Preservation Guidelines provides for protection and replacement of trees that are disturbed by development. The City's Oak Tree Preservation Guidelines state that it is "the policy of the City of Agoura Hills to require the preservation of all oak trees unless compelling reasons justify the removal of such trees." Additionally, the Agoura Village Specific Plan states that "Oak trees shall be preserved and incorporated into the project whenever possible. New developments shall preserve or improve natural conditions on or adjacent to the site such as wildlife habitats, streams, creeks, views, and restore and preserve riparian habitats to a natural state where appropriate." Additionally, the City has an unofficial policy which protects high value (to be determined by a biologist) Coastal Sage Scrub habitat and provides for replacement of habitat that is disturbed.

b. Regional Biological Context. The Specific Plan area is located directly south of U.S. Highway 101 on both the east and west sides of Kanan Road. Agoura Hills has a topographical character that is hilly, with a number of major ridgelines. The Santa Monica Mountains Recreation Area, which is adjacent to the City, contains other major ridgelines, large canyons, and some riparian areas. The site is bounded on the south, southeast, and southwest by mostly vacant and undeveloped lands, including Santa Monica Mountains National Recreation Area and Santa Monica Mountains Conservancy lands. The site is bounded to the east and west by commercial and retail developments and U.S. Highway 101 to the north.

The Specific Plan area topography is variable, relatively flat to the west and ascending quickly south towards Ladyface Mountain and associated ridgelines. The areas north of Agoura Road are predominantly built out, relatively flat, and devoid of significant native flora and fauna. The areas south of Agoura Road generally descend in a southeasterly aspect from a hilltop located just east of Kanan Road to natural portions of Medea Creek and open space.

Steep slopes and volcanic rock limit the developable area of the vacant parcels adjacent to Kanan Road on the south side of Agoura Road. Local bedrock formations consist primarily of Conejo Volcanics, a generally stable, andesitic conglomerate composed of cobbles and bedded rock. Several sensitive plants as listed by state and federal regulatory agencies are known to occur on soils derived from this volcanic bedrock. Medea Creek and Lindero Creek flow through the western and central portions of the project area, and Cheseboro Creek flows parallel to Agoura Road from the eastern boundary of the Specific Plan. Currently Medea Creek and Chesebro Creek have been converted into rectangular (concrete-lined) open channel drainages with tall vertical concrete walls. Nonetheless, the riparian resources associated with these creeks are important to local wildlife.

c. Vegetation. The flora of the project area is a mix of ornamental landscaping (primarily north of Agoura Road), natural willow riparian woodland, oak/willow woodland, mixed chaparral, coastal sage scrub with non-native annual grasslands, and grassland (primarily south of Agoura Road). Preliminary field reviews conducted for independent projects and reports on surrounding properties identified over 100 native vascular plants, nearly all of which are situated within the southern portions of the project area. The most notable vegetation series within the Specific Plan boundary include:



Source: Air Photo U.S.A., 2006 (image), Rincon Consultants, Inc., 2008.

Legend

- Plan Area Boundary
- Zones

Vegetation Types

- Coastal Sage Scrub
- Developed/Ornamental
- California Annual Grassland
- Scrub Oak Chaparral
- Mixed Chaparral
- Oak Stand
- Coastal Live Oak Woodland
- Southern Willow Scrub/Southern Arroyo Willow Riparian
- Ruderal/Disturbed
- Valley Needlegrass Grassland

N

0 250 500 1,000 Feet

Vegetation Map

Figure 4.3-1

Vegetation Type	Zones A-F Acreage	Zone G Acreage
Coastal Sage Scrub with Non-Native Annual Grasslands	2.3	28.3
Mixed Chaparral	4.3	78.7
Scrub Oak Chaparral;	8.5	0.7
Coast Live Oak Woodland	0.2	1.3
Southern Arroyo Willow/Southern Willow Scrub, Coastal and Valley Freshwater Marsh	1.0	6.3
Native Perennial Grassland	0.4	0.4
California Annual Grassland	3.3	15.8
Ruderal Series/Disturbed	27.6	4.2
Developed/Ornamental	45.9	1.5
Valley Oak Tree stands	2.4	0.1

These vegetation types are grouped based on their general structure and described in more detail below. Figure 4.3-1 shows the locations of each vegetation series onsite.

Coastal Sage Scrub with Non-Native Annual Grasslands. Coastal sage scrub communities are divided into series based on the dominant shrub(s) that comprise over 20% of the canopy cover. Two distinct series were identified and mapped within the project area: Coyote Brush Series and California Buckwheat Series as described by Sawyer and Keeler-Wolf (1995).

Coyote Brush Series is dominated by its namesake coyote brush *(Baccharis pilularis)* and occurs on gentle to steep slopes and in lowland areas, often in riparian habitats. Coyote brush series habitat is located in the southern portion of the site, specifically on the south side of the knoll located east of Kanan Road. The California Buckwheat Series is dominated by its namesake California buckwheat *(Eriogonum fasciculatum)* and occurs on slopes with shallow rocky soils and rarely flooded low-gradient deposits along streams. Also referred to as Venturan Coastal Sage Scrub, areas dominated by California buckwheat were noted on the south-facing slopes of two east-west trending ridges southwest of the SP site, possibly a result of steep slopes and erodable soils. Both series were noted as supporting large areas of non-native annual grasses including slender wild oats (*Avena barbata*) and foxtail fescue (*Vulpia myuros var. hirsute*). Other species observed onsite include deerweed (*Lotus scoparius)*, brome grasses (*Bromus* sp.), mustard (*Brassica* sp.), slender tarweed (*Hemizonia fasciculata*), prickly pear (*Opuntia littoralis*), turkish rugging (*Chorizanthe staticoides*) and chalk live-forever (*Dudleya pulverulenta*) (Rincon 2003).

Mixed Chaparral. This community generally occurs on the north-facing slopes in the Specific Plan area, with Venturan coastal sage scrub occurring on the steeper, south-facingslopes. This community is quite variable in the project area, ranging from dense stands on north-facing slopes to open stands on south-facing and west-facing slopes. This community is generally dominated by chamise (*Adenostoma fasciculatum*) and scrub oak (*Quercus berberidifolia*), but occurs in several sub-associations in the project area. A more open form dominated by chamise occurs in a band southwest of the Specific Plan area and in patches between grassland. The area along the south and southwest boundary of the project area supports a more diverse form of this community that includes mountain mahogany (*Cercocarpus betuloides*), laurel sumac (*Malosma laurina*), poison oak (*Toxicodendron diversilobum*) and scattered

chaparral bush mallow (*Malacothamnus fasciculatus* ssp. *fasciculatus*), black sage (*Salvia mellifera*) and California sagebrush (*Artemisia californica*).

Generally, the area between shrubs supports elements of annual grassland including red brome (*Bromus madritensis* ssp. *rubens*), slender wild oats (*Avena barbata*) and foxtail fescue (*Vulpia myuros var. hirsute*). However, occasional patches of native annuals occur between shrubs and include yellow pincushion (*Chaenactis glabriuscula*), slender cotton weed (*Micropus californicus*) and clarkia (*Clarkia* sp.) (Creekside EIR, 1997).

Scrub Oak Chaparral. This community was included in the 2006 EIR as part of the mixed chaparral community, but mapping conducted in 2007and 2008 indicates that the dense stands of scrub oak in the southwestern portion of the Specific Plan can be separately categorized. These stands are dominated by scrub oak that comprises more than 50% of the cover, with the predominant other associate being mountain mahogany. This community is considered the scrub oak - birchleaf mountain-mahogany series as described by Sawyer and Keeler-Wolf (1995). Other shrub elements found in this community are the same as in the mixed chaparral, into which this community intergrades.

Coast Live Oak Woodland. Results of an oak species inventory within Zone G revealed nearly 100 coast live oaks and 10 valley oaks within Zone G-A. This portion of Zone G-A appears to have been previously associated with Chesebro Creek and was possibly isolated from the riparian zone after the creek was channelized and merged with Medea Creek to the north of these trees. In the past, this area may have been classifiable as "Coast Live Oak Riparian Forest"(a sensitive plant community), and was mapped in the 2006 FEIR as "oak/willow woodland." Coast live oak (*Quercus agrifolia*) dominates this portion of Zone G-A (see Figure 4-1), and current studies found a poorly developed shrub understory of *Toxicodendron diversilobum* (poison oak), *Sambucus mexicana* (Mexican elderberry), and young oaks. Thus, the habitat along the south and eastern section of Zone G-A has been classified as [Southern] Coast Live Oak Woodland, which has a global ranking of G4 and a state ranking of S4 and, thus, is not considered a special-status community or habitat. In addition, another area of coast live oak woodland is located along the lower reaches of Lindero Canyon Creek within Zone G of the Specific Plan, south of Cornell Way, but outside the plant community mapping illustrated in Figure 4.3-1.

Southern Arroyo Willow Riparian/Southern Willow Scrub and Freshwater Aquatic. Southern Arroyo Willow Riparian/Southern Willow Scrub, Coastal and Valley Freshwater Marsh, and Aquatic Habitat occur south of Agoura Road along Lindero Canyon Creek and Medea Creek (Refer to Figure 4.3-1). The relevant wetland environments within and adjacent to each creek and its tributaries are summarized briefly below.

The arroyo willow dominated habitat type was previously described in the 2006 FEIR as "Arroyo Willow Riparian Habitat." Relevé surveys were performed at random intervals along Lindero Canyon Creek and Medea Creek to determine habitat type during preparation of the BTA. Based on the evaluation of these relevé surveys, habitats found along both Lindero Canyon Creek and Medea Creek can be classified as southern willow scrub as defined by Holland (1986) and/or arroyo willow series, specifically southern arroyo willow riparian as defined by Sawyer and Keeler-Wolf (1995). Within *The Vegetation Classification and Mapping Program; list of California Terrestrial Natural Communities Recognized by the California Natural*

Diversity Database (CDFG, 2003) both the southern willow scrub (61.208.00) and the southern arroyo willow riparian (61.201.02) are listed as "a series or association considered rare and worthy of consideration by CNDDB (California Natural Diversity Database)." Both southern willow scrub and southern arroyo willow have a global ranking of G3 and a state ranking of S2.1. With respect to the California Wildlife Habitat Relationship (CWHR) classification, these are considered tree-dominated habitats termed "Valley Foothill Riparian," which is inclusive of both riparian scrub and riparian forest.

Arroyo Willow Scrub typically consists of more than one willow (*Salix* spp.) tree and/or shrub as dominant in the riparian canopy. Trees form a continuous riparian canopy and shrubs are generally sparse under the dense canopy and ground cover can be sparse or abundant. This vegetative community is associated with seasonally flooded and saturated freshwater rivers and streams. The national inventory of wetland plants (Reed, 1988) lists Arroyo Willow as facultative wetland (FACW), which means that the species is generally found in wetland habitats (67%-99% probability according to the USFWS).

Aquatic Habitat of Medea Creek and its tributaries, supports Arroyo Willow Scrub and Freshwater Marsh vegetation communities. Along Medea Creek, sample plots yielded a mixed canopy primarily of arroyo willow, valley oak, coast live oak and black walnut ranging from 65-95% coverage of the uppermost canopy. Intermediary canopy plants were limited and sparse, comprised primarily of arroyo willow and black walnut saplings. Other shrubs noted include coyote bush (*Baccharis pilularis*), poison oak (*Toxicodendron diversiloba*), gooseberry (*Ribes speciosum*) and California wild rose (*Rosa californica*). The herbaceous/graminoid ground layer lacked diversity and was dominated by either bare ground or non-native cheat grass. Other herbaceous plants noted, although comprising less than 5% coverage individually, included mugwort, azolla (*Azolla filiculoides*), Pacific rush (*Juncus effuses*), green bristlegrass (*Setaria viridis*) and smilo grass.

On Lindero Canyon Creek, sample plots yielded an uppermost canopy primarily of arroyo willow (*Salix lasiolepis*) with a range of 60-85% coverage with secondary canopy coverage comprised of 5-10% valley oak (*Quercus lobata*). The intermediary canopy including shrubs, saplings and large herbaceous plants, was dominated by emergent arroyo willow and valley oak saplings with a small percentage of palm trees and fennel. The majority of the intermediary canopy was of open space ranging from 55-70% open space. The herbaceous/graminoid ground layer was mature and diverse including smilo grass (*Piptatherum miliaceum*), spike-rush (*Eleocharis* sp.), mugwort (*Artemisia douglasiana*), salt grass (*Distichlis spicata*) and water cress (*Nasturtium officinale* = *Rorippa nasturtium-aquaticum*). Other plants were noted although only those inhabiting over 10% coverage were included in the survey. The following discusses the freshwater marsh habitat that is associated with the arroyo willow scrub community, but are too small to be mapped on Figure 4.3-1.

The Coastal and Valley Freshwater Marsh (Holland 1990) can be further classified into series, including the Cattail Series (Sawyer and Keeler Wolf 1995). Cattails (*Typha* sp.) are generally the sole or dominant herb emerging from the water. Herb cover can be continuous, intermittent, or open but is generally less than four meters in height. This vegetative community is associated with permanently or seasonally flooded habitat of fresh or saline waters and occurs in a limited area along the Lindero Canyon Creek, south of Agoura Road.

The national list of wetland plants (Reed 1988) lists cattails as obligate wetland (OBL), which means that the species occurs in wetland habitats over 99% of the time.

Freshwater/Vernal Marsh occurs in two forms, a more permanent marsh near Agoura Road (freshwater marsh) and patches of seasonal marsh adjacent to surface flows of Lindero Canyon Creek (vernal marsh). In addition, a few small patches of several square feet of this community occur along Lindero Canyon Creek. The size and species composition of the more permanent marsh (Agoura Road marsh) is variable based upon the amount of channel clearing and annual rainfall. The Agoura Road marsh would become less permanent (summer die-off) during drought years or when sediment was allowed to accumulate and reduce the depth of the existing depression. This marsh is dominated by narrowleaf cattail (*Typha domingensis*) with lesser amounts of water-cress and creeping spikerush (*Eleocharis macrostachys*). The banks of this marsh support mostly introduced annual grasses and saltgrass (*Distichlis spicata*).

The vernal marshes are flooded during the spring for a sufficient period to be dominated by vegetation characteristic of wetlands. Wetland vegetation observed in these areas include Baltic rush (*Juncus balticus*), Mexican rush (*Juncus mexicanus*), creeping spikerush, willow week (*Polygonum lapathifolium*), cocklebur (*Xanthium strumarium*) and saltgrass. Cattail series marsh habitat is also found scattered in patches within the bed of Medea Creek. Islands of cattails (*Typha sp.*) are dense to open. Cattails are found in shallow water of two inches deep to pools greater than a meter in depth. Cattail is the dominant understory beneath the willow canopy. Non native grasses are found on the saturated islands and drier banks in the understory.

Native Perennial Grassland. Grassland communities at the site can be divided into two series based on composition. Two distinct series were identified and mapped within the Specific Plan area, (native and non-native). The only prominent remaining native grasslands onsite were characterized as Valley needlegrass grasslands under the Holland classification system (= purple needlegrass series per Sawyer and Keeler-Wolf).

Valley needlegrass grasslands are comprised of greater than 10% purple needlegrass (*Nasella pulchra*). Valley needlegrass grasslands were delineated in three locations within the Specific Plan area. The first location (VN#1) was located south and east of the intersection of Agoura and Cornell Road. Quadrat samples of this small strip with *Nassella pulchra, Avena fatua*, and *Clarkia purpurea* indicated a mean percent coverage 19% Valley Needlegrass. This small strip of identifiable native grass dominance was only 719 square feet (sf), less than 0.02 acres in area, and is not mapped or considered further herein as it does not meet the minimum criteria size (0.25 acres) to qualify as a mappable grassland community.

The second location of Valley needlegrass grassland (VN#2) in Zone E was located directly north and downslope of VN#1, but substantially separated by non-native annual grassland. The surrounding areas within Zone E have previously been disturbed and invaded by non-native oat, A*vena fatua*. VN#2 comprised 19,544 sf or 0.45 acres in area and was likely separated from VN#1 during clearance of the access road and fuel management areas within Zone E. The two grasslands are separated by roughly 140 feet of non-native annual grassland. Quadrat samples within VN#2 resulted in a mean 25% cover of Valley Needlegrass.

The third Valley Needlegrass grassland identified within the Specific Plan (VN#3) is located west of Kanan Road, near the southern boundary of Zone B, within Zone G-B between Lindero Canyon Creek and Kanan Road. The area of VN#3 was delineated as roughly 20,005 sf or 0.46 acres with a mean 32 % cover of Valley Needlegrass. Other species identified within the grassland included the non-native plants *Brassica nigra, Avena fatua, Marrubium vulgare,* and *Bromus diandrus.*

California Annual Grassland. Annual grasslands (= California annual grassland series per Sawyer and Keeler-Wolf) primarily occur in scattered bands between Ladyface Mountain and Lindero Canyon Creek; small patches between Lindero Canyon Creek, with the largest mapped non-native, or annual, grasslandse located in Zone E and Zone G-B as shown on Figure 4.3-1. The annual grasslands are distinguished from the ruderal/disturbed community in that they are not annually disked or otherwise managed for weed control/fuel management. Characteristic plants in the annual grassland included wild oats (*Avena fatua*), ripgut grass (*Bromus diandrus*), and various non-native herbs.

Annual grassland composition is variable throughout the project area, dependent upon the frequency and magnitude of disturbance. Common components include wild oats (*Avena fatua, A. barbata*) red brome, other brome grasses (*Bromus* sp.), soft chess (*Bromus hordaeceus*), slender tarweed (*Hemizonia fasciculata*), and ripgut grass (*Bromus diandrus*). Less disturbed areas support native grassland species including golden yarrow (*Eriophyllum confertiflorum*), golden stars (*Bloomeria crocea),*and blue dicks (*Dichelostemma capitatum*). Other common species throughout this habitat type included common fiddleneck (*Amsinckia menziesii*), yellow star-thistle (*Centaurea solstitialis*), woolly aster (*Lessingia filaginifolia*) and vinegar weed (*Trichostema lanceolatum*). More disturbed areas are generally dominated by only a few introduced annual species, usually wild oats. It is expected that some annual grasslands replaced native perennial grasslands and native shrub communities in the Specific Plan area due to historic land uses that resulted in excessive grazing and increased fire frequency.

Ruderal. Ruderal vegetation consists of habitats that have been recently disturbed by human or natural forces and are in early successional stages of development. Common and characteristic plants of the Ruderal Series onsite include black mustard *(Brassica nigra),* sweet fennel *(Foeniculum vulgare),* hare barley *(Hordeum murinum* ssp. *leporinum*), cheeseweed (*Malva parviflora*), Russian thistle (*Salsola tragus*), tree tobacco *(Nicotiana glauca)*, and non-native brome *(Bromus* sp.*)* and oat *(Avena* sp.) grasses. Much of the project area has been historically disturbed and is dominated by ruderal species. Ruderal vegetation occurs throughout the majority of the Specific Plan area. Because this is not considered a vegetation type because of its numerous potential constituents, it is not described in Sawyer and Keeler-Wolf, 1995.

Ruderal vegetation is located in the heavily disturbed areas west of Kanan Road and south of Agoura Road; the ruderal area south of Agoura Road and north of Medea Creek; and the ruderal and disturbed areas east of Cornell Road.

Developed. Developed lands cover a large portion of the Specific Plan area and include areas such as roadways (paved and unpaved), landscaping, and commercial and retail land uses. The majority of the existing development within the Specific Plan area is located north of Agoura Road. Developed areas typically contain few, if any, native plants. However, ruderal (weedy) species can often be found within edge areas and include wild oats, ragweed, black

mustard, red brome, barley, Italian ryegrass, cheeseweed, sourclover, tumbleweed, milk thistle, and sow thistle. Additionally, isolated native oak trees or sycamore trees may also be found within developed areas. However, these areas are generally of limited value to wildlife.

Valley Oak Trees and "Oak Savanna". The BTA contains an extensive discussion of the term "savanna" and its relationship to the oak tree stands at the site. "Savanna" is not a defined vegetation type under the current classification system of Sawyer and Keeler-Wolf. The term "savanna" originally referred to open grassland areas, but now refers to land with grass and either scattered trees, or an open canopy of trees. Savannas have been defined differently by various authors, based on often subjective criteria (http://www.savannas.net/savdef.htm). Savannas form a continuum between tropical forests and grasslands and have often been classified as either one or the other in the past. The distinction between what is forest, grassland and different structural savanna types can only be set with arbitrary limits and descriptions.[1] The concept of "savanna" is also one that generally involves landscape level relationships that are on the scale of mountains and valleys, not limited areas such as the Specific Plan area.

Under current practice in California, herbaceous dominated groups, including grasslands, can be considered to exhibit 10% or less relative tree or shrub cover. Woodlands would contain between 10% and 100% relative tree canopy cover. For the purpose of this Revised and Recirculated EIR and using the CWHR criteria for canopy closure, the "sparse" and "open" criteria (10-24%, 25-39% respectively) of oak woodlands are considered synonymous with "oak savanna" provided that understory shrubs are relatively lacking (less than 10% cover) and the understory is composed of grass species. Where the tree canopy exceeds 40% closure, or where shrub canopy cover is greater than 10% and tree canopy coverage is greater than 10%, such habitats would be considered "woodland." Also, as indicated by Holland and Keil (1995), where the plants are clustered together (consistent with the canopy closure), such an area would be defined as woodland as compared to savanna. However, where canopy cover is dense (CWHR >60%) and there is three or more stratum layers present, such areas can be defined as "forests."

It is important to consider the aspect of scale on the vegetation mapping system employed. On a practical level, a mapping unit becomes meaningless at too fine of a scale. A single large valley oak can have a canopy spread of up to 70 feet from the trunk, and so have a 100% canopy cover over 15,000 square feet (0.35 acre), but it would not be meaningful to describe this as an oak woodland per the above classification definitions. When trees are few and scattered, it is difficult to determine where an open woodland exists adjacent to grasslands, or an oak savanna exists. As such, oak savanna at a small scale tends to be difficult to characterize since the limit between it and adjacent grasslands is not defined except as a qualitative opinion by individual biologists. A few isolated oaks would not be sufficient in the EIR authors' biological opinion to justify incorporating a much larger area of adjacent grassland as "oak savanna;" such oaks must be part of a continuous whole with other oaks in the landscape. A meaningful discussion of the

[1] For example, Scholes and Hall (1996) defined the following:

- **Forests**: Complete tree canopy cover and three or more overlapping vegetation strata
- **Woodlands**: 50-100% tree canopy cover, and a graminaceous (grass) layer
- **Savannas**: 10-50% cover by woody plants and well-developed grass layer
- **Grasslands**: less than 10% tree cover

separation of woodland as compared to savanna is more on the scale of several hundreds of acres. This landscape level of scale generally exceeds the size of the Specific Plan area (total of 135 acres). Nonetheless, for the purpose of this analysis, the smallest mapping unit used during the BTA study was on the order of 0.25-0.5 acres.

The Wieslander Vegetation Type Map for Triunfo Pass (originally compiled in the 1930's; University of California, 2005, http://vtm.berkeley.edu/about/) was reviewed to provide a historic perspective on the landscape level of vegetation distribution before suburban development. The intermountain valley that comprises the center of the City of Agoura Hills and contains the drainages from Lindero, Medea, and Cheseboro Creeks historically appeared to consist of riparian woodlands along the creeks with the deeper soils of the valley floor containing an oak woodland/savanna with open grasslands that changed to mixed chaparral and coastal sage scrub on the thin soiled mountain slopes. This map indicates that the area west of Medea Creek was grassland with valley oaks on the valley floor (Zones B and A south, north part of Zone F), while the area to the east (Zones D and E) contained coast live oak, scrub oak and grassland. While relatively narrow in the vicinity of the Specific Plan, this oak punctuated grassland extended westward and expanded substantially through the Russell Valley (now the City of Westlake Village). At the east end of the Specific Plan, this grassland terminated adjacent to cultivated land. The hillsides to the south contained chaparral dominated by chamise, white sage, buckwheat, buckbrush and purple sage. Based on this historic mapping, the south portion of the Specific Plan (Zones A south, B, D, E, and F) was the southeastern terminus of a much larger oak savanna/woodland.

Although a native grassland is present within the central portion of Zone E, the grassland is disjunct from all but one of the oak stands. The native grassland extends under the canopy of only one valley oak tree. An examination of Zone E as a whole using ArcGIS Spatial Analysis found that the oaks are clustered as compared to "widely spaced" (as contained in one of the definitions for savanna); and given the definitions provided above, the oak stands in this area are more similar to oak "woodlands" than "savanna." Nonetheless, if the isolated oaks and the oak stands are lumped together with the ruderal, non-native grasslands, and valley needlegrass grassland, the canopy coverage would be sufficiently reduced to meet the definition of "oak savanna," most specifically for those trees along the southeast boundary of Zone E. However, even when these two stands are lumped together, the total amount of habitat is little more than one acre, which is not a viable size for long term ecological functioning as a "community." When Zone E is considered as a whole with the continuous and highly disturbed nature of the area, the distance between tree stands, and the disjunct understory of those trees within Zone E, the area fails to meet the definition of valley oak savanna or woodland. Rather, in the EIR consultants' biological opinion, the habitats within this area are more readily defined as mostly isolated residual oak stands in the matrix of urban use, ruderal/disturbed lands, and grassland. In particular, those stands adjacent to the roadways and the residential uses have essentially been reduced to landscaping status because of the ongoing fuel management activities. Further information on the individual oak tree stands, the level of disturbance, and the analysis technique is provided in the BTA.

Valley oaks within Zone B located directly east and west of the ponded portion of Lindero Canyon Creek, just south of Agoura Road, were similarly assessed using ArcGIS. Those oaks located east of Lindero Canyon Creek are relatively clustered with a non-native, highly disturbed understory. This area has been subjected to weed control and random disposal of rock and fill dirt. The southernmost stand located in Zone B east of and closest to the creek

consists of four large trees and is roughly 0.25 acres in size. The second stand, directly to the north, is roughly 0.14 acres in size and is also comprised of four large trees. The third stand further to the north is located adjacent to Agoura Road with more than half of its canopy covering the road. The distance between stands, the disturbed nature of their understory and the surrounding area has reduced these trees to landscaping status, insufficient in size to meet the definition of valley oak savanna or woodland. Rather, these groups of oaks are considered isolated residual oak stands, similar to those in Zone E. It is noted that similar to Zone E, if these three stands along with the disturbed understory were lumped together, they could be considered an oak "savanna," but would total only about 1 acre. As previously stated, this is not a viable size for long term ecological functioning as a "community," especially given a location adjacent to Agoura Road and the existing commercial development on the north side of Agoura Road.

A fourth stand, located west of Lindero Canyon Creek, is approximately 0.25 acres in size and separated by nearly 150 feet from the nearest other stand. Although a small dirt road is graded through this cluster of oaks, this stand more closely meets the definition of valley oak woodland as it has an open canopy, a more diverse and more or less natural understory, and still provides habitat value through its connectivity with the adjacent scrub oak chaparral. While in the EIR consultant's biological opinion this stand would not be considered a sensitive community (Valley Oak Woodland) due to its small size, it nonetheless harbors significant habitat value.

Several oak trees are also located in Zone F, however, most of the trees are either distant from each other, or where grouped as stands, the stands were either isolated due to discing, disturbed soils, or are adjacent to Agoura Road. Thus, these are also considered isolated residual oak stands. Specifically, the understory and surrounding ground cover along the western boundary of Zone F is disced regularly to maintain fire clearance around each of the trees shown. As the stands examined in Zone E are larger, more contiguous and have some native understory, and yet do not meet the criteria to be a "savanna community," the stands in Zone F can be ruled out as they exhibit even fewer qualifying characteristics as those stands analyzed in Zone E.

d. Fish and Wildlife Habitat. Classification of habitat types or vegetation communities is based generally on the California Wildlife Habitat Relationship System (CWHR), Holland (1986), and Sawyer and Keeler-Wolf (1995) with modifications to better represent existing field conditions. The CWHR defines habitats based on the composition and structure of the dominant vegetation of any given area and provides generalized information pertaining to wildlife value and use of these habitat types. The project area can be divided into the following five broad habitat categories: aquatic, coastal scrub and chaparral, grassland, oak woodland and developed. Common wildlife species observed or expected are discussed below and a discussion of special-status wildlife species follows. Species are referred by common wildlife name in the following text.

Aquatic Habitats. Aquatic habitats onsite include riparian and wetland areas. Aquatic habitats: 1) support a diversity of wildlife species; 2) may provide critical breeding and foraging habitat for special-status or restricted wildlife species; 3) provide a source of fresh water; 4) provide food and protective cover; and 5) may be used as corridors for movement and dispersal of wildlife. Aquatic habitats on the site are primarily associated with Lindero Canyon, Medea, and Chesebro Creek.

Riparian woodlands are often the only source of water for wildlife during the summer months in the Santa Monica Mountains area. This plant community is very valuable from a habitat standpoint. Aquatic habitat of Medea and Chesebro Creeks within the Specific Plan boundary is limited to degraded environments within drainage swales (which are dominated by non-native trees); however, near the southern boundaries of the project area, aquatic habitats are more valuable and associated with wetlands. The more permanent marshes near Agoura Road (freshwater marsh) and patches of seasonal marsh adjacent to surface flows of Lindero Canyon Creek (vernal marsh) also provide valuable aquatic habitat. A variety of amphibians are expected to be present in these cool, moist, habitats. Amphibians expected to occur include California newts, tiger salamanders, arboreal salamanders, several species of slender salamanders, ensatina salamanders, western toads, Pacific tree frogs, bullfrogs and canyon tree frogs. All of these species utilize temporary pond and stream habitats for breeding and do not require much water for the rest of the year. Fully aquatic forms such as red-legged frogs may be present in the riparian areas.

Coastal Scrub and Chaparral Habitats. These are the most widespread vegetative communities in the Santa Monica Mountains area. Coastal Sage Scrub plant community can be found throughout the undeveloped areas of the City. Coastal Sage Scrub habitat is located in the southern portion of the project area, primarily on the far western boundary of the site, west of Kanan Road; along the southern boundary of the project area, between Kanan Road and Medea Creek; and south of the knoll in the southwest corner. The project area is steep in some areas, and contains numerous rock outcroppings. As with the grassland area, there were numerous signs of small mammal activity such as scat and burrows. Western fence lizards were also noted in the coastal sage scrub. Wildlife species or sign observed within the Specific Plan boundaries include California ground squirrel, coyote, rabbit, crow, and dog.

No wildlife species are restricted to mixed chaparral. Most species are found in other shrub-dominated habitats. Wildlife management considerations usually focus on selecting alternative fire management treatments for these areas. The majority of chaparral located within the Specific Plan area is concentrated along the base slopes of Ladyface Mountain, immediately west of Lindero Canyon Creek and along the south and east Specific Plan boundary.

Developed Habitats. Developed lands cover a large portion of the Specific Plan area and include areas such as roadways (paved and unpaved), parking areas, landscaping, and commercial/retail land uses. Developed areas typically contain few, if any, native plants. However, ruderal (weedy) species can often be found within edge areas and include wild oats, ragweed, black mustard, red brome, barley, Italian ryegrass, cheeseweed, sourclover, tumbleweed, milk thistle, and sow thistle. These areas are generally of limited value to wildlife.

The parking areas located between Cornell Road and Medea Creek, one to the south of Agoura Road and one to the north, and the parking lot north and east of the Whizin's Center, each contain oak and planted landscaping trees. These trees provide potential habitat for several species of birds, which could use the trees for nesting, feeding, roosting, and hawking sites. Flycatchers, kinglets, vireos, warblers, sparrows, house finches, house sparrows, and orioles may be expected to utilize large trees for shelter and nesting. Raptors such as red-tailed hawk, barn and great horned owls, and American kestrel may also use these large trees for nest and

"hawking" sites, particularly the windrow north of Agoura Road, overlooking the open space southeast of the intersection of Agoura and Cornell Road (see Figure 4.3-1).

Grassland Habitats. The annual grassland that constitutes much of the undeveloped Specific Plan area provides habitat primarily for various small mammals. Grasslands have a high primary biological productivity, providing forage for herbivores, primary habitat for small mammals and abundant small animal populations such as rabbits, ground squirrels, and gophers. The small mammal populations in turn provide a food source for raptors and mammals such as the grey fox, coyotes, bobcats and long-tailed weasels. Cottontail rabbits and their trails were seen throughout the site, along with California ground squirrel. Western harvest mouse, deer mouse, and gopher would also be expected onsite. Bird species observed include American crow and mourning dove. Other birds expected to be found in the habitats within the project area include California quail, Anna's hummingbird, northern flicker, western kingbird, Bewick's wren, yellow-rumped warbler, spotted towhee, white-crowned sparrow, and European starling.

Woodland Habitats. Oak woodlands are present within the City but limited to small geographical areas and cover less than one percent of the City's total area. Within the Specific Plan area oaks are dispersed among mixed chaparral and non-native annual grasslands, with several stands located immediately adjacent to Agoura Road. A dense stand of oaks mixed with willows exists directly south of Medea Creek. This community supports a wide variety of bird and animal species. Vertebrate diversity in oak woodlands is typically high. Oaks onsite possess a well-developed canopy, a moderate shrub layer, and well-developed ground cover. Scrub jays and red-tailed hawks are often found utilizing oaks. However, more riparian related species would be anticipated in this area due to its proximity to water and mixture with willows. Oak trees are perhaps the most widely-recognized and most environmentally sensitive resource of the City of Agoura Hills. Native oaks are considered a valuable natural resource by the CDFG and are protected by the City of Agoura Hills Oak Tree Ordinance.

e. Special-Status Biological Resources. Special status species include the following six categories of species: (1) those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the US Fish and Wildlife Service (USFWS) under the Federal Endangered Species Act (FESA); (2) those considered "species of concern" by the USFWS; (3) those listed or proposed for listing as rare, threatened, or endangered by the California Department of Fish and Game (CDFG) under the California Endangered Species Act (CESA); (4) animals designated as "Species of Special Concern" by the CDFG; (5) those listed on the CDFG *Special Vascular Plants, Bryophytes, and Lichens List* (April 2004); and (6) those plants of special interest noted by the Santa Monica Mountains National Recreation Area (SMMNRA). The CDFG Special Vascular Plants list includes the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California*, *Sixth Edition* (Tibor, 2001) as updated online.

Per the CNPS code definitions, List 1A species include those presumed extinct in California, 1B includes those rare, threatened, or endangered species in CNPS's opinion in California and elsewhere, and List 2 includes plants considered rare, threatened, or endangered in California, but more common elsewhere. List 3 is a review list that includes species for which necessary information is lacking to assign them to one list or another or to reject them. Nearly all of these plants are taxonomically problematic. List 4 species are of limited distribution or infrequent

throughout a broader range of California and their vulnerability or susceptibility to threat appears low at this time. Local agencies may also consider and list additional plants to be of "local concern" because of local or regional scarcity as determined by that agency (per the *State CEQA Guidelines* Section 15380).

A list of special status plant and animal species that could potentially occur on-site was developed based on review of the California Natural Diversity Database (CNDDB), previous studies from the vicinity of the site, and general knowledge of the area. A map of the CNDDB results for special status plant and animal species within a 5-mile radius of the Specific Plan area is included as Figure 4.3-2. Previous field surveys and reports were used to identify habitat types and refine the target list of species and focus the assessment on the actual or potential for occurrence of special status species within the Specific Plan boundaries. The special status species list includes 21 wildlife species and 14 plant species. Tables 4.3-1 and 4.3-2 include this complete list with the corresponding listing status, habitat requirements, and project site suitability. Of the 35 species, 11 wildlife and 4 plant species were observed within habitats located within the Specific Plan boundaries.

Special-Status Plants. The CDFG CNDDB overlay for a 5 – mile radius surrounding the Specific Plan site, indicates a known population of Agoura Hills dudleya (which has previously been reported as the similar Santa Monica Mountains dudleya) and Lyon's pentachaeta within the Specific Plan area (Refer to Figure 4.3-3). Both Agoura Hills dudleya and Lyon's pentachaeta were observed within the Specific Plan during the 2007 and 2008 site surveys. Those special-status plant species with the potential to occur on the Specific Plan site are listed in Table 4.3-1. Those plants with the potential of occurring within the Specific Plan area are described in greater detail below.

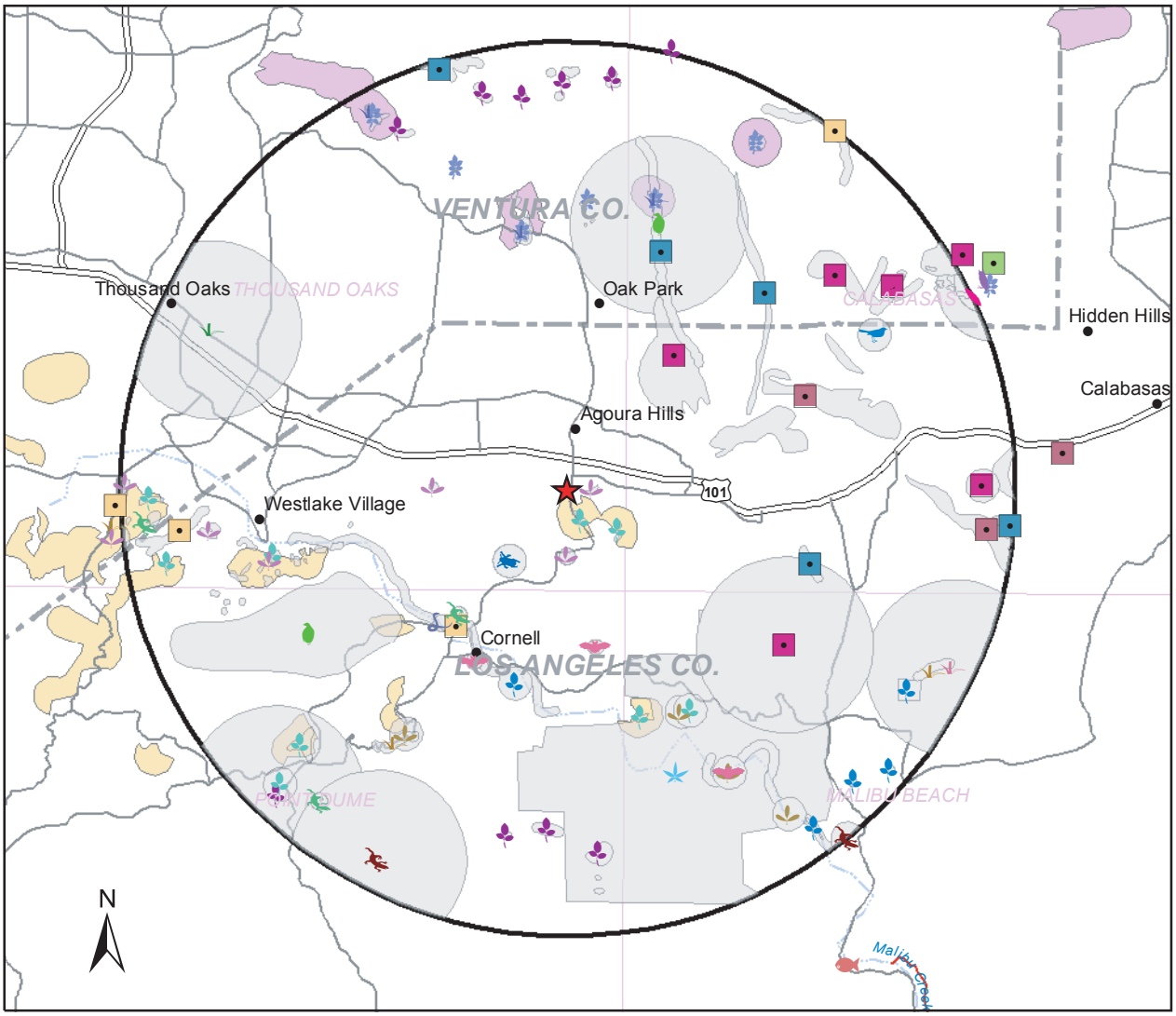
Plummer's mariposa lily (CNPS List 1B) is a bulbiferous perennial in the lily family (Liliaceae) that blooms May through July. This species is typically found in coastal scrub, chaparral, and valley and foothill grasslands. Plummer's mariposa lily is known to occur approximately three miles north of the Specific Plan site (CNDDB, 2002). No Plummer's mariposa lilies were found during site visits completed by prior surveys or by the 2007 or 2008 special status plant surveys; however, suitable habitat is present in the Specific Plan area (mostly in Zone G) and this plant could be present.

Slender mariposa lily (CNPS List 1B) is a CNPS List 1B perennial, bulbiferous herb in the lily family (*Liliaceae*). This species occupies shaded foothill canyons on steep grassy slopes within chaparral and coastal sage scrub at elevations of 1,200 to 3,300 feet (USDA, 2008). The blooming period of the slender mariposa lily is from March to June. No slender mariposa lilies were found during the site visits completed by prior surveys or by the 2007 or 2008 special status plant surveys, which were completed during the blooming season for this species. There are two known locations of slender mariposa lilies approximately five miles east of the project site. However, these locations were noted in 1959 and presumed extant.

Santa Susana tarplant (State rare and CNPS List 1B) is a deciduous shrub in the sunflower family (Asteraceae) that blooms from July to November. This species is typically found in chaparral and coastal sage scrub usually on sandstone outcrops and crevices. Suitable habitat is present among the rocky outcrops on the southern portions of the site. This species would have been identifiable during site visits conducted by prior studies, but none were found. It was not

discovered within the site during the 2007 or 2008 special status plant surveys.

Agoura Hills dudleya (Federally threatened and CNPS 1B) occurs on volcanic rocks in chaparral and coast scrub habitats. Volcanic rock and coast scrub habitat are known to occur onsite. Two subspecies of Dudleya cymosa have previously been reported within the Specific Plan area. A 1990 CNDDB Sensitive Elements report listed an occurrence of D.c. agourensis (Agoura Hills Dudleya) near Cornell Road within the eastern portion of the Specific Plan area, and the 1996 Creekside EIR noted that D.c. ovatifolia (Santa Monica Mountains Dudleya) was observed within the western portion of the Specific Plan area. Nomenclature for these two sub-species may be easily confused as the 1993 Jepson Manual treated agourensis as a synonym for ovatifolia, giving both the common name, Santa Monica Mountains Dudleya. Although Kei Nakai described D.c. agourensis in Madroño in 1987 it was not recognized as a separate subspecies by the scientific community until recently. Further, the January 29, 1997 Final Ruling from USFWS on the status of D.c. ovatifolia included D.c. agourensis as described by Nakai, thus affording Threatened status to both ovatifolia and agourensis. Subsequent to this ruling, the CNDDB recognized the split.



Sources: California Natural Diversity Database, March 2007; U.S. Fish and Wildlife Service, February 2007; Rincon Consultants, 2007; U.S. Bureau of the Census TIGER 2000 data; and ESRI, 2002.
Note: Markers represent approximate locations where species may be found. Critical habitat shown is that most recently available from U.S. FWS. Check with U.S. FWS or Federal Register to confirm.

0 1.25 2.5 3.75 5 Miles

Legend

- Project Location
- 5-Mile Radius
- AAABH01022, California red-legged frog
- ABNKC22010, golden eagle
- ABNSB10010, burrowing owl
- ABPBJ08081, coastal California gnatcatcher
- AFCJB13120, arroyo chub
- AMACC07010, spotted bat
- AMACD02011, western mastiff bat
- ARACF12021, Coast (San Diego) horned lizard
- ARACJ02143, coastal western whiptail
- ARADB36160, two-striped garter snake
- CTT42110CA, Valley Needlegrass Grassland
- CTT61310CA, Southern Coast Live Oak Riparian Forest
- CTT62400CA, Southern Sycamore Alder Riparian Woodland
- CTT71130CA, Valley Oak Woodland
- CTT71210CA, California Walnut Woodland
- IIORT36300, Santa Monica grasshopper
- PDAST0W0W0, Malibu baccharis
- PDAST4R0J0, Santa Susana tarplant
- PDAST6X060, Lyon's pentachaeta
- PDCRA040A3, marcescent dudleya
- PDCRA040A7, Agoura Hills dudleya
- PDFAB0F1G0, Braunton's milk-vetch
- PDGER01070, round-leaved filaree
- PDPGN040J1, San Fernando Valley spineflower
- PMAGA080E0, chaparral nolina
- PMLIL0D096, slender mariposa lily
- PMLIL0D150, Plummer's mariposa lily
- PMPOA4G010, California Orcutt grass
- S Calif Steelhead FCH
- Braunton's Milk Vetch FCH
- Lyon's Pentachaeta FCH

Sensitive Elements Reported by the California Natural Diversity Database

Figure 4.3-2

Table 4.3-1 Special-Status Plant Species Potentially Occurring in the Agoura Village Specific Plan Area

Scientific Name	Common Name	Status Fed/State/CNPS	Habitat Requirements	Project Site Suitability
Astragalus brauntonii	Braunton's milk-vetch	FE/None/1B	Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland. Recent burns or disturbed areas. Stiff gravelly clay soils overlying granite or limestone. Blooms February – July. Perennial herb. 10 – 2100 feet.	Suitable habitat not present on-site. Suitable soils absent. Searched for and not found during the 2007 surveys.
Baccharis malibuensis	Malibu baccharis	None/None/1B	Coastal scrub, chaparral, cismontane woodland. In Conejo volcanic substrates, often on exposed roadcuts. Sometimes occupies oak woodland habitat. 485 – 832 feet.	Has not been recorded in the area and is outside of known population range. Not discovered onsite during 2007 surveys.
Calochortus plummerae	Plummer's mariposa lily	None/None/1B	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granite or alluvial material. Fire follower. Blooms May – July. Bulbiferous perennial herb. 300 – 5280 feet.	Suitable habitat on-site. None found during 2007 site survey though specifically searched for.
Calochortus clavatus var. gracilis	Slender mariposa lily	None/None/1B	Chaparral on slopes or in canyons below 1200 m, south base of San Gabriel and Sierra Pelona mountains.	Suitable habitat on-site. None found during 2007 site survey though specifically searched for.
Chorizanthe parryi fernandina	San Fernando valley spineflower	FC/SE/1B	Coastal scrub. Dry, gravelly or sandy soils. Blooms April – June. 10 – 3396 feet.	Suitable habitat not present on-site. Suitable soils absent. Not seen during 2007 surveys.
Deinandra minthornii	Santa Susana tarplant	None/SR/1B	Chaparral, coastal sage scrub. Usually on sandstone outcrops and crevices, in shrubland. Blooms July – November. Shrub. 920 – 2500 feet.	Habitat present, but species not found during 2007 site surveys.
Dudleya cymosa ssp. agourensis	Agoura Hills dudleya	FT/None/1B	Chaparral. Cismontane woodland. Rocky, volcanic breccia, 200-500 m.	Suitable habitat present on-site. Noted in CNDDB Sensitive Elements Report (1990 observation).
Dudleya cymosa ssp. marcescens	Santa Monica Mountains dudleya (or Marcescent dudleya)	FT/SR/1B	Chaparral. Sheer volcanic rock surfaces, canyon walls. Blooms April – June. Perennial herb. 490 – 1700 feet.	No suitable habitat based on specific microhabitat requirements . No recorded observations onsite, nor was plant seen during 2007surveys.
Erodium macrophyllum	Round-leaved filaree	None/None/2	Cismontane woodland, valley and foothill grassland. Clay soils. Blooms March – May. Annual herb. 49 – 3900 feet.	Suitable habitat may be present within the Specific Plan boundaries. Not found during prior site visits or 2007 surveys, but failure of known populations indicate that plant could still be potentially present in suitable habitat in Zone G.
Nolina cismontane	Chaparral nolina	None/None/1B	Chaparral and coastal scrub, primarily sandstone and shale substrates	No suitable habitat is present within the project area; not seen during 2007 surveys .
Orcuttia californica	California orcutt grass	FE/SE/1B	Vernal pools. Blooms April – August. Annual herb. 49 – 2200 feet.	Suitable habitat not present within the project area. No vernal pools present within the plan boundaries.

Pentachaeta lyonii	Lyon's pentachaeta	FE/SE/1B	Chaparral, valley and foothill grassland. Edges of clearings in chaparral. Clay soils, exposed soils. Blooms March – August. Annual herb. 100 – 2100 feet.	Suitable habitat present within the Specific Plan boundaries. Found onsite in 1996 & 1997. Two colonies known within project area and several within surrounding area. Additional populations found onsite during 2007 surveys.
Juniperus californica	California juniper	None	Dry slopes, flats, pinyon/juniper woodlands; Elevation range 150 -- 5000 ft	Project site not in typical current range of species. One live and one dead individual found in Zone G-E.
Orobanche fasciculata	Clustered broomrape	None	Dry, generally bare places, on shrubs (especially *Artemisia, Eriodictyon, Eriogonum*). Blooms April-July. Elevation range <11,000 ft	Suitable habitat present; two individuals found in Zone G during 2007 surveys.
Senecio aphanactis	Rayless ragwort	None/None/2	Vernally moist clay soils coastal sage scrub, chaparral, and cismontane woodland. Blooms January – April, Elevation range 0-2600 ft	Limited clay soils present in Zone G; potentially present.

Source: California Department of Fish and Game, *Special Plants*, February 2005; CNDDB Rarefind 5--mile search radius, February 2005; California Native Plant Society (CNPS) *6th Inventory of Rare Plants - Online Edition*, November 2002.

CSC = California Species of Special Concern
FSC = Federal Species of Special Concern
SE = State Endangered
FE = Federally Endangered
ST = State Threatened
FT = Federally Threatened
FP = Fully Protected
SR = State Rare
FC = Federal Candidate
CNPS List 1B = rare or endangered in California and elsewhere
CNPS List 2 = rare or endangered in California
None = no status

Table 4.3-2 Special-Status Wildlife Species Potentially Occurring in the Agoura Village Specific Plan Area

Scientific Name	Common Name	Status Federal/State	Habitat Requirements	Project Site Suitability
Accipiter cooperii	Cooper's hawk	None/ WL	Open woodlands, nests in large trees in riparian areas and oak woodlands.	Observed during 2007 surveys onsite; potentially breeds in riparian woodlands in Zone G; forage throughout Specific Plan area.
Accipiter striatus	Sharp-shinned hawk	None/ WL (nesting)	Roosts in intermediate to high-canopy forest; nests in dense, even-aged, single-layered forest canopy; winters in woodlands.	Project area in known wintering, but not breeding, range.
Aquila chrysaetos	Golden eagle	None/ WL (Nesting and Wintering)/FP	Rolling foothills, mountain areas, sage-juniper flats, desert. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Suitable nesting habitat lacking within Specific Plan area, could forage on-site.
Athene cunicularia	Burrowing owl	None/CSC	Burrow sites are open, dry annual or perennial grasslands, deserts & scrublands characterized by low growing vegetation	No burrowing owls have been observed in the Specific Plan area.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None/WL	Coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Observed, potentially nesting, during 2007 surveys onsite.
Ardea alba	Great egret	None/ SA (rookery site)/G5S4	Common resident throughout most of California; feeds in shallow water and along shores, in cropland and pastures; nests in large trees in mixed species colonies that are limited in distribution.	Observed in suitable foraging habitat in open portion of Zone B; no nesting colonies present.
Ardea herodias	Great blue heron	None/ SA (rookery site)/G5S4	Common throughout most of California in wetlands, croplands, irrigated pasture and in urban areas with open water; nests in large trees in mixed species colonies that are limited in distribution.	Observed in suitable foraging habitat in Zone G; no nesting colonies present.
Aspidoscelis tigris stejnegeri	Coastal western whiptail	None/ SA	Deserts and semiarid areas with sparse vegetation and open areas, woodlands and riparian areas. Firm soil; sandy or rocky.	Suitable habitat on-site. Observed during 1993 survey and 2007 surveys.
Baeolophus inornatus	Oak titmouse	None/SA (nesting)	Found primarily in oak or oak-pine woodlands of the Pacific slope; non-migratory; nest in natural or woodpecker-excavated cavities.	Observed during 2007 surveys onsite.
Botaurus lentiginosus	American bittern	None/SA (nesting)	Uses wetlands with tall, emergent vegetation; cryptic; breeds in freshwater wetlands from the mid-United States to northern Canada.	Observed during 2007 surveys onsite.
Actinemys marmorata pallida	Southwestern pond turtle	None/CSC	Inhabits permanent or nearly permanent bodies of water in many habitat types; below 6,000 feet. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks. Needs suitable nesting sites.	Observed during 2007 surveys onsite.
Elanus leucurus	White-tailed kite	None/FP	Riparian woodlands near agricultural fields, forages over open grasslands and scrub.	Seen onsite during 2007 surveys.
Euderma maculatum	Spotted bat	None/CSC	Forages in a variety of habitats; roosts strictly in cliffs.	Although few crevices observed, may roost in steep cliff area in Zone A, but no bat sign

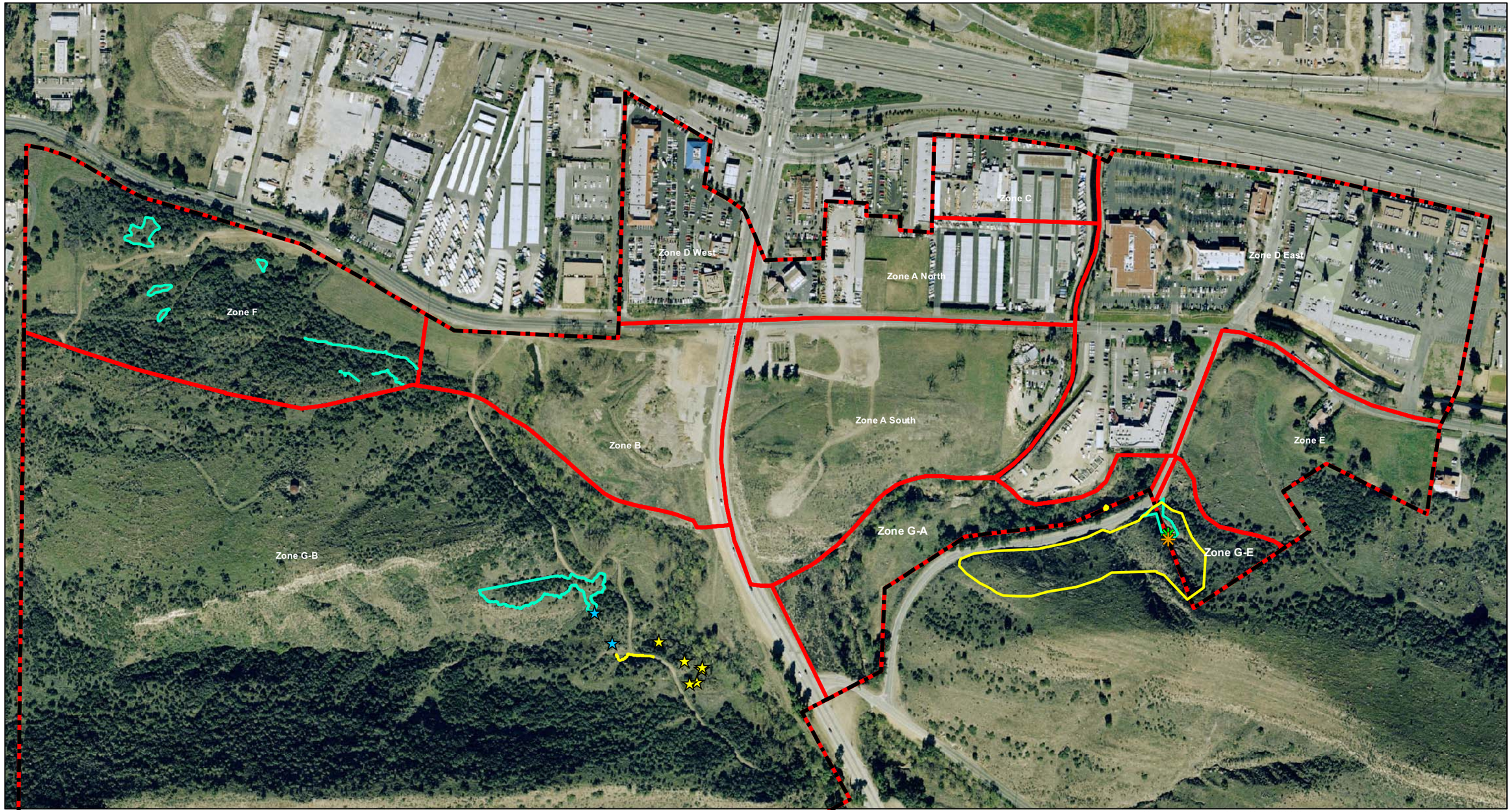
Table 4.3-2 Special-Status Wildlife Species Potentially Occurring in the Agoura Village Specific Plan Area

Scientific Name	Common Name	Status Federal/State	Habitat Requirements	Project Site Suitability
				observed; may forage onsite.
Eumops perotis	Western mastiff bat	None/CSC	Forages in woodlands; roosts in crevices in cliff faces, trees, & tunnels 30-80' above ground; breeds March-June; found 1,000-8,500 feet.	Potentially forages through project area; potentially roosts in riparian area, oak woodland, and scattered trees; documented 1 mile south of site.
Gila orcutti	Arroyo chub	None/CSC	Slow water stream sections with mud or sand bottoms. Slow moving streams with typical water depth of 40 cm (15.75 inches of water). Feeds on aquatic vegetation.	Suitable aquatic habitat not present on-site.
Myotis yumanensis	Yuma myotis	None/CSC	Forages in riparian areas; open forests and woodlands are optimal habitat; roosts in caves, crevices or in buildings.	Although few crevices observed, may use riparian areas in Lindero and Medea Creeks to forage.
Phrynosoma coronatum (blainvillei population)	Coast (San Diego) horned lizard	None/CSC	Coastal sage scrub and chaparral in arid and semi-arid climate. Prefers friable, rocky or shallow sandy soils.	Suitable habitat present on-site.
Picoides nuttallii	Nuttall's woodpecker	None/SA (nesting)	A year-round resident of oak woodlands in most of the west half of California; sometimes uses riparian or conifer forests;	Observed potentially nesting during 2007 surveys onsite.
Polioptila californica	California gnatcatcher	FT/CSC	Obligate, permanent resident of coastal sage scrub. Low coastal sage scrub in arid washes, on mesas and slopes. Below 2500 feet in southern California.	Species unlikely to occur on site. Per USFWS (2002) no CA gnatcatchers populations have been found in the Santa Monica Mts. Nearest designated critical habitat located about 7.5 miles to northwest.
Rana auroura draytonii	California red-legged frog	FT/CSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Potentially suitable habitat is present within the project area; however, no individuals have been observed within the Specific Plan boundaries. Not seen during 2007 surveys and not likely to be present.
Thamnophis hammondii	Two-striped garter snake	None/CSC	Aquatic. Found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Suitable aquatic habitat present within the project area. Observed nearby during 1989 survey.
Selasphorus sasin	Allen's hummingbird	None/SA (nesting)/G5 SNR	Open coniferous forests and riparian woods; migrants common in many habitats, especially mountain meadows.	Observed during 2008 surveys onsite.
Trimerotropis occidentaloides	Santa Monica Mountains grasshopper	None/SA	Known only from the western Santa Monica Mountains in Los Angeles and Ventura Counties; has been found on bare hillsides and along dirt trails in chaparral	Although potential habitat exists, not seen onsite, low probabily of occurrence in Zone G.

Source: California Department of Fish and Game, *Special Animals*, February 2008; CNDDB Rarefind 5-mile search radius, March 2007.

CSC = California Species of Special Concern
FSC = Federal Species of Special Concern
SE = State Endangered
FE = Federally Endangered
ST = State Threatened
FT = Federally Threatened
FP = Fully Protected
SR = State Rare
FP = California Department of Fish and Game Fully Protected
SA = Special Animal (In *Special Animals* but no other status)
None = no status
WL = CDFG Watch List

This page intentionally left blank



Source: Air Photo U.S.A., 2006 (image), Rincon Consultants, Inc., 2008.

Legend

- Plan Area Boundary
- Zones
- California juniper (live)
- California juniper (dead)
- Clustered broomrape (Orobanche fasciculata)
- Agoura Hills Dudleya (Dudleya cymosa agourensis
- Agoura Hills Dudleya (Dudleya cymosa agourensis)
- Lyon's Pentachaeta (Pentachaeta lyonii)

N

0 250 500 Feet

Special-Status Plants

Figure 4.3-3

The basic differences between these two plants, and two other dudleya within the area, are described in the Biological Technical Appendix (BTA Appendix). Recently, per communications with Stephen McCabe (University of California Santa Cruz Herbarium), the California Department of Fish and Game, CNPS, Kei Nakai, Reid Moran, and Stephen McCabe agree that *D.c. agourensis* should be recognized independently of *D.c. ovatifolia* and is scheduled to be recognized as such in the upcoming Flora of North America and the 2008 version of the Jepson Manual. Based on Nakai's description and characteristics provided by Stephen McCabe, the occurrences of *Dudleya cymosa* within the Specific Plan area were identified as *ssp. agourensis*.

Two occurrences of *D.c. agourensis* were found blooming within the Specific Plan boundaries during the 2007 and 2008 surveys as shown in Figure 4.3-3. These were in Zone G, south of Zone B and E (hereafter referred to as Zones G-B and G-E). The eastern population of *D.c. agourensis* is centered on a drainage that straddles the southernmost boundary of Zone G-E. The approximate 400 foot drainage faces northwest towards Cornell Road, draining across the road towards Medea Creek. The steep side walls and rocky volcanic outcrops receive partial shade during the day and provide numerous rocky shelves with thin soils, suitable for dudleya. Roughly 12 individuals were also noted along the embankment north of Cornell Road, directly across the street from the drainage noted above. This cluster of *D.c. agourensis* is considered part of the larger population south of Cornell Road.

The population also extends outside the Specific Plan Area, with plants found parallel to and extending south from Cornell Road along a steep wall of volcanic rock and the lower slopes at the base of this local ridge. *D.c. agourensis* were concentrated above the shoulder of Cornell Road, on a rocky volcanic breccia exposure ranging in height from three to fifteen feet. At the top of this exposure, the hillside slopes more gently to the south and towards the ridge south of the Specific Plan. Surveys of this area found *D.c. agourensis* within the first few hundred feet south from Cornell Road, restricted to volcanic rock and those areas with shallow soils. *D.c. agourensis* were found in relative open areas and among isolated rock outcrops. This area is shown on Figure 4.3-3, south of Zone G-A and west of Zone G-E, and adjacent to Cornell Road.

The western population found within Zone G-B consisted of scattered groups of multiple individuals (1-10) clustered on rocky outcrops or small areas of shallow soils. Individuals within a cluster (as indicated with a yellow star on Figure 4.3-3) were generally located within 10 to 20 feet of one another and were found on north and eastern facing slopes. One large group of roughly 50 plants was found along the access road that parallels Lindero Canyon Creek. Plants extended along a five to 12-foot high volcanic rock outcrop (indicated with a yellow line on Figure 4.3-3) directly adjacent to the dirt access road. This occurrence was previously mapped as Santa Monica Mountains Dudleya, *Dudleya cymosa ssp. ovatifolia*, in the 1996 Creekside EIR.

Santa Monica Mountains dudleya (Federally threatened, State rare, and CNPS 1B) occurs on volcanic rocks in chaparral habitat. As detailed in the BTA, taxonomic reclassification of the *Dudleya cymosa* subspecies indicates that the previously reported *D.c.* ssp. *ovatifolia* at the site is actually the Agoura Hills dudleya, as indicated above.

Round-leaved filaree (CNPS List 1B) is an annual herb that blooms between March and May. This species typically occurs in cismontane woodland, valley and foothill grassland in clay soils. The nearest CNDDB record of this species is located approximately four miles southeast of the

project area. This species is not likely to occur within the Specific Plan area due to the disturbed nature of the site and the predominance of rocky soils. However, small patches of potentially suitable clayey soils are present in the southeastern and western portions of the Specific Plan area (Zone G). These areas were checked for this plant in 2007 and 2008, but it was not observed. Given the failure of the local known populations to bloom in 2007, its potential presence cannot be ruled out in these small areas.

Lyon's pentachaeta (Federal and State endangered, CNPS List 1B) is an annual herb that blooms from March to August. The species is found in chaparral, valley grassland and foothill grassland. Lyon's pentachaeta was found within the Specific Plan area west of Kanan Road in April 1996 during focused surveys, and again in 1997 within the same general location. Each of these locations was confirmed during the 2007 and 2008 surveys and new locations recorded. During the 2007 and 2008 surveys, five occurrences of *P. lyonii* were observed and mapped within the Specific Plan boundaries. The eastern most occurrence was located just south of the southern boundary of Zone G-E, near the drainage outlet to Cornell Road. Several trails utilized by various mammals and possibly humans were noted at the base of the drainage. *P. lyonii* have colonized along these trails where soils are shallow and there is little competition from other plants. A second occurrence of *P. lyonii* was observed and mapped in Zone G-B near the dirt access road that traverses south of Lindero Canyon Creek.

The third occurrence of *P. lyonii* was identified along trails in the western portion of the Specific Plan in Zone F. This previously unrecorded locale was mapped during the May and June 2007 surveys among heavily disturbed trails within dense mixed chaparral generally dominated by chamise (*Adenostoma fasciculatum*) and scrub oak (*Quercus berberidifolia*). The scrub oak ranged between five to seven feet in height, overshadowing the majority of the trails, which were limited to roughly two to three feet in width. The trails were generally littered with garbage and human waste. More than 100 individuals were recorded along the trails within an atypical habitat for this endangered species (see the BTA for further discussion).

A fourth occurrence was located near the north and western boundary of Zone F, roughly 200 feet from Agoura Road and adjacent to an unpaved dirt access road that extends from Agoura Road to the southern edge of Zone F. This occurrence is located within sparse or open areas within mixed chaparral dominated by scrub oak and mountain mahogany (*Cercocarpus betuloides*). *P.lyonii* observations were limited to those areas with hard and dry soils and minimal grasses, such as wild oats (*Avena fatua*), and were dominated by annuals, specifically slender tarweed (*Hemizonia fasciculate*). Both this occurrence and the fifth occurrence, described below, were seemingly associated with the slender tarweed and/or the soil conditions that both were found in.

The fifth occurrence of *P. lyonii* was located within several openings found among dense mixed chaparral generally dominated by chamise and scrub oak. These open areas appear to have formed during some level of human disturbance. An abandoned fence line that has been largely overgrown by chaparral was located adjacent to this occurrence. The fenceline trends west to east from the western boundary of Zone F, ending near a drainage that trends across Zone F from south to north. At this juncture the fenceline turns roughly 90° and extends northward downslope. The northern extent of this occurrence of *P.lyonii* begins at this fence corner. Areas cleared adjacent to the fenceline that have not been overgrown with chaparral appear suitable to *P. lyonii,* which is found along this abandoned structure. It is assumed that

all five occurrences are part of the northern extent of the population identified as Unit 6 (Cornell Road Unit) in the critical habitat designation for the Lyon's pentachaeta, but not listed as critical habitat for economic reasons (see USFWS, November 14, 2006.

Rayless ragwort (*Senecio aphanactis*) is an annual that occurs at elevations from about sea level to 2,600 feet in vernally moist clay soils of coastal sage scrub, chaparral, and cismontane woodland in the coastal area from San Francisco Bay to Baja California. It has been found primarily in association with drying alkaline flats in the Santa Monica Mountains, and is known from Decker Canyon (State Route 23). It blooms from January through April, but tends to be overlooked. None were observed within the survey area during the 2007 surveys. The portions of the project site proposed for development lack the drying alkaline flats, vernally moist clay soils where this plant is found. Similar to the round-leaved filaree, a few areas within Zone G may contain potentially suitable habitat and its potential presence cannot be ruled out in these small areas.

Additionally, it should be noted that two species of interest, California juniper (*Juniperus californica*) and Clustered broomrape (*Orobanche fasciculate*), have been found within the Specific Plan boundaries. Neither of these species currently has a special status listing/designation, is a candidate for special status, or is a local species of concern; however, the Santa Monica Mountains National Recreation Area (National Park) notes that these plants are of special interest.

Clustered broomrape was observed in one location directly south of Cornell Road, adjacent to, and outside of the Specific Plan area. A second plant was observed within an area of the Specific Plan, south and east of the intersection of Cornell and Agoura Road and south of Zone E. This area is proposed as Open Space under the Specific Plan. During the 2007 surveys two additional individuals of *Orobanche fasciculata* were found within the western portion of the Specific Plan area in Zone G-B, roughly 125 feet apart. The first individual was located at the base of a yucca plant on a knoll directly above the dirt access road that traverses south of Lindero Canyon Creek (as indicated with a blue star on Figure 4.3-3). The second individual was found along an opening at the bottom slope of a hillside of chaparral in more exposed soils, directly adjacent to a population of Lyon's pentacheata. The individuals previously recorded within the Specific Plan were not relocated during the 2007 special status plant surveys.

California juniper (*Juniperus californica*) is a non-listed species; however SMMNRA (National Parks) notes this species as a "plant of special interest" within the Specific Plan area. The species occurs within an elevation range of 50 to 1,500 feet along dry slopes and flats in pinyon/juniper woodlands in the high desert mountains, desert side of the coastal mountains, and along the arid foothills of the San Joaquin and Sacramento Valleys. A California juniper stand of unknown ancestry (potentially was planted) was described in McAuley (1996) as south of Cornell Corners, which is assumed to be south and east of the intersection of Cornell and Agoura Roads. This stand was present until the Kanan Fire of 1978 (McAuley, 1996). It is also described as being present in the occurrence report for the Agoura Hills dudleya in this location. Suitable habitat in the form of dry rocky slopes is present in Zone G-E, which would be preserved within the Specific Plan's area of designated Open Space. One live and one dead California juniper were observed within the drainage in Zone G-E during the 2007 surveys.

Special-Status Wildlife. A sensitive wildlife resource refers to any rare, threatened, or endangered animal species. This section addresses special-status animal species that occur in the region and are either known to occur or may occur within the Specific Plan boundaries. The 2007 CNDDB indicated 11 special-status animal species as potentially occurring within a five mile radius of the project area. Table 4.3-2 identifies these sensitive wildlife species, their listing status, preferred habitat and the potential for those species to occur within the project boundaries. Potential occurrence of these species is based on the availability and quality of suitable habitat. Those special-status wildlife with suitable habitat onsite are described in more detail below. The location of special status wildlife seen at the site during the 2007 and 2008 field surveys are illustrated on Figure 4.3-4. Please note that the locations of wildlife shown on the figure are approximate, and that wildlife are highly mobile and will move about extensively within preferred habitat.

Golden eagle (WL; CFP) requires open savannahs, rolling foothills, and early successional shrub habitats for foraging. The species generally nests on cliffs and in large trees located in open areas. Suitable foraging habitat for the golden eagle is present in the project area; however, no individuals were observed during the 2007or 2008 field surveys.

Coastal western whiptail (Special Animal) inhabits a variety of habitats including sage scrub, grasslands, washes, and oak woodlands. CNDDB records show occurrences throughout the Santa Monica Mountains south of the US Highway 101. Habitat is present within the project area to support this subspecies. Individuals were observed within the Specific Plan area during field surveys in 1993. Three different whiptails were observed during the 2007 surveys at the same location on different survey days (two on one day, one larger one the second day) on the west side of Kanan Road at the edge of Zone G (Figure 4.3-4). Two additional individuals were observed in 2008 within Zone F. The project site is in a zone of overlap between two subspecies and it is unknown which subspecies was present as identification requires extensive study, generally including comparing the animal to museum specimens. This animal prefers dense vegetation and it may occur throughout the project area within mixed chaparral and coastal sage scrub. It is noted that this animal was formerly listed by CDFG as a "species of special concern," but in the latest publication of *Special Animals* (CDFG, February 2008), it no longer has that status, nor is it on the CDFG "Watch List."

Coast (San Diego) horned lizard (CSC) is associated with open, sandy areas of coastal sage scrub and chaparral habitats. CNDDB records for the species are located to the south and east of the Specific Plan area, with the nearest record approximately five miles away. Potential habitat occurs for this species on portions of the Specific Plan area; however, no individuals were observed during prior field surveys or during the 2007 or 2008 field efforts.

Southwestern pond turtle (CSC) is an aquatic turtle that prefers slack or slow water ponds, marshes, rivers, streams, and irrigation ditches with rocky or muddy bottoms and suitable basking sites (CDFG, 1994; Stebbins, 2003). Females emigrate to upland areas between 700 to 1,000 feet from aquatic sites to lay eggs between the months of April and August. Southwestern pond turtles require an upland oviposition site in the vicinity of the aquatic site (Holland 1991b). Suitable oviposition sites must have the proper thermal and hydric environment for incubation of the eggs. Nests also are typically located on a slope that is unshaded that may be at least in part south-facing, probably to ensure that substrate temperatures will be high enough to incubate the eggs (Rathbun et al. 1993). How close the aquatic site is to the nesting site

probably depends largely on the availability of suitable nesting sites adjacent to aquatic sites where southwestern pond turtles are known to occur because the array of features that make a nesting site suitable may significantly limit the availability of such sites. The nesting site can be up to 1300 ft from the aquatic site (Storer 1930), but the majority of nests located to date are within 650 ft (D. Holland, pers. comm.). However, at localities with less gradient, soil moisture gradients and soil type may cause nesting sites to be located at a significantly greater distance than where the majority are located. Slope of the nest sites range up to 60%, but most nests are on slopes < 25%. Hatchlings require shallow water habitat in their first year with dense submergent or short emergent vegetation.

Southwestern pond turtles are known to feed on relatively slow-moving aquatic invertebrates (e.g., the larvae of many aquatic insects) and carrion, although aquatic vegetation may be eaten (Holland 1985a, Bury 1986, Baldwin and Stanford 1987). The range of southwestern pond turtles extends from Washington into northern Baja California, Mexico, generally occurring in coastal environments within an elevational range from near sea level to ca. 4,700 ft (Jose Basin Creek, Fresno County; D. Holland, pers. comm.). Western pond turtle populations are currently declining throughout most of their range.

Seven individuals were observed within the Specific Plan area, three within Lindero Canyon Creek in Zones B and G and four within Medea Creek in Zone G. Potentially suitable nesting habitat was also identified within Zones G and B, adjacent to both creeks. Several low-lying areas exhibit loose sands, slope, and sunlight that could potentially be suitable for nesting; however it is difficult to tell as much is still unknown regarding the nesting habits of this species.

Coastal California gnatcatcher (FT; CSC) occurs in coastal scrub sage and inland sage scrub habitats at elevations below 900 feet in San Diego, Orange, and Los Angeles County, and below 1,600 feet in Riverside County. Suitable coastal sage scrub habitat required to support the species was present on-site, however, this species has not been documented as occurring as a breeding population within the Santa Monica Mountains (communication with Rick Ferris, USFWS 2002), and none were seen during prior site visits or during the 2007 or 2008 field surveys. The nearest verified California gnatcatchers sightings have been in the Thousand Oaks area, about 7.5 miles to the northwest. The nearest area designated as critical habitat for this bird is located about 7.5 miles to the northwest (USFWS, December 2007).

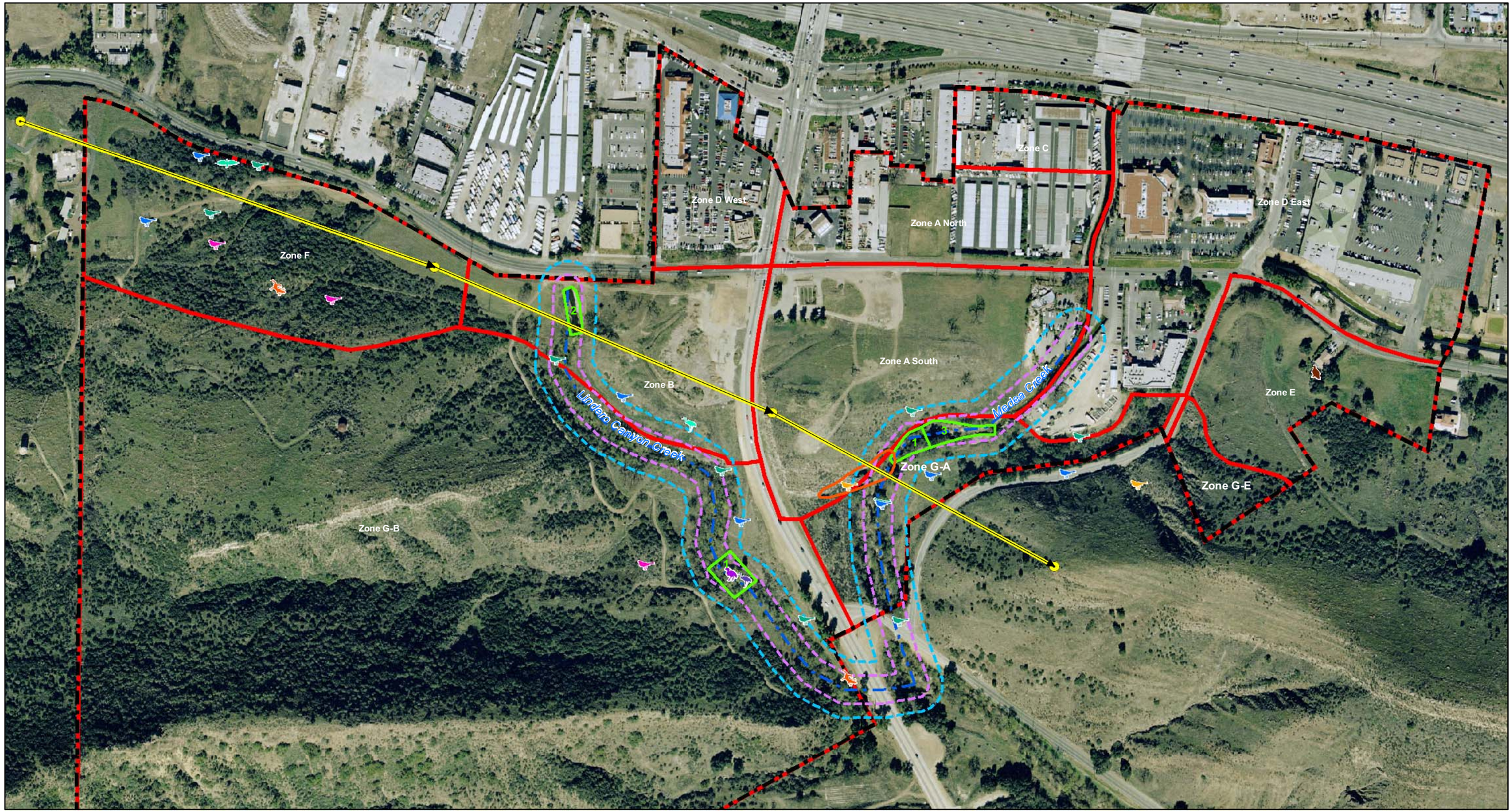
California red-legged frogs (FT; CSC) are generally found in lowland and foothill areas, in or near permanent sources of deep water with dense and emergent riparian vegetation. For reproduction, this species requires 11-20 weeks of permanent water for larval development. Lindero Canyon Creek would potentially serve as habitat for this species; however, due to the heavy disturbance in and around the perennial water sources, it is not anticipated that California red-legged frogs would be found in the project area. Additionally, the species is not anticipated to utilize Medea Creek within the Specific Plan area due to the swift and shallow nature of the waters within this portion of the Creek. No individuals have been observed during previous site visits or during the 2007 or 2008 field surveys.

Two-striped garter snakes (FT; CSC) are generally associated with perennial and intermittent streams that have rocky beds bordered by willow thickets or other dense emergent vegetation, good water quality, and seasonal pools. While the structure of the creek habitat of onsite creeks

seems suitable, the water quality is questionable. However, this species was observed on Agoura Canyon Ranch (MBA, 1989), which includes a portion of the Specific Plan area. It may occur on the in the vicinity and within Medea and Lindero Canyon Creeks; none were observed during the creek surveys conducted in 2007.

Southern California rufous-crowned sparrow (WL) is resident in the foothills of mountain ranges from Northern California into northern Baja California and from southern Utah, northern Arizona, northern New Mexico, and Central Texas into Mexico. Smaller populations occur in northern Texas, southeastern Colorado, southwest Kansas, Oklahoma, and central Arkansas. The subspecies occurs along the coastal slope of the Coast Ranges from Santa Barbara County to Northwestern Baja California. This species is found normally in coastal sage scrub and chaparral, particularly in rocky areas and with native perennial bunch grasses. It eats insects, spiders, seeds, and some vegetation which it gleans from the ground or low foliage. Home ranges for this species average about 3.7 acres and territories average about 2 acres (Zeiner et al., 1990). An adult was seen with food (indicative of nesting) just south of Cornell Road and outside the project area (Figure 4.3-4). Another adult was seen on the southern edge of Zone A South near the steep cliffs indicated in yellow on Figure 4.3-4.

White-tailed kite (FP) occurs along the West Coast from Oregon south into the tropics, also in Texas, and Florida. This species normally forages within grasslands, agricultural areas, and marshes in search of small mammals, reptiles, or insects. It nests in large trees adjacent to suitable foraging habitat. Although this species is rarely territorial, it will defend an area as large as 0.04 square miles (~26 acres) for feeding against other species. It usually uses a two square mile area for feeding, though rarely can be found farther than 0.5 miles from a nest (Zeiner et al., 1990). Suitable nesting habitat is present and one individual was seen foraging both on and offsite. It could forage throughout the open lands within the Specific Plan area and similar habitats to the south.



*Source: Air Photo U.S.A., 2006 (image), *Ventura County Resource Management Agency, 2006, and Rincon Consultants, Inc., 2008.*

Legend

- Plan Area Boundary
- Zones
- 50' Native Vegetation Buffer
- 100' Native Vegetation Buffer
- Steep Cliff Area
- # Western Pond Turtles Sighted
- Bird Flight Path/Direction
- Allen's Hummingbird
- Western Whiptail
- California Thrasher
- Nuttall's Woodpecker
- Oak Titmouse
- Southern California Rufous-Crowned Sparrow
- Cooper's Hawk
- White-Tailed Kite
- American Bittern
- Great Blue Heron
- Great Egret

N

0 250 500 Feet

Special-Status Wildlife

Figure 4.3-4

Oak titmouse and **Nuttall's woodpecker,** both on the CDFG *Special Animals* list, but with no other status, are considered to be "special-status" only while nesting. Suitable nesting habitat is present within the oak stands at the site, most of which are located within the planned open space of Zone G. These species were seen in appropriate habitat both within the developable areas and in Zone G. The rookeries of most herons, including **Great egret, Great blue heron, and Black-crowned night heron,** are considered sensitive. While the great egret and great blue heron were observed at the site, no rookeries are present and these birds are frequently seen foraging in agricultural, open and park areas in suburban and rural locations. **American bittern** is also a "Special Animal" that was observed along Lindero Canyon Creek within Zone G. **Cooper's hawk** was seen in a potentially developable area in Zone E immediately adjacent to a residence; this species has recently (CDFG, February 2008) been downlisted to "Watch List" status. Cooper's hawk nests in large trees in riparian and open woodlands and are also known to breed in suburban areas. Suitable nesting habitat is present within the Specific Plan area in both the developable area and Zone G. The titmouse and Allen's hummingbird were seen in developable areas as well, with an oak titmouse family group located in Zone F in 2008. The great blue heron was seen in the proposed open space Zone G. Several Nuttall's woodpeckers were seen, both within and outside the developable areas, with one Nuttall's woodpecker seen carrying food in Zone G south of Zone A, and probably was nesting.

Bat species, specifically **western mastiff bat**, **spotted bat**, and **Yuma myotis**, have the potential to occur onsite. These species have been documented in the area (one mile south of the site, one mile south of the site, and three miles south of the site, respectively). These species use trees, rock crevices, and/or buildings for roosting, and forage over riparian areas or cleared areas onsite. However, no sign of bats could be detected at the most probable location, the 30-40 foot steep cliff area in the south end of Zone A and visual surveys conducted on the evenings of June 27 and July 2, 2007, did not observe any bats foraging over the site. Nonetheless, these bats may forage throughout the site.

It should be noted that small mammal trapping was conducted in 2007 to determine if special status small mammals (particularly San Diego desert woodrat) were present at the site. No special-status species were captured during the June 27 and July 2, 2007 trapping dates.

Special-Status Communities. The CDFG CNDDB overlay for a 5– mile radius surrounding the Specific Plan area indicates several special-status communities known to occur in the project vicinity. Those communities include: Southern Coast Live Oak Riparian Forest; Southern Sycamore Alder Riparian Woodland; Southern Arroyo Willow Riparian Forest, Valley Needlegrass Grassland; California Walnut Woodland, and Valley Oak Woodland. Table 4.3-3 provides a summary of the sensitivity rating of special status plant communities within the general project area. A global sensitivity ranking of G1 means that less than 2,000 acres of this community exist world-wide. A global sensitivity ranking of G3 means only 10,000 to 50,000 acres (4,000 to 20,000 hectares) of this community exist world-wide. A global sensitivity ranking of G4 means that the community is secure, but factors exist to cause some concern (i.e., there is some threat, or somewhat narrow habitat). A State sensitivity ranking of S2.1 means only 2,000 to 10,000 acres of this community exist statewide and it is considered very threatened. A State sensitivity ranking of S3.1 means only 10,000 to 50,000 acres of this community exist statewide and it is considered very threatened. A State sensitivity ranking of S4 means that the community is secure within California, but factors exist to cause some concern (i.e. there is some threat, or somewhat narrow habitat).

Special status communities known to occur at the site include Valley Needlegrass Grassland and Southern Willow Scrub (CNDDB sensitive). Figure 4.3-5 shows the location of these communities, which are described in greater detail below.

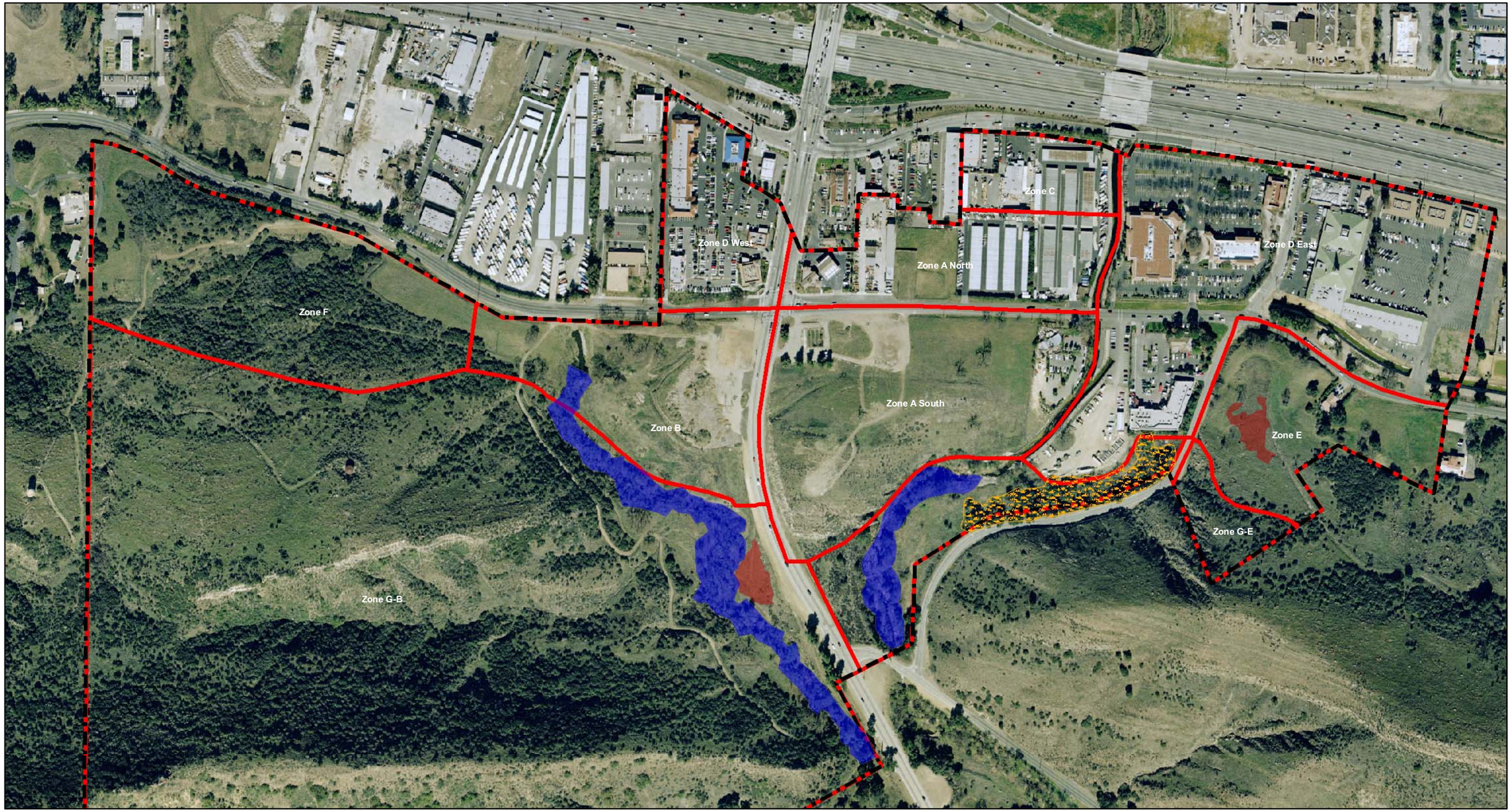
Southern Willow Scrub (previously described as Southern Arroyo Willow Riparian Forest) occurs within the Specific Plan area along Lindero Canyon Creek and Medea Creek. This community is dominated by arroyo willow, but also includes coast live oak, black walnut, and valley oak in the overstory, with coyote brush, poison oak, gooseberry, and wild rose in the shrub stratum. The understory varies from sparse to dense, composed of mostly mugwort (*Artemisia douglasiama*), cheat grass, and smilo grass (*Piptatherum miliaceum*) on the stream banks and water-cress (*Rorippa nasturtium-aquaticum*) in the stream flow.

Valley Needlegrass Grassland occurs in two locations within the Specific Plan area composed of a sufficiently large aggregation of purple needlegrass to be considered an identifiable community (>0.25 acre). Although additional stands of needlegrass were observed within the Specific Plan area, these were not large or contiguous enough to qualify as the protected community Valley Needlegrass Grassland. Needlegrass also occurs scattered within mixed chaparral, coastal sage scrub and annual grassland within the project area.

Table 4.3-3 Special Status Plant Communities Occurring Within a 5-mile Radius of the Agoura Village Specific Plan Area

Community	Global Ranking	State Ranking
California Walnut Woodland	**G2**	**S2.1**
Southern Coast Live Oak Riparian Forest	**G4**	**S4**
Southern Sycamore Alder Riparian Woodland	**G4**	**S4**
Southern Arroyo Willow Riparian Forest (now classified onsite as southern willow scrub)	**G3**	**S2.1**
Valley Needlegrass Grassland	**G1**	**S3.1**
Valley Oak Woodland	**G3**	**S2.1**
Source: California Department of Fish and Game, CNDDB 2007 and Creekside EIR, 1996.		

In addition to these two communities, several stands of oaks are located in Zones B, E and F that if grouped together could be considered Valley Oak Woodland/Savanna. As discussed in the BTA, these stands are residual trees from the landscape level concept of oak savanna that existed in this inland valley area and to the west before the area was urbanized. In the EIR consultant's biological opinion, these are residual oak tree stands reduced to landscaping status because of their location adjacent to roads and the long term fuel management of the understory. Nonetheless, other biologists may disagree and consider these stands a sensitive community, of which approximately 0.8 acres is present in Zone B, 0.2 in Zone F and 1.5 acres in Zone E.



Source: Air Photo U.S.A., 2006 (image) and Rincon Consultants, Inc., 2008.

Legend

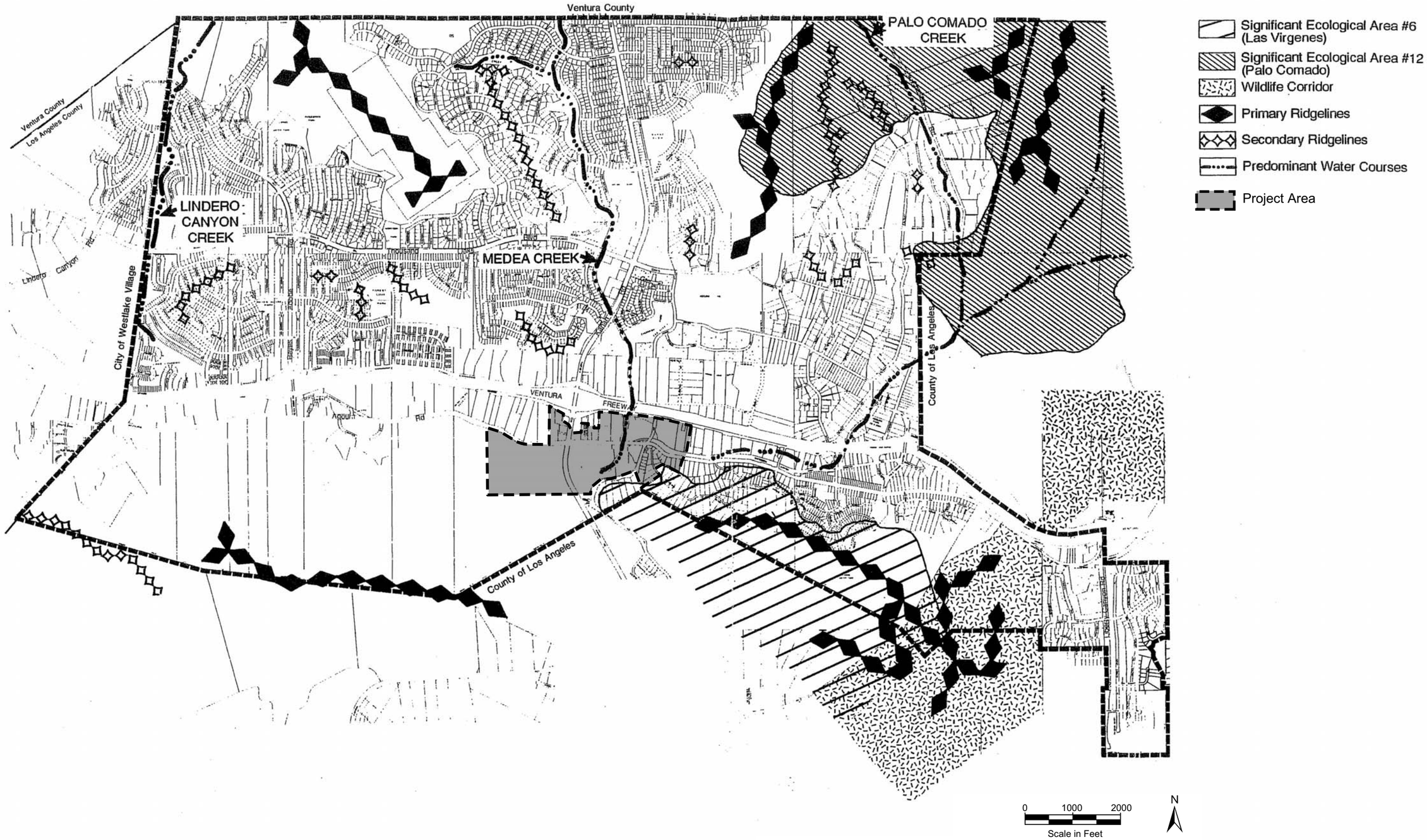
- Plan Area Boundary
- Zones
- Coast Live Oak Woodland
- Southern Willow Scrub/Southern Arroyo Willow Riparian
- Valley Needlegrass Grassland

N

0 250 500 Feet

Special-Status
Plant Communities

Figure 4.3-5



Open Space Resources
Figure 4.3-6

Source: Cotton/Beland Associates

Significant Ecological Areas. The Los Angeles County General Plan (1993) has classified specific geographical regions as Significant Ecological Areas (SEA) based on a variety of biological criteria, including the presence of special status plant, animals, and plant communities. The Specific Plan area is located adjacent to the Las Virgenes SEA #6 (refer to Figure 4.3-6). This area contains a number of plants common to the interior areas of Southern California, but found nowhere else in the Santa Monica Mountains region. The most conspicuous of these is *Juniperus californica*, the California Juniper. Also common on hillsides, but found nowhere else in the Santa Monica Mountains is *Happlopappus linearifolius*, a characteristic shrub of the interior hillsides and desert ranges. *Calochortus venustus,* a species of the interior coast ranges of Central California is only found at two other localities and is here at its southern limit. In addition, this is the only locality in the Santa Monica Mountains where *Dudleya cymosa* grows in full sun. All other populations are found on steep north-facing rocky cliffs. Surrounding vegetation consists of coastal sage scrub and chaparral. The City's policies, as outlined in the Zoning Code, are to require biological studies prior to considering development in an SEA. As part of its General Plan Update, the County of Los Angeles is in the process of updating its SEA areas, and may be changing the boundaries of SEAs in the vicinity of Agoura Hills. It should be noted, nonetheless, that land use regulations regarding SEAs are applicable only to unincorporated county area and not to land within the City's jurisdiction.

f. Wildlife Movements. Natural movement corridors and habitat linkages have been the focus of numerous studies intended to better understand relationships between large animal populations, open space reserves, and natural movement patterns. In general, it has been amply demonstrated that fragmentation of large habitat areas into small, isolated segments reduces biological diversity, eliminates disturbance-sensitive species, restricts genetic flow between populations of organisms, and may eventually lead to local extinctions of entire floral or faunal assemblages. Most land use planning guidelines now recognize the importance of protecting wildlife movement corridors, and seek to retain major linkages intact wherever possible. Defining precise or comprehensively useful corridor alignments or specific spatial and resource requirements is as yet somewhat conjectural, but the accepted basic rule of thumb in planning corridors or reserves is that the benefit increases with size.

Discussions of wildlife corridors and habitat linkages in environmental assessments are often confusing. Most smaller project areas (that is, encompassing fewer than several hundred square miles) do not actually contain major wildlife movement corridors within their boundaries; however, they may lie along or within such a route, or they may contain smaller, secondary movement pathways or trail systems, with or without major corridor connections. The *Missing Linkages: Restoring Connectivity to California Landscape* conference (November 2000) refers to such corridors as "landscape linkages." These are specifically defined in the report from that conference as:

> *"large, regional connections between habitat blocks ("core areas") meant to facilitate animal movement and other essential flows between different sections of a landscape (taken from Soulé and Terborgh 1999). These linkages are not necessarily constricted, but are essential to maintain connectivity function in the ecoregion."*

Such landscape linkages or wildlife corridors may also be considered "choke-points," where the through movement of animals has been restricted. The *Missing Linkages* Conference defined a choke-point as:

> *"a narrow, impacted or otherwise tenuous habitat linkage connecting two or more habitat blocks ("core areas"). Choke-points are essential to maintain landscape level connectivity, but are particularly in danger of losing connectivity function."*

From the standpoint of local project impact analysis, the primary difference between true corridors and secondary pathways is that major movement corridors often are essential to the maintenance of long-term population vigor, reproduction, and genetic viability of one or many species.

Corridors usually connect one large habitat area with another, and while there is no pre-defined size limit for such areas, they most often are on the scale of mountain ranges, valleys or clearly delimited ecological situations (i.e. vernal pools). Animals, which move along corridors as part of evolutionary patterns of migration or seasonal movement, may be "hard-wired" to follow such routes, with little or no ability to modify their behavior in the face of sudden geophysical changes. Actions which impede movement along corridors, may result in population dislocation, reproductive failure and collapse, leading to local extirpations or even total extinction.

Corridors on the largest scale function as genetic movement routes from areas such as the Sierra Nevada to the south Coast Ranges (including the Santa Monica Mountains) or Transverse Ranges, with the passage moving through the Tehachapi Range. In such a case, obstruction of the corridor would isolate the different ranges from one another, but it is difficult to predict over what scale of time this division would manifest itself detectably within floral or faunal populations. Smaller scale corridors, usually serving one or a suite of species may be more easily disrupted, and their dislocation can have more directly observable effects. The Santa Cruz long-toed salamander (*Ambystoma macrodactylum*), an amphibian species which moves seasonally from aestivating sites to breeding ponds, is a classic example. Individual salamanders spend a portion of each year underground as adults, emerging and moving seasonally to breeding ponds some distance away. They follow genetically encoded migration routes to the breeding pools, and interposing hazards, such as roadways, will be crossed without regard for, or awareness of, vehicle traffic. This can lead to disproportionately high roadkill losses annually, significantly reducing the effective reproducing population.

Movement pathways, in contrast to the definition of corridors, may provide routes of travel for highly mobile species, such as mountain lion, coyote, black bear, or bobcat, but by themselves rarely serve to maintain individual population vigor or support the species on a broad geographic scale. Movement pathways can occur within a habitat core area, as routes into such areas, or as a network of movement pathways and habitat patches within a wildlife corridor (landscape linkage). Pathways may become well established, but usually may be altered should obstructions occur if alternative routes are available. Animals moving along pathways may behave in a variety of manners when confronting change and species with good vision or higher levels of intelligence may stop, retreat, and/or seek an alternative route. Depending on species and the nature of the obstruction, particular pathways may be critical to local species survival, especially when alternative routes are lacking. For example, southern Pacific pond

turtle moves from its preferred aquatic habitat into upland breeding locations along paths of low resistance and through suitable habitat. A long linear feature, such as a roadway with vertical-faced curbs higher than its shell, is essentially such a formidable physical barrier to its movement that without an open passageway across or other alternative route, affected populations may no longer breed at all.

Because movement pathways often connect peripheral areas to main corridors and thus play an integral role in linking habitat genetically, it is difficult to generalize about the relative values of corridors and pathways to species dynamics. Both systems are important to maintaining gene flow, and must be considered within impact analyses, but from the standpoint of understanding the magnitude of a particular action, the difference may be critical. Movement pathway systems are the more common sort of linkages encountered on small to moderate-sized development sites, such as the Specific Plan site.

Habitat linkages differ somewhat from corridors and pathways in that they may be identified by the presence of certain resources rather than by areas of linear movement. They may serve as corridors for species, which move from site to site as individuals, but for low-mobility organisms (such as plants, flightless arthropods, amphibians, reptiles, chaparral birds) they may maintain genetic connectivity between larger habitat areas by permitting long-term genetic exchange over a broad area. Many species move only slightly as individuals, staying within a small territory or home range; for these species, directional movement populationally may be incremental and via a network of overlapping home ranges on a year to year basis. While such small and non-directional movements are slow to expand or contract the population, over many thousands of years these species have been able to cross vast areas of otherwise unsuitable habitat. For species such as horned lizards, salamanders, and wrentits, habitat linkages physically connect separate units of similar habitat value by providing buffer zones or areas of marginal contact. Land uses that retain connectivity between moderate-sized patches of similar-value habitats across an entire property and outward beyond the boundaries provide better habitat linkage than do designs that set aside larger, but non-contiguous, areas of habitat.

Linkage zones may extend for many miles between primary habitat areas, and their adequacy for supporting genetic flow often depends upon the combined presence of specific resources, sufficient width (to buffer against adjacent disturbances), and sufficient shelter or cover. Certain specific resources (such as rock outcroppings, vernal pools, or oak trees) may be needed at particular intervals to insure that slower-moving species are able to traverse the linkage zone. For highly-mobile or flying organisms, habitat linkages may consist of a series of discontinuous patches of suitable resources, spaced sufficiently close together to permit movement along a route in a short period of time (i.e. a sequence of ponds and lakes spaced at intervals of several hundred miles, extending for several thousand miles can serve as a habitat linkage system for migratory waterfowl). Both the concept of a wildlife corridor and a linkage zone is contained within the definition of "landscape linkage" as used by the *Missing Links* Conference participants.

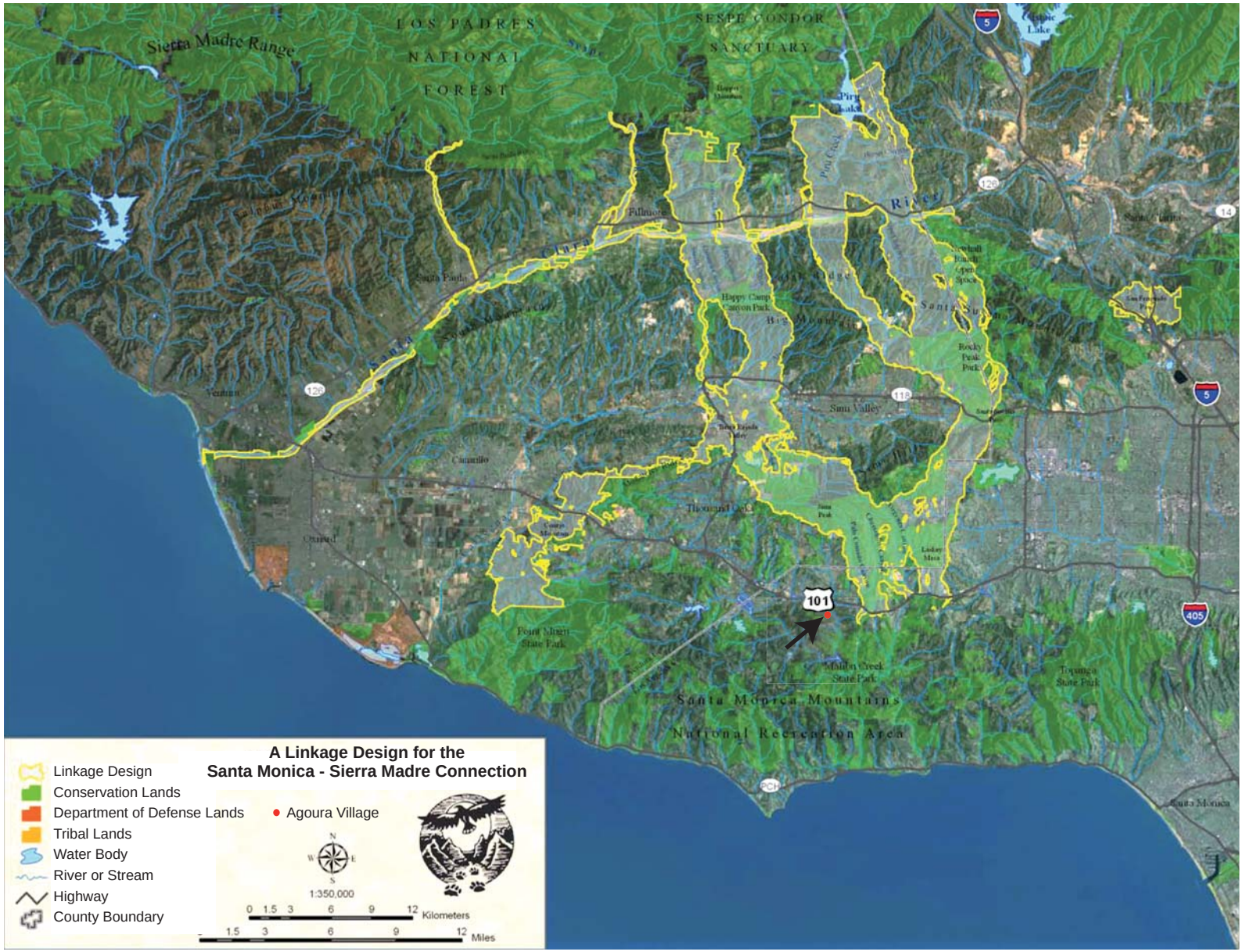
The *Missing Linkages* conference identified a choke-point linkage at Liberty Canyon (SC No. 15) to the east of the Specific Plan Area as one of 60 important habitat linkages in the South Coast Region. This linkage was ranked as moderate with respect to the overall threat to connectivity by conference participants, and was also identified as a "low priority," in part because of the existing preservation of lands north and south of the freeway within the Santa Monica

Mountains National Recreation Area. Prioritization was based on four categories, including the opportunity for the linkage to be preserved, the presence of key species or ecological processes within the linkage, the threat that the linkage could be broken, and the level of certainty that the linkage was of high value. This linkage attaches two general "stewardship zones" identified on the "South Coast Vision Map" contained in the *Missing Linkages'* conference report. The stewardship zones are the Simi Hills (No. 4) and the Santa Monica Mountains (No. 5). The City of Agoura Hills and the Specific Plan Area lie outside of these zones.

In 1996, the National Park Service (NPS) began a long-term project to monitor the distribution, density, spatial ecology, movement patterns, survival, and mortality of bobcats and coyotes in the Santa Monica Mountains and surrounding areas. Data collected in the site vicinity indicate the presence of bobcats in the open spaces to the south, but no mountain lions are known in the vicinity (Riley, April 2005). The NPS work has determined that species and sexes use the landscape differently. Coyotes and male bobcats use developed zones significantly more than adult female bobcats, which are mostly restricted to natural and vegetated habitats. However, even for coyotes and male bobcats, only 25% of their home ranges consists of developed and altered habitat. Thus, despite some ability to adapt to and move through an urbanized landscape, these animals mostly stay in natural zones. Larger, more wary animals such as mountain lion, are further restricted in their movement patterns based on available information. Only a single mountain lion was documented using an underpass or a culvert to cross the local freeways as compared to a total of 122 verified and probable large animal crossings at 15 locations (Ng, 2000). This single crossing was at Corriganville Park along the U.S. 118 between the Simi Hills and the Santa Susana Mountains in an area of natural habitat that is approximately 2 miles wide.

Since the *Missing Linkages: Restoring Connectivity to the California Landscape* conference study, continued analysis has been conducted by the South Coast Wildlands to develop linkage designs for 15 major landscape linkages in the South Coast Ecoregion. To identify potential routes, South Coast Wildlands has used a permeability analysis for three focal species (mule deer, mountain lion, and American badger) and defined a "least cost corridor" or route that costs the least effort on the part of the organism. Final linkage designs were based on the requirements of all 20 focal species chosen for analysis. As discussed above, a major landscape linkage is that which links the Santa Monica Mountains to the mountains of the Transverse Range and the core habitats within the Los Padres and Angeles National Forests. A linkage design for this Santa Monica – Sierra Madre Connection developed by South Coast Wildlands (March 2008) is illustrated in Figure 4.3-7. The Specific Plan area lies to the west of the southern end of this connection so identified.

On a more local scale, the project area contains several well-established animal movement pathways and trails as observable by aerial photography. Most of these pathways were apparently made by rabbit- to deer-sized animals and are located along both sides of Medea Creek in the southern end of the Specific Plan area, and along the west side of Lindero Canyon Creek and the adjacent coastal sage scrub and chaparral habitat to the west. The pattern of these routes appears to follow the upper bank of the creeks and in the western scrub habitat tend to be laterally east to west and generally diffusing over the hillside, creating a network of trails and runs.



Source: South Coast Wildlands. 2008. South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion. Produced in cooperation with partners in the South Coast Missing Linkages Initiative.

A Linkage Design for the
Santa Monica - Sierra Madre Connection

Figure 4.3-7

4.3.2 Impact Analysis

a. Methodology and Significance Thresholds. This analysis was based on the following: a review of previous biological studies prepared for the site and the surrounding area; prior field surveys conducted for individual projects within the Specific Plan area; results of field surveys performed at the site in 2007 and 2008; available literature regarding the existing biological resources within the Specific Plan area, and aerial photography.

The California Environmental Quality Act (CEQA), Chapter 1, Section 21001 (c) states that it is the policy of the State of California to "prevent the elimination of fish and wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities." Environmental impacts relative to biological resources may be assessed using impact significance criteria encompassing CEQA guidelines and federal, state and local plans, regulations, and ordinances. Impacts to flora and fauna may be determined to be significant even if they do not directly affect rare, threatened or endangered species.

For the purposes of this analysis, significant impacts to biological resources may occur if a project action would:

- *Have a substantial adverse effect (i.e. significantly reduce species population, reduce species habitat, restrict reproductive capacity), either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, regulations, or by CDFG or USFWS;*
- *Have a substantial adverse effect (i.e. direct/indirect reduction) on any riparian habitat or other sensitive natural community identified in local or regional plans, policies regulations, or by the CDFG or USFWS;*
- *Have a substantial adverse effect (i.e. direct/indirect reduction) on 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, or hydrological interruption, or other means;*
- *Interfere substantially (i.e. direct/indirect reduction) with the movement of any native 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;*
- *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and*
- *Conflict with the provisions of an adopted Habitat Preservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

b. Project Impacts and Mitigation Measures.

Impact BIO-1 Full build out of the Specific Plan area has the potential to affect sensitive species, including nesting raptors and migratory birds. This is considered a Class II, *significant but mitigable* impact.

The consideration of whether or not a substantial habitat loss occurs to an individual species focuses on those sensitive or special status animals and plants that have been identified by

regulatory agencies because of the cumulative decreases in their ranges, or substantial decreases in overall and local population levels. The degree to which a species has suffered such losses is reflected in the identified status level of that species, beginning with initial listing of an organism as a species of special concern through listing as threatened or endangered under the state or federal Endangered Species Acts. Plants and animals that are listed as endangered have suffered such large losses in range and numbers that the additional loss of even a few individuals or a few acres of suitable habitat could result in the extinction of the animal.

As discussed in the *Setting*, two listed plant species, Agoura Hills dudleya and Lyon's pentachaeta, were observed within the Specific Plan boundaries during the 2007 and 2008 surveys. All observations of Agoura Hills dudleya within the Specific Plan area are located in Zone G and so would be preserved within the proposed open space designation.

Five occurrences of Lyon's pentachaeta were discovered during the 2007 and 2008 surveys, of which two lie within Zone G and so would be preserved. The largest of these includes nearly 1,000 plants, and is included in the area south of Lindero Canyon Creek that was placed into the open space designation per the City Council decision on June 14, 2006. The third occurrence is located along an approximate 2-3 foot wide trail within dense chaparral in an atypical situation within Zone F. The fourth and fifth occurrences are also located in Zone F. The fourth occurrence is located near the north and western boundary of Zone F, roughly 200 feet from Agoura Road and adjacent to an unpaved dirt access road. This occurrence is located within sparse or open areas within mixed chaparral. The fifth occurrence of *P. lyonii* was located within several openings found among dense mixed chaparral generally dominated by chamise and scrub oak. These open areas appear to have formed during some level of human disturbance. An abandoned fence line that has been largely overgrown by chaparral was located adjacent to this occurrence. The fenceline trends west to east from the western boundary of Zone F, ending near a drainage that trends across Zone F from south to north. At this juncture the fenceline turns roughly 90° and extends northward downslope. The northern extent of this occurrence of *P.lyonii* begins at this fence corner. Areas cleared adjacent to the fenceline that have not been overgrown with chaparral appear suitable to *P. lyonii,* which is found along this abandoned structure. It is assumed that all five occurrences are part of the northern extent of the population identified as Unit 6 (Cornell Road Unit) in the critical habitat designation for the Lyon's pentachaeta, but not listed as critical habitat for economic reasons (see USFWS, November 14, 2006). Because the loss of any known population of endangered plants is considered significant, full buildout of Zone F as proposed would have a potentially significant impact.

The 2007 surveys identified two individuals of *Orobanche fasciculata* within the western portion of the Specific Plan area in Zone G-B. These two individuals would not be impacted by development, as this area is proposed to be preserved as open space. Similarly, the one remaining live specimen of California juniper is located within Zone G-E and no impacts to this plant would occur. Special lichen species are not located within the Specific Plan area, and are sufficiently distant from proposed development that may occur within the Specific Plan that no direct or indirect impacts would occur (see Section 5 of the BTA). Two sensitive plant species, round-leaved filaree and rayless ragwort, were not seen during the 2007 or 2008 field surveys but nonetheless could be located on suitable clay soils in Zone G. Suitable habitat for these two plants is not located within the proposed developable zones, and no significant impacts to these plants are anticipated.

As noted above, special-status wildlife identified during the 2007 and 2008 surveys were recorded primarily within the proposed open space portions (Zone G) of the Specific Plan area and tended to be species associated with the riparian habitats along Lindero Canyon and Medea Creeks. Although most of the bird species observed (American bittern, Nuttall's woodpecker, Oak titmouse and Great Blue Heron) are associated with riparian habitats for foraging and nesting, some may also forage within upland habitats (developable Zones B, A south, and F).

Species observed within upland, open, ruderal, and grassland habitats within developable Zones B, A south, and F include: Oak titmouse, Southern California rufous-crowned sparrow, Allen's hummingbird, Nuttall's woodpeckers, Great egret, White-tailed kite, and Cooper's hawk. The oak titmouse is a "special animal" with respect to its nest locations because it is on various "watch lists" due to declining populations; it is not however listed by the CDFG as a species of special concern. It is found in dry, open woods with a range limited mostly to California (from southern Oregon to northern Mexico; Sibley, 2000). It is considered a common resident in a variety of habitats, but is typically associated with oaks. It sometimes forages and breeds in riparian areas, and ventures into residential areas (Zeiner, et. al., 1990). Development of the site as proposed under the Specific Plan would reduce nesting opportunities for this species, but given the large amount of suitable habitat still present in the Santa Monica Mountains and throughout its range, impacts would not be considered significant.

The southern California rufous-crowned sparrow occurs along the coastal slope of the Coast Ranges from Santa Barbara County to Northwestern Baja California. It typically occurs in coastal sage scrub and chaparral, particularly in rocky areas with native perennial bunch grasses. Its preferred habitat at the site is primarily the proposed open space areas of Zone G; therefore, development as proposed under the Specific Plan would not be expected to cause a significant reduction in the local population.

Allen's hummingbird is a California "special animal" and, like the oak titmouse, is not listed by the CDFG as a species of special concern; however it's nesting location is afforded special consideration. The species, found only along the coastal boundary of North America, is thought to be in decline. The male generally sets up a territory in open areas of coastal scrub vegetation or riparian shrubs, while the female selects nest sites in more densely vegetated areas. Development of the Specific Plan would avoid the riparian forests, but could reduce densely vegetated scrub and chaparral which may provide nesting habitat for this species. Like the oak titmouse, however, given the large amount of suitable habitat still present in the Santa Monica Mountains and throughout its range, impacts would not be considered significant.

Nuttall's woodpecker is found primarily in oak woodlands and in riparian woods where they nest in tree cavities. Just as the oak titmouse and Allen's hummingbird, the Nuttall's woodpecker is a "Special Animal", and considered of moderate conservation importance, primarily because of its limited range. There is limited oak woodland habitat within the Specific Plan area; however, most of the oak trees are located within Zone G and would be protected as open space. Impacts to this species would not be considered significant.

One great egret was seen foraging within the open area of Zone B; however, this species would not be expected to utilize such an area for nesting. Great egrets generally forage and nest within wetland and riparian habitats and in croplands and irrigated pastures. Similarly, a great blue heron was seen foraging in Zone G. Both birds are relatively common throughout California, and are considered a Special Animal only with respect to their limited nesting habitat, which are large rookeries comprised of multiple nests in tall trees. No rookeries are

located within the Specific Plan area and site development would have no effect on breeding habitat for these species. Great egret and great blue heron would be expected to continue to forage along the riparian areas within the site after Specific Plan buildout. No significant impacts to these species are associated with Specific Plan buildout.

The white-tailed kite, sharp-shinned hawk, and Cooper's hawk require large areas of foraging habitat, typically about 1,000 acres for an individual of each species (Zeiner, et al, 1990). Additional suitable foraging habitat is located within the project area, Zone G, or in adjacent lands near the project site. These species would be anticipated to utilize nearby, or adjacent, grasslands and open chaparral and coastal sage scrub upon development of the Specific Plan. The sharp-shinned hawk, while not seen at the site, is a wintering species in this area, and would not breed at the site. Suitable winter foraging area for this species would be preserved within the open space portions of the site in Zone G. After Specific Plan buildout, it is possible for the Cooper's hawk to breed in the riparian woodlands of Lindero Canyon and Medea Creeks and forage in the open space areas of Zone G. The white-tailed kite can be frequently seen foraging in small grassland habitat patches, particularly along freeways, and would be expected to continue to forage in the open areas of Zone G after Specific Plan buildout and potentially breed along Medea and Lindero Canyon Creeks. No significant project effects to these species would occur based on CEQA significance criteria.

Coastal western whiptail generally prefers open or rocky areas with little vegetation, but may also be found within shrub, oak, or riparian habitats where invertebrate prey may be prevalent. Three whiptails were observed near Lindero Canyon Creek within Zone G in 2007 and two whiptails were observed in Zone F in 2008. Given the low habitat suitability of most of the developable area and the higher suitability of the much larger open space areas, the proposed development action would not have a significant effect on this subspecies.

The southwestern pond turtle, a California Species of Special Concern, is also associated with the riparian areas within the Specific Plan, but requires adjacent open sparsely vegetated areas for its nesting activity. Loss of suitable basking sites, nesting habitat, interactions of nesting females with people and pets, and the introduction of non-native turtles are considered the most important effects with respect to pond turtles adjacent to urban areas (Spinks, et al., 2003). While the instream pond turtle habitat would be preserved in Zone G, indirect effects related to development could have a significant impact on the local population.

Several other special status wildlife species not observed during the 2007 surveys could nonetheless be present within the project site. Those with the greatest potential to be present are the San Diego horned lizard, burrowing owl (winter only), and two-striped garter snake (seen along the creek in prior studies). Discing for weed control substantially reduces horned lizard populations as they rely on cryptic coloration to avoid predation and no horned lizards would be anticipated to be present in those areas of the Specific Plan that are regularly disced. Higher quality habitat for this lizard is present in Zone G and further to the south outside the City limits and most of the local population would be anticipated to be located in that area and not affected by the proposed development. Burrowing owl has not been observed within the Specific Plan area, though it does occur as a winter migrant in the Santa Monica Mountains (CBD et al. 2003). Given the lack of recorded observations in the developable portions of the site and the extensive habitat present to the south, no significant effect would be anticipated. Two-striped garter snake is closely associated with the aquatic habitat, and preservation of these areas in Zone G would serve to protect this species.

Santa Monica Mountains grasshopper was identified as potentially occurring within the Specific Plan area on bare hillsides and along dirt trails in chaparral within Zone G. Only four locations of this grasshopper are contained in the CNDDB and these extend from the Cornell area south of the site to the western edge of the Santa Monica Mountains. Grasshoppers captured during the 2007 field survey were identified sufficiently to eliminate their identification as this species. Given the large amount of more suitable habitat outside the Specific Plan, no significant impacts to this sensitive species would be anticipated.

Although a large portion of the Specific Plan area is highly disturbed, there is the potential for additional sensitive plant species to be found within the project area that were not observed during the 2007 or 2008 sensitive plant surveys. Specifically, given the poor rainfall experienced in 2007, the potential presence of rayless ragwort and round-leaved filaree could not be ruled out, though these species are only likely to be found in the open space area of Zone G. Also, larger colonies of Lyon's pentachaeta may be present within the suitable habitat in Zone G-B on Ladyface Mountain.

Build out of undeveloped properties within the Specific Plan area could result in the loss of habitat that is marginally suitable for both sensitive plants and animals. The significance of the change in land use from ruderal grassland, woodland, riparian, chaparral, and coastal sage scrub habitats to urban uses will vary based on individual site conditions within the Specific Plan area. However, the anticipated impacts to sensitive species are considered potentially significant, but mitigable.

Mitigation Measures. The Agoura Village Specific Plan includes a number of development standards that would reduce the biological impacts related to site grading, natural resource protection (i.e. tree and stream preservation), and landscaping and vegetated buffer areas from designated scenic roadways. In addition to the items outlined in the Specific Plan, implementation of the following mitigation measures is required to reduce the direct loss of individual special status animals and to maintain compliance with City requirements and California Fish and Game Code, the Migratory Bird Treaty Act and the Federal Endangered Species Act.

BIO-1(a) **Sensitive Plant Survey and Protection Plan.** Prior to approval of individual development applications within the residual natural areas of Zones A south, B, E, and F, surveys for sensitive plant species, including but not limited to Agoura Hills dudleya and Lyon's pentachaeta, should be performed by a qualified plant ecologist. These surveys shall be performed during the blooming period (April - June). If a sensitive species is found, avoidance shall be required unless the applicant provides substantial documentation that avoidance would not be feasible or would compromise the objectives of the Specific Plan. For Lyon's pentachaeta and Agoura Hills dudleya, avoidance is defined as a minimum 200 foot setback unless an active maintenance plan is implemented for the known occurrence. With implementation of an active maintenance and management program, the buffer width may be reduced further based on review and approval by the jurisdictional agencies (USFWS and/or CDFG). For other sensitive species avoidance shall be determined based on the specific plant pursuant with the recommendations of a qualified plant ecologist, and with the coordination of USFWS and/or CDFG for state or federally listed plants. The maintenance

and management plan must be approved by the appropriate jurisdictional agencies prior to issuance of a grading permit.

If avoidance is not feasible, on-site mitigation is preferred if suitable, unoccupied, habitat is present that can be isolated from human disturbance. Otherwise, an offsite location would be considered; the Ladyface Mountain Specific Plan area may contain appropriate habitat and may be a preferred location. A mitigation restoration plan shall be prepared by a qualified plant ecologist that identifies the number of plants to be replanted and the methods that will be used to preserve this species in the on- or off-site mitigation location. The plan shall also include a monitoring program so that the success of the effort can be measured. Restoration efforts shall be coordinated with applicable federal, state, and local agencies. The required level of success for Agoura Hills dudleya and Lyon's pentachaeta shall be defined at a minimum as a demonstration of five consecutive years, or a period as deemed appropriate by the permitting agencies (USFWS and/or CDFG), of growth of a population equal to or greater than that which would be lost due to the project. This level of success shall be achieved prior to removal of the impacted population. Success criteria for other sensitive species will be determined on an individual basis pursuant with the recommendations of a qualified plant ecologist, and with the coordination of USFWS and/or CDFG for state or federally listed plants. When applicable the mitigation restoration plan shall be submitted to the appropriate regulatory agencies for review and approval, with the approved plan then submitted to the City of Agoura Hills prior to issuance of a grading permit for the area of concern.

BIO-1(b) **Sensitive Wildlife Survey.** Not more than two weeks prior to ground disturbing construction within the Specific Plan area, a preconstruction survey for the two-striped garter snake, burrowing owl, western pond turtle, sensitive bat species, and any other special-status species shall be conducted by a qualified biologist and submitted to the City Planning and Development Department prior to beginning construction and/or commencement of any disturbance. If a species is found, avoidance is the preferred mitigation option. If avoidance is not feasible these species shall be captured, when possible, and transferred to adjacent appropriate habitat within designated open space areas either onsite or directly adjacent to the project area. This shall be performed only by a CDFG approved biologist. The CDFG and City of Agoura Hills shall be formally notified and consulted regarding the presence of these species onsite. If a federally listed species is found prior to grading of the site, the USFWS shall also be notified. Only a USFWS approved biologist would be allowed to capture and relocate these animals.

BIO-1(c) **Bird Nesting Surveys.** If vegetation clearing (including tree pruning and removal) or other project construction is to be initiated during the bird breeding season (February 1 through August 31), pre-construction/grading surveys shall be conducted by a qualified ornithologist (a person with a biology degree and/or established skills in bird recognition). Surveys shall

begin 30 days prior to initial disturbance activities and shall continue weekly, with the last survey being conducted no more than three days prior to the initiation of clearance/construction work. If bird species are observed nesting within 500 feet of construction/grading areas, all construction or grading activities will be postponed or halted at the discretion of the biologist until the nest is vacated and the juveniles have fledged.

Limits of construction to avoid a nest should be established in the field with flagging and stakes or construction fencing. This distance shall be at least 300 feet for raptors and at least 100 feet for all other bird species. Construction personnel should be instructed on the sensitivity of the area. The applicant should record the results of the recommended protective measures described above to document compliance with applicable State and federal laws pertaining to the protection of native birds.

Significance After Mitigation. The mitigation measures identified above would reduce impacts to sensitive species to less than significant.

Impact BIO-2 Build out of the Specific Plan area has the potential to adversely affect sensitive communities onsite. This impact is considered Class II, *significant but mitigable*.

The CDFG lists valley needlegrass grassland and southern arroyo willow riparian/southern willow scrub as natural communities of special concern in California (September 2003). This classification denotes communities that are either known or believed to be of high priority for inventory in the CNDDB. As discussed in the *Setting*, there are known occurrences of valley needlegrass grassland and southern arroyo willow riparian/southern willow scrub within the Specific Plan area. Potential development could result in the direct loss, degradation, and isolation of individuals within these community classifications, or indirectly cause a decrease in the community through the introduction of invasive species.

Native perennial grasslands were delineated in two locations within the Specific Plan area. The first location is within Zone E, located south of the oak tree cluster adjacent to Cornell Road and west of the dirt access road within this parcel (Figure 4.3-5). It is about 0.45 acres in area and is surrounded by non-native grassland to the south and west, and disked areas (ruderal field) to the north and east. Due to the location of this grassland, it will likely not be avoidable under feasible development scenarios in Zone E. Loss of this native grassland is considered a significant impact that requires mitigation.

The other native grassland identified within the Specific Plan area is located west of Kanan Road, in Zone G-B. It is situated between Kanan Road and Lindero Canyon Creek, and comprises 0.46 acres with a mean 32 % cover of valley needlegrass. This grassland is thought to be either a translocated or previously unmapped portion of the grassland originally mapped in the Creekside EIR (1996). The grassland mapped in the 1996 Creekside EIR was recorded south of Lindero Canyon Creek and totaled 0.2 acres in area, but the 2007 surveys determined that this area is disturbed non-native grassland with adjacent chaparral, riparian scrub, and several oaks. It is possible that the original grassland was erroneously mapped, or activity in this area has replaced the former native grassland with one dominated by non-natives. The grassland

delineated in 2007 is twice the size of the previously recorded population and is located in Zone G-B, adjacent to special-status southern willow scrub habitat along Lindero Canyon Creek. Both the formerly mapped location and the larger grassland delineated in 2007 are located within Zone G and would not be directly impacted by the proposed development scenario.

The City Council on June 14, 2006 included a change to the zone area map, consistent with implementation of Mitigation Measure BIO-1(A) in the 2006 FEIR, that shifted the line of Zone G to the north side of Lindero Canyon Creek, thereby placing all but about 300 linear feet of riparian habitat (about 150 lineal feet of arroyo willow scrub) within the protected open space zone. This action maintains the connectivity of Lindero Canyon Creek and its biological resources to the open space of Ladyface Mountain Specific Plan area. While this has substantially reduced by avoidance the acreage of potential impacts to this sensitive community, due to its rarity and expected regional decline, the project-related loss and isolation of southern arroyo willow riparian/southern willow scrub in Zone B is considered locally and regionally significant. In addition, the ponded area within Zone B contained southwestern pond turtles and a large area along Lindero Canyon Creek contains sandy soil habitat suitable for nesting pond turtles. As a total of seven pond turtles were seen in Lindero Canyon Creek and Medea Creek during the 2007 wildlife surveys, these areas are important to sustain and recover the population of this California Species of Special Concern.

Biologists commenting on the 2006 EIR have opined that the residual oak tree stands in Zone E still constitute the sensitive Valley Oak Woodland/Savanna community, and that the potential loss of approximately 2.41 acres of this community could be considered a significant impact of the Specific Plan. Several oak tree stands are located within Zones B, E and F that are residual elements from a once much larger Valley Oak Woodland/Savanna. While these oak stands have lost much of their ecological value as a "community;" the oak trees in themselves are important on an individual basis as wildlife habitat. For instance, a small stand of valley oaks (0.25 acre) west of Lindero Canyon Creek in Zone B retains much of its connectivity with the adjacent natural areas and Lindero Canyon Creek, but would not be considered a Valley Oak Woodland or community due to its small size. Impacts to these trees and other residual oak stands are given protection under the City's Oak Tree Preservation Guidelines and are considered further under Impact BIO-3, which discusses effects on individual oak trees and mitigation for related Specific Plan impacts. Refer to Mitigation Measures 3(a) – 3(d) which address impacts on individual oak trees.

Mitigation Measures. Although the Specific Plan would implement several general natural resource protection standards, build out under the proposed Specific Plan could potentially generate adverse impacts on native grasslands and southern arroyo willow riparian/southern willow scrub. Therefore, in addition to those measures outlined in the Specific Plan, the following mitigation measures would be required to reduce impacts to a less than significant level.

BIO-2(a) **Buffer Zones.** Except in cases of Lyon's pentachaeta and/or Agoura Hills Dudleya, which are addressed in MM BIO-1(a), a minimum buffer zone of 50-100 feet of native vegetation shall be maintained between urban development and adjacent sensitive native habitats. This includes those areas located along the unchannelized portions of Medea and Lindero Canyon Creeks within the Specific Plan boundaries. Such vegetation should be

sensitive to, and similar in nature to, the natural environment surrounding the sensitive native habitats. A minimum buffer of 50 feet (or greater if required by the CDFG) from the top of bank and/or edge of riparian cover (whichever is greater) shall be established for the protection of southwestern pond turtle where preferred nesting habitat (exposed, southerly-facing slopes vegetated with open scrub or sparse grassland vegetation, dense soils with a high silt and clay fraction, and less than 25% slope) is present. No heavy equipment or ground disturbance shall enter the buffer zone during the nesting period of SWPT (April-August). Further, equestrian trails shall be located no less than 10 to 20 (preferred) feet from the edge of the exterior riparian canopy.

BIO-2(b) Prior to approval of individual development applications within the southern portion of the Specific Plan area, surveys for native grasslands shall be performed by a qualified biologist (with acceptance by the City Planning and Community Development Department Staff). If native grasslands are found, avoidance shall be required unless the applicant provides substantial documentation that avoidance would not be feasible or would compromise the objectives of the Specific Plan. Avoidance shall be planned and enforced with a **Native Grassland Protection Program**. If the applicant demonstrates that avoidance would not be feasible or would compromise the objectives of the Specific Plan, on-site mitigation would be required if suitable habitat is present and can be isolated from human disturbance. In this event, a **Native Grassland Restoration Plan** shall be prepared and implemented.

Native Grassland Protection Program. If native grasslands are found onsite and avoidance is feasible, a native grassland protection program shall be prepared by a qualified biologist. The protection program shall be submitted for review and approval as part of the application process with the City Planning and Development Department. In addition, final plans shall be subject to review and approval by the City Planning and Community Development Department prior to issuance of a grading permit. The protection program shall include, but not be limited to, the following components:

- A qualified biologist shall map the current extent of habitat; and
- The location of native grassland habitat outside of the construction footprint shall be fenced in the field. Fencing shall be depicted on final grading and building plans. The location of the habitat and fencing shall be done under the direction of a qualified biologist (with acceptance by the City Planning and Community Development Department Staff); and
- All ground disturbances, including grading for buildings, accessways, easements, subsurface grading, and utilities shall be prohibited within the fenced native grassland area.

Native Grassland Restoration Plan. If avoidance is not feasible, on-site mitigation is preferred if suitable habitat is present that can be isolated from

human disturbance. In this event, a restoration plan shall be prepared by a qualified plant ecologist that identifies the location and acreage to be replanted and the methods that will be used to preserve this community in that location. The plan shall also include a monitoring program so that the success of the effort can be measured. The required level of success, at a minimum, shall be defined as a demonstration of three consecutive years of at least 50% native grass dominance within the mitigation area. If off-site mitigation is proposed, the Ladyface Mountain Specific Plan area may contain appropriate habitat and may be a preferred location. Restoration efforts shall be coordinated with applicable federal, state, and local agencies (including LA County Fire Department). The restoration plan shall be submitted for review as part of the application process with the City Planning and Development Department. In addition, final plans shall be subject to review and approval by the City Planning and Development Department prior to issuance of a Grading Permit.

Native grassland habitat shall be replaced at a minimum ratio of three to one for native grassland lost and shall utilize native species from onsite habitats. Target sites for mitigation plots shall be sampled for soil type and habitat criteria sufficient for the establishment and growth of the native grassland lost. No species identified as invasive on the CNPS, Channel Islands Chapter Invasive Plants List (1997) shall be utilized in the landscape plans. The plan shall include, but not be limited to, the following components:

- Performance criteria (i.e., what is an acceptable success level of revegetation to mitigate past impacts);
- Monitoring effort (i.e., who is to check on the success of the revegetation plan, and how frequently);
- Contingency planning (i.e., if the effort fails to reach the performance criteria, what remediation steps need to be taken);
- Irrigation method/schedule (i.e., how much water is needed, where, and for how long);
- Plant species, seed mixes, weed suppression and planting methodology

From preliminary observations, it appears that potential target areas to perform mitigation for the loss of native grassland exist on the northern slopes of Ladyface Mountain, within the open space of Zone G (the area formerly identified in the 1996 Creekside EIR as valley needlegrass grassland and located south of Lindero Canyon Creek) in the southwest corner of the Specific Plan boundary. These areas need testing to confirm that they meet the soil and habitat requirements for native grassland species. If sufficient mitigation area does not exist onsite, off site mitigation or in lieu fees to an off site local or regional mitigation bank acceptable to the City of Agoura Hills shall be done.

BIO-2(c) Southern Willow Scrub/ Southern Arroyo Willow Riparian Protection. Based on a review of pending development applications near Lindero

Canyon Creek, it is anticipated that the existing southern willow scrub/ southern arroyo willow riparian ~~forest~~ may be ~~heavily~~ encroached upon; however, avoidance of these areas is required. If avoidance is feasible, the following Riparian Habitat and Creek Protection Program shall be implemented in order to reduce impacts to this sensitive community. If the applicant demonstrates that avoidance would not be feasible or would compromise the objectives of the Specific Plan, on-site mitigation is preferred and shall be implemented through a Riparian Habitat Restoration Plan, as outlined below.

Riparian Habitat and Creek Protection Program. A riparian habitat and creek protection program shall be prepared and implemented for any future developments proposed within the Specific Plan area adjacent to Lindero Canyon or Medea Creeks. These shall be prepared by a qualified biologist (with acceptance by the City Planning and Community Development Department Staff) and shall include specific measures as dictated by CDFG. The program shall, to the extent feasible, avoid encroachment into any riparian areas. The program shall include, but not be limited to, the following components:

- Riparian areas shall be indicated and fenced off on all grading and construction plans. The location of the habitat and fencing off shall be done under the direction of a qualified biologist (with acceptance by the City Planning and Community Development Department Staff). Construction personnel shall be informed of the sensitivity and location of riparian habitat on the project site; and
- All ground disturbances including grading for buildings, accessways, easements, subsurface grading, and utilities shall be prohibited within the fenced riparian area.

The protection program shall be submitted for review as part of the application process with the City Planning and Community Development Department. In addition, the final plans shall be subject to review and approval by the City Planning and Community Development Department prior to the issuance of a Grading Permit.

Riparian Habitat Restoration Plan. However, if avoidance is not feasible, on-site mitigation is preferred over off-site mitigation but both mitigation measures could be effective at reducing the impacts to less than significant. If avoidance is not feasible, a restoration plan shall be prepared by a qualified plant ecologist. The preferred area to perform mitigation for the loss of riparian forest exists within the southern reach of the channelized and concrete lined portion of Medea Creek, located directly south of Agoura Road and also in the vicinity of Lindero Canyon Creek. If development were to encroach upon this sensitive community, the appropriate permits would be necessary from the Army Corps of Engineers, the California Department of Fish and Game, and the Los Angeles Regional Water Quality Control Board. Individual applicants for projects located south of Agoura Road and that

contain riparian habitat areas, shall submit a Riparian Habitat Restoration Plan for review by the City Planning and Community Development Department and, as necessary, a City approved biologist or qualified landscape specialist, as part of the initial project application. Riparian habitat shall be replaced at a minimum ratio of 2.0 acres for every 1.0 acre of riparian habitat lost. However, additional mitigation may be required by the CDFG. The restoration plans shall include, but not be limited to, the following components:

- Performance criteria (i.e., what is an acceptable success level of revegetation to mitigate past impacts);
- Monitoring effort (i.e., who is to check on the success of the revegetation plan, and how frequently);
- Contingency planning (i.e., if the effort fails to reach the performance criteria, what remediation steps need to be taken); and
- Irrigation method/schedule (i.e., how much water is needed, where, and for how long).

The required level of success, at a minimum, shall be defined as a demonstration of three consecutive years of growth of a population double the size of that which would be lost due to the project. The final restoration plan shall be subject to review and approval by the City Planning and Community Development Department prior to Grading Permit issuance.

Significance After Mitigation. Implementation of the above mitigation measures would reduce direct and indirect impacts to sensitive communities to a level considered less than significant.

Impact BIO-3 Build out within the Specific Plan area may require removal of oak trees and indirectly affect additional oaks. This is considered a Class II, *significant but mitigable* impact.

Oak trees (*Quercus* sp.) within the City of Agoura Hills are protected by the City's Oak Tree Ordinance (City Council Resolution #374). For an oak tree larger than two inches in diameter, measured 3.5 feet above the tree's natural grade, a permit is required to cut, move, or remove any oak tree. In addition, a permit is required for encroachment within a qualified oak tree's protected zone, which is defined as extending five feet beyond the dripline and in all cases shall be at least 15 feet from the trunk. According to the oak tree ordinance, reasonably healthy oaks in new commercial properties shall be replaced with the same species as that removed, per the quantities and dimensions specified in the Zoning Code.

Two preliminary oak tree surveys have been performed within the Specific Plan area. The area located south and west of the intersection of Kanan and Agoura Road was surveyed in 1997, (Melendrez Associates et al.) for the Creekside EIR. The area located south and east of the intersection of Cornell and Agoura Road was surveyed in 2004 (TREES, etc.) for a pending development application for that property. Although these are preliminary surveys, they are described herein to provide an indication of the potential impact to oak tree resources within the Specific Plan area.

The 1996 Creekside EIR reported 93 oaks within the Creekside project area. This area included approximately 17 acres of the 23 acres within the western-most boundary of the Specific Plan area (Zone B and Zone F located south and west of the intersection of Kanan and Agoura Road). Of the 93 oaks reported within the Specific Plan area, the previously proposed project would have involved removal of approximately 53 trees and encroachment upon 7 trees. It was estimated that 33 trees would not be impacted. Thus 55% of the total trees at this location would have been directly affected by the Creekside project. Future development within this area of the Specific Plan would be expected to involve similar impacts to oak tree resources as those described for the former Creekside project.

TREES, etc. (2004) prepared an oak tree survey for the 6.8 acres of undeveloped land located south and east of the intersection of Cornell and Agoura Road. This survey identified a total of 411 oaks within and directly adjacent to this area. The oak tree survey identified 61 coast live oaks and valley oaks on this property, and about 350 scrub oaks on or immediately adjacent to this area. Of the 61 oaks on this property, 24 were coast live oaks; 35 were valley oaks; and 2 were scrub oaks. Based upon preliminary site plans prepared for that site which illustrate a possible future development scenario future development would directly remove 25 oak trees and would potentially encroach into the tree protection zone of 10 additional oaks. Given this or a similar development scenario for that property, it is estimated that about 41% of the 61 oak trees on this property (9% of the 411 oaks either onsite or in the immediate site vicinity) would potentially be directly or indirectly affected by project development at this location.

An oak tree study was also conducted during recent field surveys. Zones were systematically traversed, with special attention paid to the dense riparian woodlands along Medea and Lindero Canyon Creeks in Zones B, G-B, and G-A, to ensure that all oak individuals were located and mapped. Data was collected for oak individuals greater than 2″ as measured at between 3.5 to 4.5 feet above natural grade. This range was used due to the difficulty in accessing certain trees within the Specific Plan area. Where specific measurements could not be taken, diameter estimates were made accounting for the range in height of measurement. In addition, grade differential on different sides of certain trees alters this height measurement. It should be noted there is generally very little difference in the DBH measured at either exact height; thus, marginal trees close to meeting the 2″ requirement were included to provide a conservative estimate. Data was also collected for smaller valley, coast live, and scrub oaks in order to estimate general recruitment within the Specific Plan area. The geographical location of individual trees (excluding those areas of scrub oak chaparral) was recorded using a GPS system. Per communications with the Agoura Hills Planning and Community Development Department oak tree consultant, Kay Greeley, where *Q. berberidifolia* clusters consisted of numerous large shrubs, a polygon was drawn around the edge of canopy for each cluster and a corresponding estimate of trees within each cluster was made. Table 4.3-4 contains the results of the recent surveys. Additionally, several large clusters of scrub oaks were located in Zones E, F and G-B that are best described as shrubs rather than trees as they do not have a single main trunk. Nonetheless, these large shrubs would have multiple branches with diameters at 3.5 feet above the ground of 1.5 to 2.5 inches and so are subject to the City's Tree Ordinance. The largest numbers (87%) of scrub oak shrubs are in Area F, with an estimated total of 1,244 scrub oaks in the scrub oak chaparral, as shown in Table 4.3-4.

Table 4.3-4 – Oak Inventory Summary for Agoura Village Specific Plan Area

	A South	B	D West	E	F	G-A	G-B	Total
Valley Oak	16	50	3	33	8	36	39	185
Coast Live Oak	4	2	0	14	19	141	33	213
Scrub Oak	0	0	0	52	2	0	0	54
Subtotal	*20*	*52*	*3*	*99*	*29*	*177*	*72*	*452*
Scrub Oak Chaparral (estimate) [1]		61			1080		103	
Total	**20**	**113**	**3**	**99**	**1109**	**177**	**175** [2]	**1**

Site specific design within the development areas could potentially preserve many of the trees located within the development zones. However, on a worst case basis, the Specific Plan could eliminate all oaks in the development zones, which would total 110 valley oaks, 39 coast live oaks, and 54 scrub oaks, or about 44% of those inventoried. The majority of the scrub oaks associated with the scrub oak chaparral in Zone F and the west end of Zone B are also assumed would be lost under this scenario, totaling approximately 1,141 scrub oak shrubs. With respect to just valley oaks and coast live oaks, 59% of the valley oaks and 18% of the coast live oaks identified would be removed if no trees are preserved in the developable zones. This is considered a significant loss of overstory, shrub and understory plants associated with these individual trees. Impacts to oak trees within the Specific Plan area are considered significant, but mitigable.

Mitigation Measures. The applicant is required to obtain a permit from the City for the removal of onsite oak trees and comply with the provisions of the permit. It should be noted here that BIO-3(d) was included in the Mitigation Monitoring and Reporting Program for the Final EIR in response to a comment on the Draft EIR. Although this comment was addressed and an additional mitigation measure drafted for inclusion in the MMRP, it was not within the final text of Section 4.3 of the EIR. It is therefore mentioned herein for inclusion in the Revised and Recirculated EIR. In addition, the following measures to mitigate impacts relating to the loss of the oak trees shall be implemented.

BIO-3(a) **Oak Tree Protection and Preservation.** Individual project applicants shall submit the results of an oak tree survey and an Oak Tree Report, including an Oak Tree Preservation Program, for review and approval by the City's oak tree consultant as part of the project application. Individual projects shall be developed and operated in compliance with the approved Oak Tree Preservation Program and any other conditions determined to be necessary by the City oak tree consultant. The program shall include, but not be limited to, the following components:

- No grading or development shall occur within 5 feet from the driplines of oak trees that occur in the construction area.
- All specimen oak trees within 25 feet of proposed ground disturbances shall be temporarily fenced with chain-link or other material satisfactory to the City throughout all grading and construction activities. The fencing shall be installed six feet outside the dripline of each specimen oak tree, and shall be staked every six feet.
- No construction equipment shall be parked, stored or operated within six feet of any specimen oak tree dripline.
- No fill soil, rocks, or construction materials shall be stored or placed within six feet of the dripline of a specimen oak tree (pervious paving and other materials are allowed, as approved by the City).
- No artificial surface, pervious or impervious, shall be placed within six feet of the dripline of any specimen oak tree, except for project access roads.
- Any roots encountered that are one inch in diameter or greater shall be cleanly cut. This shall be done under the direction of a City approved arborist/oak tree consultant.
- Any trenching required within the dripline or sensitive root zone of any specimen tree shall be done by hand. In addition, trenching n the protected zone needs to preserve roots over 1 inch by tunneling.
- No permanent irrigation shall occur within the dripline of any existing oak tree.
- Any construction activity required within three feet of a specimen oak tree's dripline shall be done with hand tools.

BIO-3(b) **Grading Plan.** The number of oak trees requiring removal and the number of trees that will be encroached upon by grading and project development shall be confirmed by the City's oak tree consultant with the final grading plan. The plan shall also indicate requirements for retaining walls, tree wells, tree drainage requirements, and pruning as part of the plan.

BIO-3(c) **Oak Tree Replacement.** For impacts involving 10 percent or less of oak tree removal resulting from grading and project development, each oak tree shall be replaced with specimen oak trees of the same species as the tree that was removed at a ratio and dimension specified in the City's Zoning Ordinance. This mitigation is to occur onsite. For impacts involving greater than 10 percent of oak tree removal resulting from grading and project development, mitigation shall either be onsite with the requirements as listed above, or an in-lieu fee may be paid to the City to be used to acquire land and/or install oak trees on another site, preferably in as close proximity to the area of removal as possible. The sum of the calipers of all oak trees planted must be at least equal to that removed. The locations of the replanted trees shall be indicated on the project plans submitted to the City for review by the City's oak tree consultant. Trees shall be planted so that mature trees will have a continuous canopy. Every attempt shall be made to plant oak trees according to species-specific habitat requirements: valley oaks at lower

elevations in alluvial soils; and coast live oaks on mesic north-facing slope locations. Each oak tree removed by grading and project development shall be replaced with two 36-inch box and two 24-inch box specimen oak trees of the same species as the tree that was removed. Additionally, all naturally occurring native vegetation in the areas proposed for oak tree mitigation shall be identified. This includes surveys for ephemeral plants and bulbs. Oak tree planting shall not cause the removal or destruction of existing native vegetation without replacement in the same locations.

BIO-3(d) **Oak Planting Arrangements.** Where appropriate pursuant to the recommendations of the City's oak tree consultant, replacement oaks for the removal of individual oak trees shall be clustered in an attempt to replace oak woodland habitat removed. Trees shall be planted so that mature trees will have a continuous canopy. Every attempt shall be made to plant oak trees according to species-specific habitat requirements: valley oaks at lower elevations in alluvial soils and coast live oaks on mesic north facing slope locations.

Significance After Mitigation. Implementation of the recommended mitigation measures would reduce impacts to oak trees to a level considered less than significant. Nevertheless, the City would need to approve a variance for oak tree removals if individual projects would remove more than 10% of the oaks onsite for any given development.

Impact BIO-4 Individual project development could disturb wetlands and areas under the jurisdiction of the CDFG and Corps. This is considered a Class II, *significant but mitigable* impact.

Freshwater wetland areas within the project area are located within Medea and Lindero Canyon Creeks. Buildout of new development within the Specific Plan area could potentially disturb portions of these waterways. In addition, the project would potentially restore a concrete-lined rectangular open channel portion of Medea Creek directly south of Agoura Road. Each of the waterways would be subject to Army Corps of Engineers and California Department of Fish Game jurisdiction.

Areas that are within Corps of Engineers and CDFG jurisdictions are defined as "waters of the United States" under the Clean Water Act and as "waters of the state" under Section 1600 *et seq* of the Fish and Game Code. All or a portion of a watercourse under the "Ordinary High Water Mark" (OHWM) is also federally protected under the subheading of wetlands as defined by Section 404 of the Clean Water Act. As discussed in the *Regulatory Setting,* the Fish and Game Code (Streambed Alteration Agreements) gives the CDFG regulatory authority over work within the stream zone (which could extend to the 100-year flood plain) consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake. At this time it is unknown the degree to which build out of the Specific Plan would directly impact or encroach upon the streams within the project area. The extent of dredge and fill of jurisdictional wetlands that are subject to federal and state regulations and permitting, waiver, or agreement under the jurisdiction of the Corps, CDFG, and the Regional Water Quality Control Board (RWQCB) is also unknown.

The Specific Plan includes multiple development standards intended to increase consideration for natural resources in the planning process for new developments. Any new development or renovation of existing property shall require an Agoura Village Development Permit (AVDP). The permit would allow a flexible design approach in order to establish an environment equal to or better than that resulting from the application of the minimum development standards and design guidelines, including those described below. The following measures specifically address the protection of riparian habitat and creeks and, thus, would lower the probability of impacts to wetland habitat. These include, but are not limited to, the following:

- *Significant natural vegetation shall be retained and incorporated into the project whenever possible.*
- *Natural amenities, such as views, mature trees, creeks, riparian corridors, and similar features unique to the site should be preserved.*
- *Oak trees shall be preserved and incorporated into the project whenever possible. New developments shall preserve or improve natural conditions on or adjacent to the site such as wildlife habitats, streams, creeks, views, and restore and preserve riparian habitats to a natural state where appropriate.*
- *For projects adjacent to Medea, Lindero and Chesebro Creeks, it is the developer's responsibility to prepare a riparian habitat and creek protection program and implement it. Such programs shall be prepared by a qualified biologist and shall, to the extent feasible, avoid encroachment into any riparian areas and provide an adequate buffer distance to adjacent development. The buffer shall be at least 50-100 feet from the edge of riparian vegetation of either side of the creek. The specific dimensions will depend on the value of the habitat. Trails and bicycle paths may be allowed in the buffer, depending on the particular design characteristics and on site habitat.*
- *To minimize water borne pollution into local creeks and watersheds, all projects shall adhere to National Pollutant Discharge Elimination System (NPDES) requirements for both construction and on-going operational impacts. Use of bioswales and natural filter systems are encouraged.*

A Section 404 permit of the Clean Water Act would be required from the Corps for alteration of any of the drainages onsite. Additionally, a water quality certification would be required from the Regional Water Quality Control Board. These permits typically require mitigation to reduce impacts to water quality and quantity, vegetation, and wildlife. A minimum mitigation ratio of 1:1 (1 acre replaced for every 1 acre lost) is required by the Corps to meet its "no net loss" goal; however, mitigation ratios may be at a higher ratio (2:1 or 3:1). The mitigation ratios required by CDFG currently typically range from 3:1 to 7:1 depending on the quality and quantity of the habitat(s) present. Credit for removal of invasive species or restoration of the concrete-lined portions of Medea Creek may also be included as part of the permits.

The loss of federal and state protected wetlands associated with future development is considered a significant, but mitigable impact.

Mitigation Measures. Compliance with the requirements of the appropriate Corps, CDFG, and RWQCB permits, and implementation of any mitigation measures contained therein, would offset the loss of waters of the U.S. and waters of the State. As discussed in Section 4.7, *Hydrology and Water Quality*, a National Pollution Discharge Elimination System (NPDES) permit will likely be required for development of individual projects. As a result, Best

Management Practices (BMPs) would be required to minimize impacts to water quality and quantity both onsite and offsite during construction. In addition to the mitigation required in Section 4.7, *Hydrology and Water Quality*, HYD-1 through HYD-4(b), the following mitigation is required to reduce impacts to wetlands to a less than significant level.

Although the Corps and CDFG will require specific mitigation as part of their permitting processes, the following measures provide minimum requirements for individual projects that may be implemented within the project area.

BIO-4(a) **Replacement Ratio.** Federal and State protected wetland habitat shall be replaced at a minimum ratio of 2.0 acres of habitat, at the same or greater quality, for every 1.0 wetland acre removed. Replacement shall be at an Agoura Hills Planning and Community Development Department approved location or by providing adequate funding for the replacement of wetland habitat to an organization currently conducting restoration of wetland habitat. The organization and its activities are to be approved by an Agoura Hills Planning and Community Development Department approved biologist. Two areas located within the Specific Plan boundaries shall be considered for mitigation credit. That portion of Lindero Canyon Creek located between Agoura Road and Kanan Road is the preferred mitigation location for impacts to other wetland areas within the project area. This restoration effort would include restoring the channel to a more natural state. Improvement of the unchannelized portion of Medea Creek, located south of Agoura Road, shall be considered as an alternate location for mitigation and wetland restoration.

BIO-4(b) **Wetland Restoration Plan.** For projects that may adversely impact wetland areas, individual project applicants shall submit a wetland creation or restoration plan for review and approval by an Agoura Hills Planning and Community Development Department staff and, as necessary, a City approved biologist or qualified landscape specialist, as part of the initial application. The final restoration plan shall be submitted for City review and approval prior to Grading Permit issuance. The plan shall include, but not be limited to the following components:

- Performance criteria (i.e., what is an acceptable success level of revegetation to mitigate past impacts);
- Monitoring effort (i.e., who is to check on the success of the revegetation plan, and how frequently);
- Contingency planning (i.e., if the effort fails to reach the performance criteria, what remediation steps need to be taken); and
- Irrigation method/schedule (i.e., how much water is needed, where and for how long).

BIO-4(c) **City Approval.** For projects where wetland areas are affected, the individual project applicants shall demonstrate to the City of Agoura Hills that the requirements of agencies with jurisdiction over wetlands onsite can be met prior to obtaining grading permits. This will include, but not be limited to,

consultation with those agencies, securing the appropriate permits, waivers or agreements, and arrangements with a local or regional mitigation bank including in lieu fees, as needed.

BIO-4(d) **Riparian Habitat Preservation and Restoration.** Refer to BIO-2 (c) above.

BIO-4(e) **Fencing.** Solid barrier fencing onsite shall be prohibited around areas that border open spaces or routes of animal movement, specifically riparian areas. Fencing in these areas shall consist of "ranch style" post fencing. Fencing shall allow at least one-foot of clearance above ground to permit wildlife movement. Fencing between creekside trails and the creeks shall be designed to limit human entry into significant habitat. Such fencing or vegetative barrier shall be at least four feet in height and shall be planted with spinescent plants such as wild rose, blackberry, or other suitable native species in a dense bramble.

The following measure is suggested to reduce adverse effects to common and special-status wildlife species along the Medea and Lindero Canyon Creek corridors.

BIO-4(f) **Corridor Lighting.** The following low-light design features shall be implemented throughout the Specific Plan area, and shown on the individual project plans submitted as part of the application.

- Streetlight poles shall be of an appropriate height to reduce the glare and pooling of light into open space and corridor areas, and
- Street light elements shall be recessed or hoods shall be used to reduce glare impacts on open space and corridor areas, and
- All exterior lighting shall be low sodium lights, low intensity, shielded, and directed away from the drainage/wildlife corridors corridor.

Significance After Mitigation. Implementation of mitigation included in the Corps, CDFG, RWQCB, and NPDES permits and the recommended mitigation measures above would reduce the individual project impacts to protected wetland areas to less than significant.

Impact BIO-5 Build out of the Specific Plan area would potentially affect wildlife corridors. This is considered a Class III, less than *significant* impact.

The undeveloped southern half of the Specific Plan area is located adjacent to existing urban and developed uses and is bordered directly to the north by a heavily traveled arterial roadway (Agoura Road). Much of the land has been previously disturbed and utilized for stockpiling of soils and machinery. The southern undeveloped portion of the Specific Plan area has also been fragmented by a large arterial roadway, Kanan Road, and a smaller roadway, Cornell Road, into three isolated patches of habitat.

Conceptually, urban, rural, and agricultural development can be thought of as a net placed across the natural landscape with the mesh size varying with the intensity of the development.

As the distance between man-made landscapes decreases and development intensity increases, the mesh size decreases and thereby captures (or restricts the movement of) a greater diversity of animals. The ability of any particular species to cross that net is dependent on a number of factors, with small, highly mobile and urban tolerant species are more likely to pass through finer mesh sizes than large wary animals (such as mountain lion) that require thousands of acres of suitable habitat to support just one individual. Development within the Specific Plan area would push the unsuitable urban habitat further to the south, but in general, would not thwart the regional movement of wildlife on an east to west basis. Substantial suitable lands for such movement will continue to exist within protected lands of the Santa Monica Mountains, adjacent to the southern boundary of the Specific Plan area. North to south movement in the project vicinity is already eliminated by the urban area of the City of Agoura Hills, and limited in the project vicinity to the Liberty Canyon choke-point previously discussed.

On a local level, the western portion of the Specific Plan area abuts Ladyface Mountain Specific Plan area. As described above, small movement paths along east to west trending ridges south of the project site connect Lindero Canyon Creek to open space west of the Specific Plan area. Additionally, Lindero Canyon Creek is considered important for wildlife in the area of Ladyface Mountain, as it provides a reliable perennial water source. Kanan Road provides a constraint to movement from the west to the significant regional wildlife corridors to the east, but does not entirely isolate these areas. Maintenance of the area west of Lindero Canyon Creek as open space as currently proposed by the Specific Plan will continue to maintain the connectivity between Lindero Canyon Creek and the wildlife habitat to the west.

Cornell Road and Kanan Road bisect the Specific Plan area in a north to south direction, forming a habitat fragment, within the lower central portion of the Specific Plan area. Due to the disturbed nature of this site, its relative distance to urban uses, and the barrier effect of both Kanan and Cornell Roads, this area would not be considered an important wildlife corridor. Medea Creek runs through this portion of the Specific Plan area; however, it is channelized throughout the majority of the project area and provides minimal natural habitat. Although Medea Creek provides an undercrossing of U.S. 101, the creek is channelized through most of the Specific Plan area and north of the freeway and would not generally be conducive to the movement of most mammals, reptiles, or amphibians. Due to its lack of contiguous habitat and vegetative cover, Medea Creek is not an important wildlife corridor.

The eastern most portion of the Specific Plan area is directly adjacent to open space lands and a Los Angeles County Significant Ecological Area (SEA #6). However, the proximity of this area to existing urban uses, the small size of the project area, and the odd shape of this piece of land in the context of the larger surrounding area of open space, would make it an unlikely movement corridor for wildlife. Although there is no waterway traversing this expanse of the Specific Plan area, Cheseboro Creek traverses the developed portion of the Specific Plan area to the north. The Creek extends from the east, from Cheseboro Canyon. Also channelized, Cheseboro Creek provides no vegetative cover and would not serve as an important wildlife corridor. Overall, the Specific Plan would not disrupt the regional movement of wildlife; and therefore, is considered to have a less than significant impact with respect to wildlife corridors.

Mitigation Measures. None required.

Significance After Mitigation. Impacts to wildlife movement corridors are considered less than significant without mitigation.

Impact BIO-6 Build out of the Specific Plan area has the potential to damage or destroy Coastal Sage Scrub habitat. This impact is considered Class II, *significant but mitigable*.

The City of Agoura Hills considers Coastal Sage Scrub to be an important habitat. "High value" (as determined by a qualified biologist) Coastal Sage Scrub habitat disturbed or removed as part of a project shall be replaced at a 1:1 ratio. If the Coastal Sage Scrub is habitat for a sensitive (endangered or threatened) species, the ratio could be higher. As discussed in the *Setting*, Coastal Sage Scrub habitat is located in the southern portion of the Specific Plan area, primarily on the far western boundary of the site, west of Kanan Road; along the southern boundary of the project area, between Kanan Road and Medea Creek; and south of the knoll in the southwest corner. Approximately 2.3 acres of coastal sage scrub is within the development zones, while 28.3 acres is located within Zone G.

Informal surveys of these areas revealed Coastal Sage Scrub supporting large areas of non-native annual grasses. However there is the potential for "high value" habitat within these areas. Although buildout of the Specific Plan may not place development directly within the Coastal Sage Scrub habitat, fuel modification of open space lands directly adjacent to the project development would have the potential to disturb or remove high value Coastal Sage Scrub habitat. Therefore, impacts to Coastal Sage Scrub habitat would be considered potentially significant.

Mitigation Measures. Although the Specific Plan would implement several general natural resource protection standards, build out under the proposed Specific Plan could potentially generate adverse impacts on Coastal Sage Scrub. Therefore, in addition to those measures outlined in the Specific Plan, the following mitigation measures would be required to reduce impacts to a less than significant level.

BIO-6(a) **Coastal Sage Scrub Habitat Survey.** As part of the sensitive plant surveys required under Mitigation Measure BIO-1(a), prior to approval of individual development applications within the residual natural areas of Zones A south, B, E, and F, surveys for sensitive plant species shall also include surveys and consideration of adjacent areas of Coastal Sage Scrub habitat. A qualified biologist shall determine the condition of such habitat and whether it would be considered of "high value." Any areas identified as "high value" Coastal Sage Scrub habitat shall mitigate for disturbed (including disturbance for fuel modification) or removed CSS habitat at a minimum 1:1 ratio. Coastal Sage Scrub habitat with known occurrences of sensitive (endangered or threatened) species shall be mitigated at a minimum 2:1 ratio.

BIO-6(b) **Fuel Modification Areas.** Landscaping within fire clearance zones shall include native species indigenous to the area of disturbance. Modification of fire hazard fuels shall be limited to hand thinning of individual shrubs, clearing dead fuel, replanting with fire-resistant plants indigenous to the area, or other methods to attain fire safety while producing a viable natural

and native vegetation community. No species identified as invasive on the CNPS, Channel Islands Chapter *Invasive Plants List* (1997) shall be utilized in the landscape plans and all landscaping plans shall be approved by the City and the County Fire Department.

Significance After Mitigation. Implementation of the above mitigation measures would reduce impacts to Coastal Sage Scrub Habitat to a level considered less than significant.

c. Cumulative Impacts. Full build out of the Specific Plan area, in combination with other planned and pending development in and around Agoura Hills (see Table 3-1 in Section 3.0, *Environmental Setting*), would add a total of 772 residences and about 2.0 million square feet of commercial/retail development. Such development would continue to cumulatively alter habitats to man-made conditions. Cumulative impacts to biological resources due to this conversion are considered potentially significant. However, as with development within the Specific Plan area, all cumulative development would be subject to the regulations of the City, the State of California, and the federal government. Compliance with these regulations on all new development proposals would be expected to reduce impacts from individual projects to a less than significant level for impacts to grassland, oak woodlands and individual oak trees, wetlands, and special status species potentially in the project area, though it should be recognized that the gradual urbanization of the region would substantially alter biological conditions. Although compliance with these regulations would reduce adverse impacts to riparian habitat, impacts would be locally significant due to the cumulative loss of limited native riparian habitat in Agoura Hills. With the proposed mitigation measures identified herein, build out of individual projects within the Specific Plan area would not be cumulatively considerable.

4.4 GEOLOGY

This section describes the geologic conditions and related hazards, including faulting, seismically induced ground movement, and the potential for landslides, soil erosion, and soil expansion/contraction, within the project area.

The project area is located in the central portion of southern California's Transverse Ranges, in the Conejo-Las Virgenes region where no major active faults are known to exist. Six minor faults have been identified in the City, but are considered inactive. There are no mapped active faults crossing the area to be developed; thus, the likelihood of fault induced ground rupture is low. However, the project area is subject to strong ground shaking from a number of regionally active faults. Future development within the project area could be adversely affected by intense groundshaking. This is considered to be a potentially significant but mitigable impact.

Portions of the project area are underlain by highly indurated materials, such that potential blasting may be necessary to excavate and could increase the potential for rockfalls in the Ladyface Mountain area. Cut materials onsite may not be suitable for use as fill. Construction on areas of compressible alluvium, colluvium, weathered bedrock and existing fill could be subject to settlement impacts. Therefore, impacts related to settlement are considered to be potentially significant but mitigable. Multiple geologic and soils engineering studies have identified clayey materials throughout the project site. This type of soil can have a relatively high shrink-swell potential and is considered a potentially significant but mitigable impact. Weathered bedrock, residual soil, and colluvium encountered throughout the project site are typical of areas with slope instability. Impacts relating to slope stability are therefore considered potentially significant but mitigable. Noise and vibration impacts associated with possible blasting on the project site during grading are discussed in Section 4.9, Noise.

4.4.1 Setting

This evaluation is based on a review of existing information in the City of Agoura Hills General Plan and Seismic Safety Element and the following additional studies (See Appendix C):

- *Geologic Study for Proposed Office Building Complex, Cornerstone Project, Southeast Corner of Agoura Road and Cornell Road, City of Agoura Hills, California. Prepared by Terry A. Mayer, August 2004.*
- *Soil Engineering Investigation for Proposed Office, Retail, Residential Buildings at Southeast Corner of Agoura Road and Cornell Road, Agoura Hills, CA. Prepared by Heathcote Geotechnical, September 2004.*
- *Shallow Seismic Refraction Traverse Surveys for Evaluation of the Rock Hardness, Proposed Multi-use Development, Southeast Corner of Kanan and Agoura Roads, Agoura Hills, California. Prepared by Gorian & Associates, Inc., August 2001.*
- *Feasibility Level Geotechnical Site Investigation, Vesting Tentative Parcel Map No. 21730, City of Agoura Hills, California. Prepared by Gorian & Associates, Inc., April 1990.*
- *Engineering Geology Review of Grading Plan Review and Responses to Geological and Geotechnical Review Sheets, Creekside Center, City of Agoura Hills. Prepared by Slosson and Associates, November 1996.*
- *Engineering Geology Review of Geotechnical Feasibility Review of Creekside Center Preliminary Grading/Drainage Plan Including Responses to City Technical Reviews SW Corner of Kanan Road and Agoura Road. Prepared by Slosson and Associates, August 1996.*

a. Regional Geology and Topography. The City of Agoura Hills is located in the south central portion of southern California's Transverse Ranges. The Transverse Ranges near the City of Agoura Hills are characterized by connected valleys, low hills, and undulating terrain bounded on the south by the Santa Monica Mountains and on the north by Mountclef Ridge, Conejo Ridge, and the Simi Hills. East-west trending faults, folds, and mountain ranges characterize the Transverse Ranges. Some of the known major active and potentially active faults near the City include the Malibu Coast, the Simi-Santa Rosa, the Oak Ridge, the San Cayetano, the Santa Susana, and the San Andreas (see Figure 4.4-1).

The faulting and seismicity of this area are dominated by the intersection of the San Andreas fault and the Transverse Ranges fault systems. Seismic activity along the San Andreas fault is in response to differential movement between the Pacific geologic plate (west of the fault) and the North American geologic plate (east of the fault). Transverse Range faults generally reflect crustal shortening (reverse) faulting patterns. No major active faults are known to exist in the Conejo-Las Virgenes region, although the Thousand Oaks area contains segments of the potentially active Sycamore Canyon-Boney Mountain fault zone. This fault zone extends from Point Mugu northeastward through the Santa Monica Mountains, but is located no closer than five miles from the City of Agoura Hills. Six minor faults have been identified in the City, but are considered inactive.

As stated in the City's Seismic Safety Element (1992), geologic conditions in the City primarily include Miocene-age (six million to sixteen million year old) volcanic and marine sedimentary formations that underlie the City and the surrounding areas. In general, the volcanic rocks (identified as the Conejo Volcanics) are a well-indurated rock unit. As such, the Conejo Volcanic rocks are relatively difficult to excavate, but are relatively well suited for development due to their stability.

Agoura Hills is in an area characterized by rolling hills that are gently to moderately inclined. Steep slopes are locally present, especially along watercourses that cross through the hills. One of the dominant topographical features in the City is Ladyface Mountain, which is located between Kanan Road and the western City limits on the southern border of Agoura Hills. This mountain reaches a peak elevation of 2,036 feet. The City is bordered on two sides by the Santa Monica Mountains.

The principal surface water drainage in the project area is Medea Creek and its two tributaries, Chesebro and Lindero Canyon Creeks. Medea Creek crosses the center of the Specific Plan area, while its headwaters are in the hills north of the area. Lindero Canyon Creek crosses the southwestern corner of the project area and drains into Medea Creek immediately downstream of the project area, east of Kanan Road. Chesebro Creek flows from the eastern project boundary and drains into Medea Creek west of the intersection of Cornell Road and Agoura Road, Malibu Junction. From its headwaters, Medea Creek flows southward, through Malibu Junction, and into Malibou Lake. The man-made Malibou Lake is drained by Malibu Creek, which flows southward through the Santa Monica Mountains and into the Pacific Ocean.

b. Site Topography. The project area contains variable topography and can be classified into two subareas, the area north and south of Agoura Road (Refer to Figure 2-4, *Project*

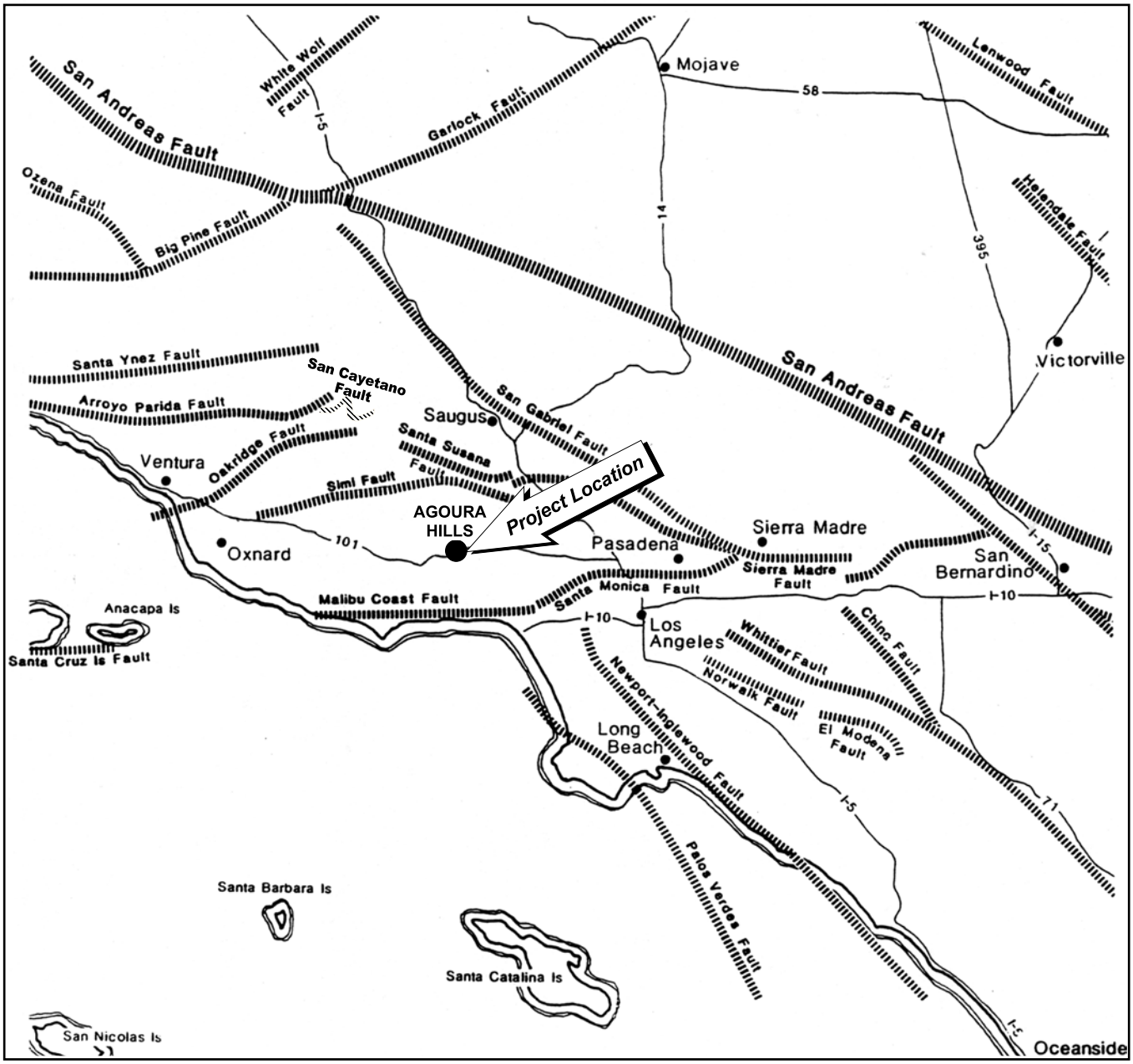
Description). The area north of Agoura Road is predominantly built out and relatively flat. The area south of Agoura Road generally descends in a southeasterly aspect from Ladyface Mountain, and a hilltop located just east of Kanan Road, to natural portions of Medea Creek and open space. The current U.S. Geological Survey (USGS) topographic map of the Thousand Oaks Quadrangle (1993) indicates that elevations across the site range from about 840 above mean sea level within the creek bed, to 960 feet above mean sea level at the peak of the southeast knoll, and 980 ft above mean sea level at the peak of the northwest knoll (Refer to Figure 4.4-2).

The western portion of the project area south of Agoura Road is relatively flat adjacent to Agoura Road but ascends quickly south towards Ladyface Mountain. This area consists of an artificially created flat area near Agoura Road and a series of northerly and northeasterly descending slopes that are dissected by several steep, V-shaped, northerly draining gullies. The southern boundary slopes descend at ratios varying from about 1-1/2:1 horizontal:vertical (h:v) to 4:1, with local steeper and gentler elements. Lindero Canyon Creek occupies an incised channel that is steep sided (1:1+/-). The creek enters the site from the north through a box culvert under Agoura Road and exits in the southeastern portion of the site through a similar structure under Kanan Road.

The central portion of the project area south of Agoura Road, between Kanan Road and Cornell Road, is defined by a prominent knoll just north of the intersection of Kanan and Cornell Road and a lowland area within the floodplain of Medea Creek (See Figure 4.4-2). The knoll is a low hill, approximately 900 ft above sea level, with a relatively gentle north slope (<4:1) and steeper south slope (>4:1). The east slope of this knoll is relatively gentle, but the western slope has been attenuated by a steep cut for Kanan Road. The south area of the knoll has been substantially altered by grading. Medea Creek cuts through the eastern portion of this area, near Cornell Road. The floodplain extends west and east of the creek and is at an elevation between 820-840 ft above sea level.

The eastern portion of the project area south of Agoura Road and east of Cornell Road is located on the top of a knoll. The site is irregular in shape and ascends from both Agoura Road and Cornell Road. Slope gradients range from 2:1 to less than 4:1. The elevation rises from approximately 880 ft at the intersection to approximately 1020 ft at the project boundary, directly south of the intersection. Extending east of the intersection, the site remains relatively flat along Agoura Road to the eastern boundary of the project area.

c. Site Geology. Regional geologic mapping (Dibblee, 1993) depicts the general project area as consisting of Quaternary-age alluvium overlying Miocene-age rocks (Figure 4.4-3). Bedrock underlying much of the site consists of volcanic and volcaniclastic rocks of Miocene age, that are identified as the Conejo Volcanics. Conejo Volcanics are a wide spread formation in the region and generally consist of basalt and andesite. Conejo Volcanics within the project area consist of interbedded andesitic (and andesitic-dacite) flows and breccias, in the Agoura area it is reddish brown to grey, massive, moderately coherent, fine grained, feldspathic to locally slightly porphyritic, and deposited as a mud flow breccia. Surficial deposits in the Specific Plan area consist of terrace deposits, older alluvium, colluvium, alluvium, topsoil and artificial fill. The area north of Agoura Road is currently developed with the exception of a single parcel and is underlain by surficial sediments. The developed area is located above predominantly



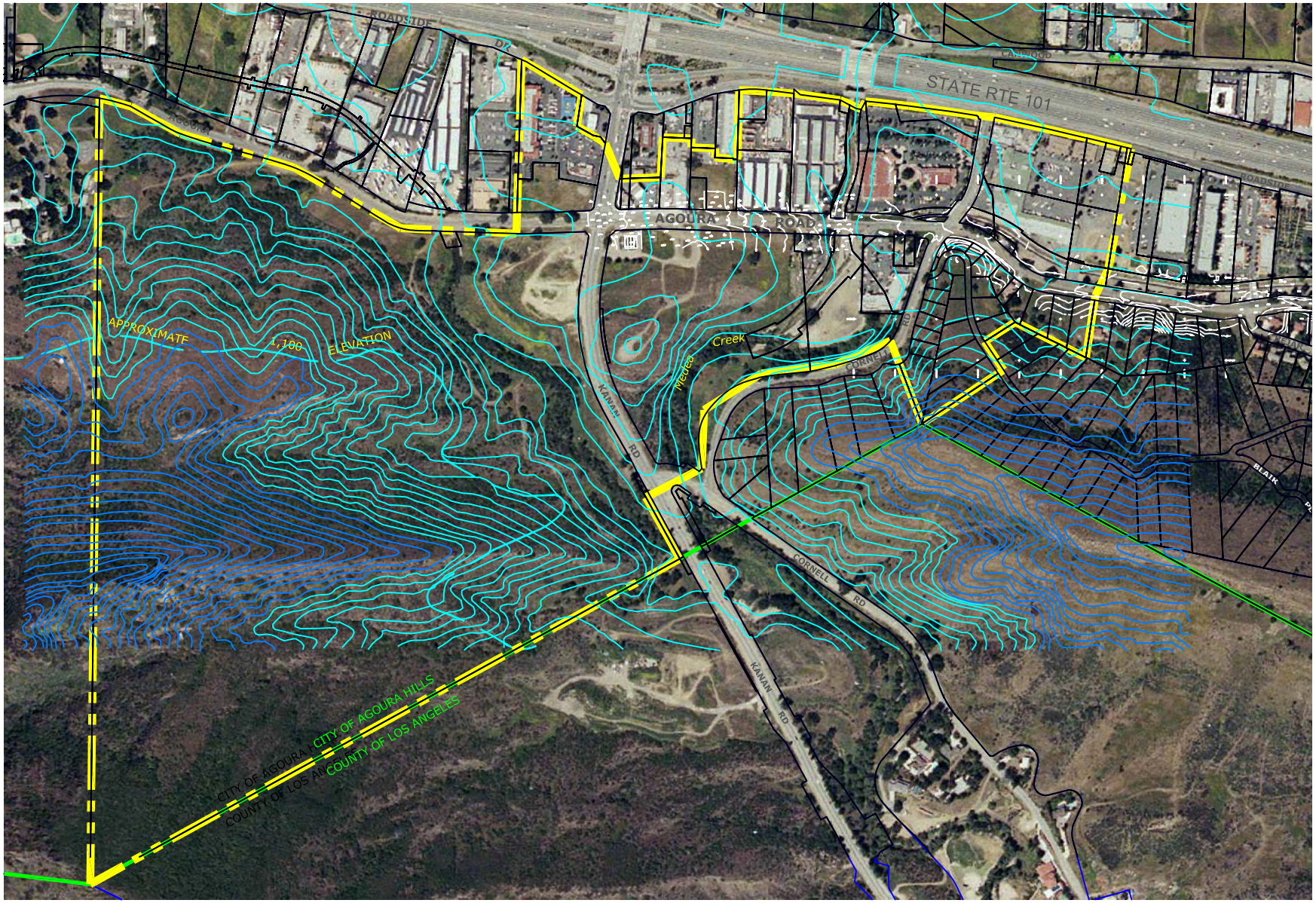
Source: Calif. Dept. of Mines & Geology, Fault Map of California, 1982

0 10 20
SCALE IN MILES

NORTH

Regional Seismic Faults

Figure 4.4-1



Aerial Source: Air Photo U.S.A. 2005
Base Map Source: City of Agoura Hills, May 2008.

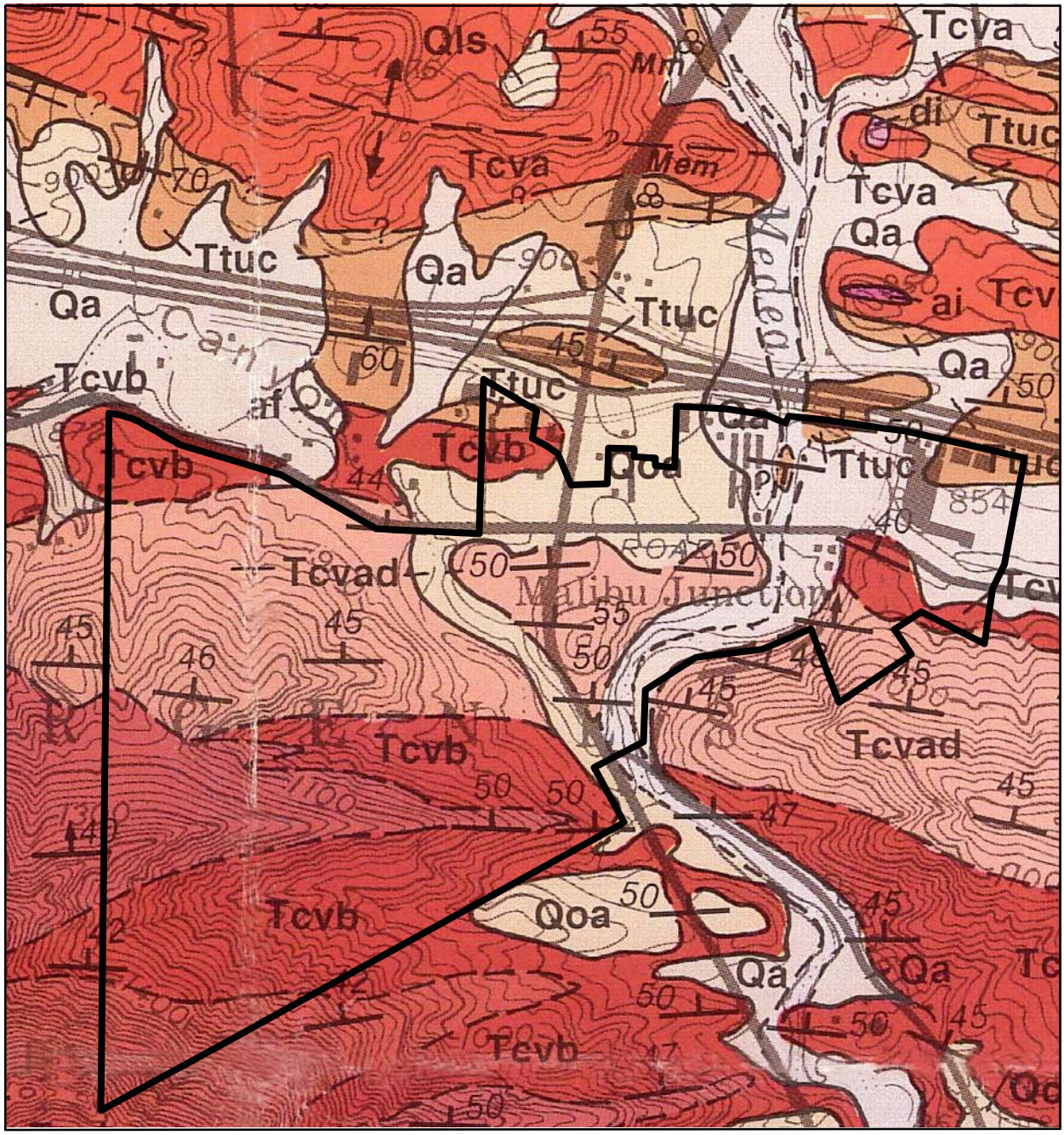
Site Topography

N

0 350 700 Feet

Figure 4.4-2

This page intentionally left blank



Source: Geologic Map of the Thousand Oaks Quadrangle, Thomas W. Dibblee, Jr., and Helmut E. Ehrenspeck, 1993

Project Boundary

N

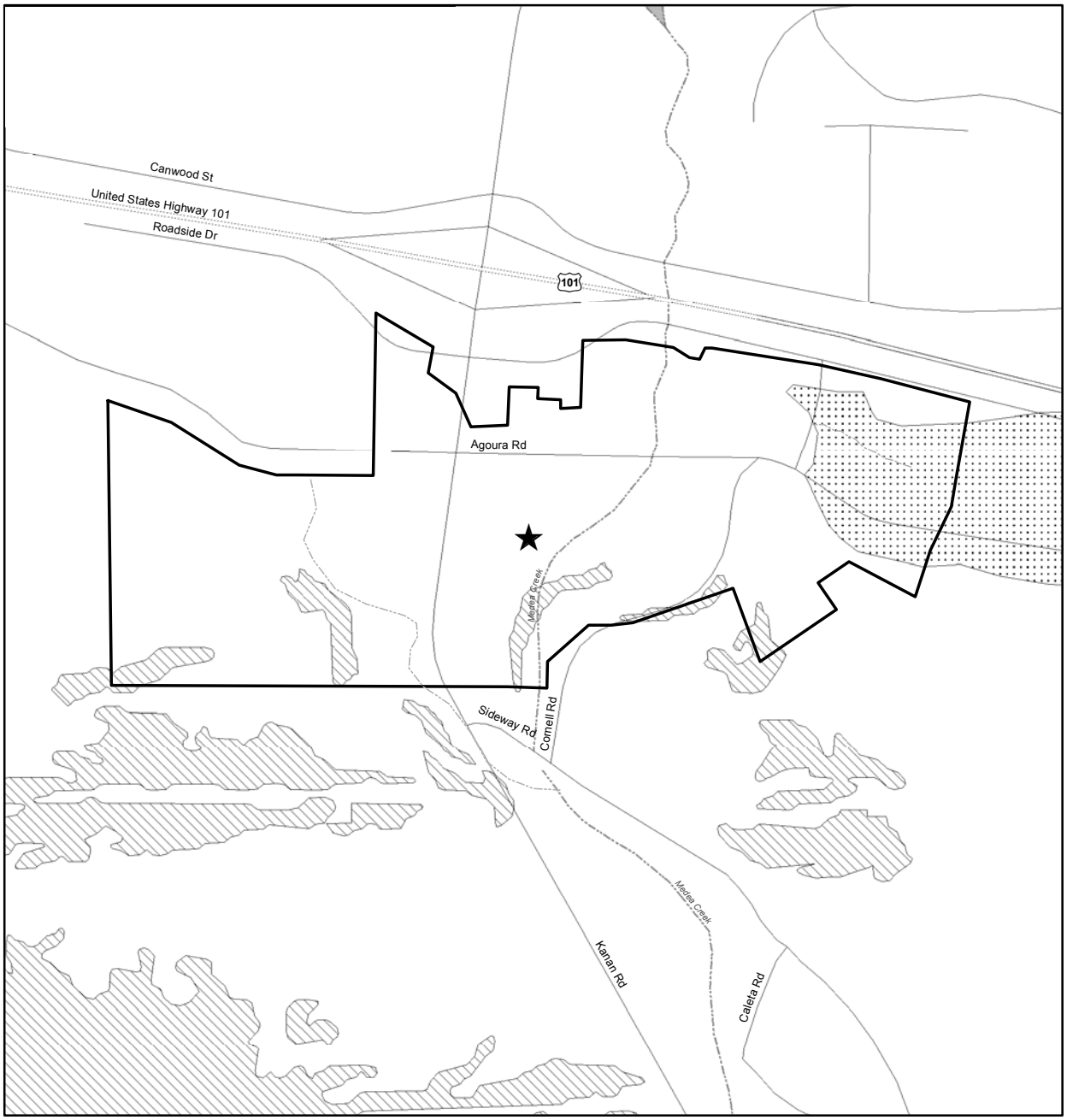
0 .25 .5 Miles

Tcvad = andestic breccias
Ttuc = clay shale and siltstone
Tcvb = basaltic flows and breccias
Qoa = older dissected alluvial gravel
Qa = alluvial gravel

Soils Map

Figure 4.4-3

This page intentionally left blank



Source: California Geological Survey, Seismic Hazard Mapping Program, 2002.

N

0 0.125 0.25 Miles

Legend

- Project Location
- Project Boundary
- Areas subject to Landslides
- Areas subject to Liquifaction

Liquefaction and Slope Stability Figure 4.4-4

Quaternary age alluvial sediments, alluvial gravel, sand and clay of valley areas, and older dissected alluvial gravel.

Within the western portion of the site, south of Agoura Road, bedrock materials consist of Conejo Volcanics including: a) reworked volcaniclastic breccias and conglomerates; and b) basaltic extrusive rocks. Most of the proposed development would be underlain by the former, whereas only the westernmost development would be underlain by the latter. In general, reworked volcaniclastic breccias and conglomerates are very well indurated (hard) and difficult to excavate. Based upon refraction seismic survey results presented in the Geotechnical Feasibility Review prepared by Pacific Soils Engineering, Inc. (1996), bedrock material at certain locations and depths would likely require local blasting or jackhammering. Surficial deposits in the proposed development area consist of terrace deposits, colluvium, alluvium, and artificial fill. The terrace deposits are generally masked by Kanan Road fill and are considered to be of minor importance to future development. The colluvium boulder to cobble clay rich soil-like material has crept or has been washed short distances down slope and now occupies most of the draws and slope flanks. Alluvial deposits occupy the Lindero Canyon Creek lowlands. The alluvium consists primarily of clayey sands and sandy clays with varied amounts of cobbles and boulders. Mechanically placed artificial fill exists along the eastern margin of Zone B, located west of Kanan Road. That material consists of a westerly descending fill slope emplaced to accommodate Kanan Road. Fill associated with the cutting of the pad, located to the southwest of the intersection of Kanan and Agoura Roads, is scattered over that pad. Additionally, minor fill including disturbance of the Lindero Canyon Creek alluvium generated during installation of the existing sewer line exists along its alignment.

Within the central portion of the Specific Plan area, south of Agoura Road (Zone A south), the Conejo Volcanics consist of intercalated units of agglomerate and basalt. The agglomerate units are well exposed, particularly on the Kanan Road cut. Bedrock is mantled over much of the site by surficial deposits which include older alluvium, colluvium, alluvium, topsoil and artificial fill. Overall color of this unit is grey to tan, but orange-brown to reddish varnish is common on natural exposures. This unit consists chiefly of very thick units of agglomerate with thin to very thick interbeds of volcaniclastic sandstone. The agglomerate is indurated and poorly to moderately sorted. A knoll located near the southwest corner of the site, north of the intersection of Kanan and Cornell Roads, consists of weathered volcanic rock, which would be very difficult to excavate and process. In this area, the soil cover is thin and the volcanic rock is hard. Excavations in the volcanic bedrock can be expected to produce rock too large for placement in engineered compacted fill and special handling would be anticipated. Based upon refraction seismic survey results presented in the Geotechnical Feasibility Review prepared by Gorian & Associates, Inc. (2001), bedrock material at certain locations and depths would likely require local blasting or jackhammering.

Within the eastern portion of the project area, south of Agoura Road (Zone E), interbedded andesitic -dacite flow breccias and basalts underlie the site and are in part overlain by terrace deposits. The volcanic deposits were found to be light gray to light brown in color, crudely stratified gravel, cobble and boulder-size andesitic fragments. Terrace deposits cap the lower part of the southern portion of this area. These deposits were found to consist of rounded to sub-angular volcanic boulders and gravel in a clayey silt matrix. A veneer of soil covers this portion of the Specific Plan area and ranges in thickness from one foot to three and a-half feet

and consists of light brown to chocolate brown clayey silt with abundant volcanic fragments and minor to moderate quantities of roots.

Neither seepage nor groundwater was encountered during exploratory excavations at the southeast corner of Agoura Road and Cornell Road. However, flowing water was encountered within Medea, Lindero Canyon and Chesebro Creeks during field investigations. Therefore, groundwater would be anticipated at or near the elevation of each creek.

Faulting and Seismically Induced Ground Shaking. The U.S. Geological Survey (USGS) and the California Geological Survey (CGS) (previously known as the California Department of Conservation Division of Mines and Geology) define active faults as those that have had surface displacement within Holocene time (about the last 11,000 years). Surface displacement can be recognized by the existence of cliffs in alluvium, terraces, offset stream courses, fault troughs and saddles, the alignment of depressions, sag ponds, and the existence of steep mountain fronts. The site is situated within an intricately block-faulted area of the Transverse Ranges. As with most of the mountain ranges in Southern California, this area is bordered by faults which are active, potentially active, and inactive. Potentially active faults are ones that have had surface displacement during the last 1.6 million years. Inactive faults have not had surface displacement within the last 1.6 million years. Active and potentially active faults with the potential to affect the project site are listed in Appendix A and B of the USGS Open-File Report 96-706 and the California Department of Conservation Division of Mines and Geology Open-File Report 96-08. Regional faults are shown on Figure 4.4-1 and are described below.

San Andreas Fault Zone. The San Andreas fault is the dominant active fault in California. It is located approximately 45 miles northeast of the City. It is the primary surface boundary between the Pacific and the North American plates. There have been numerous historic earthquakes along the San Andreas fault. USGS (2002) has listed several moment magnitudes for the San Andreas fault. These different listings correspond to different sections of the fault. Nearest the project site, the moment magnitude earthquake for the San Andreas fault (Mojave Section) is 7.4.

Oak Ridge Fault. The Oak Ridge fault is located approximately 17 miles west of the City. The fault is a steep, south-dipping reverse fault bordering the south side of the Ventura basin. The onshore segment of this fault is about 40-km long, extending from the intersection with the Santa Susana fault on the east to the Oxnard Plain. Activity along the Oak Ridge fault is known to have occurred during Pliocene time (5.3 to 7.6 million years ago) and into the Pleistocene. Parts of the Oak Ridge fault are mapped as Alquist-Priolo Earthquake Fault Zones in Ventura County. USGS (2002) has listed the moment magnitude earthquake for this fault as 7.0. The magnitude 6.7 Northridge earthquake (in 1994) is thought to have occurred along the eastern end of the Oak Ridge fault (Yeates and Huftile, 1995).

Malibu Coast Fault. The Malibu Coast fault is located about 7 miles south of the project area. This fault is an east-west trending reverse fault. The Malibu Coast fault extends from west of Point Dume near the Ventura-Los Angeles County line, eastward to the City of Santa Monica. There it is aligned with the Santa Monica-Raymond Hill fault. Activity along the Malibu Coast fault is thought to have occurred during the Late Quaternary and Holocene periods. USGS (2002) has listed the moment magnitude earthquake for this fault as 6.7.

San Cayetano. The San Cayetano fault is located about 18 miles northwest of the City. This fault is a north-dipping reverse fault on the north side of the Ventura Basin. Portions of the San Cayetano fault near Fillmore, California, are mapped as an Alquist-Priolo Earthquake Fault Zone. Movement along this fault is thought to have occurred in Holocene time. USGS (2002) has listed the moment magnitude earthquake for this fault as 7.0.

Simi-Santa Rosa. The Simi-Santa Rosa fault is located approximately 7 miles north of the City. This fault is a north-dipping reverse fault, trending southwest from the northeastern end of Simi Valley to the east edge of the Oxnard Plain, and is approximately 25 miles in length. The principal faults of the Simi-Santa Rosa fault zone, from east to west, include the Simi fault in the Simi and Tierra Rejada valleys, the Santa Rosa fault in the Santa Rosa Valley, and the Springville and Camarillo faults in the Camarillo Hills area. Seismic activity along the Simi-Santa Rosa Fault Zone appears to be relatively low; however, portions of the Simi-Santa Rosa fault near Moorpark and Camarillo, California, are mapped as an Alquist-Priolo Earthquake Fault Zone.

Blind Thrust Faults. In addition to these faults, there is the potential for ground shaking from blind thrust faults. Blind thrust faults are low angle detachment faults that do not reach the ground surface. Recent examples of blind thrust fault earthquakes include the 1994 Northridge (Magnitude 6.7), 1983 Coalinga (Magnitude 6.5), and 1987 Whittier Narrows (Magnitude 5.9) events. As described in Dolan et al (1995), much of the Los Angeles area is underlain by blind thrust faults. In their seismic model for Los Angeles, blind thrust faults are found at a depth of about 6 to 10 miles below ground surface and have the ability to produce magnitude 7.5 earthquakes.

Faults generally produce damage in two ways: ground shaking and surface rupture. Seismically induced ground shaking covers a wide area and is greatly influenced by the distance of the site to the seismic source, soil conditions, and depth to groundwater. Surface rupture is limited to very near the fault. Other hazards associated with seismically induced ground shaking include earthquake-triggered landslides and tsunamis.

Seismic Risk and Ground Acceleration. The California Geological Survey (2003) classifies faults into two categories in their modeling of California's seismic risk. These categories are:

- *Type A faults – faults that have slip rates greater than 5 millimeters per year and well constrained paleoseismic data. The San Andreas fault is an example of a Type A fault.*

- *Type B faults – all other faults not classified as Type A faults. Type B faults lack paleoseismic data necessary to constrain the recurrence interval of large events. The San Cayetano and Oak Ridge faults are Type B faults.*

There are no mapped active faults crossing the area to be developed; thus, the likelihood of fault induced ground rupture is low. Tsunamis and seiches are associated with ocean surges and inland water bodies, respectively. Neither of these hazards would affect the project area.

The geologic map of the site (Dibblee, 1993) does not depict any faults crossing the project area. The project area does not lie within any mapped Alquist-Priolo Earthquake Fault Zones, nor have any Alquist-Priolo Earthquake Fault Zones been identified in the City. An Alquist-Priolo Earthquake Fault Zone is an area delineated by the State as being within 500 feet from a known active fault trace.

Seismically induced ground acceleration is the shaking motion that is produced by an earthquake. Probabilistic modeling is done to predict future ground accelerations. Probabilistic modeling generally considers two scenarios, design basis earthquake ground motion or upper-bound earthquake ground motion. Design basis earthquake ground motion calculations are typically applied for residential and commercial sites. This ground motion is defined as a ground motion that has a 10 percent chance of exceedance in 50 years. Upper-bound earthquake ground motion calculations are applied to public schools, hospitals, skilled nursing facilities, and essential services buildings, such as police stations, fire stations, city hall, and emergency communication centers. Upper-bound earthquake ground motion is defined as the ground motion that has a 10 percent chance of exceedance in 100 years. The California Geological Survey (CGS) has an interactive web page that one can use to calculate design level ground acceleration. The CGS model shows that there is a 10% chance of peak ground acceleration exceeding 0.4-0.5 g over a 50-year time span on the project area.

The project area is subject to strong ground shaking from a number of regionally active faults. Table 4.4-1 identifies the significant faults and maximum credible earthquake faults within the region.

Table 4.4-1 Significant Faults and Maximum Movement

Fault Name	Approximate Distance from Site (miles)	Moment Magnitude[b]
Malibu Coast	8	6.7
Oak Ridge	17	7.0
San Cayetano	20	7.0
San Andreas	41	7.4
Simi-Santa Rosa	7	7.0

Source- 1) California Geological Survey. The Revised 2002 California Probabilistic Seismic Hazard Maps, June 2003. 2) United States Geological Survey (USGS) and California Geological Survey (CGS). (2002). Probabilistic Seismic Hazards Assessment (PSHA) Model, 2002 (revised April 2003).

Liquefaction. Liquefaction is a temporary loss of shear strength in granular solids, such as sand, silt, and gravel, usually occurring during or after a major earthquake. This occurs when the shock waves from an earthquake of sufficient magnitude and duration compact and reduce the volume of the soil. If drainage cannot occur, this reduction in soil volume can increase the pressure exerted on the water contained in the soil, forcing it upward to the ground surface. This process can transform stable granular material into a fluid-like state. The potential for liquefaction to occur is greatest in areas with loose, granular, low-density soil, where the water table is within the upper 40 to 50 ft of the ground surface. Liquefaction can result in slope and foundation failure. Given the local bedrock geology, the potential for liquefaction throughout the City is considered low. However, as shown in Figure 4.4-4, the

California Geological Survey Seismic Hazard Mapping Program (2002) identified a significant area along the eastern boundary of the Specific Plan where liquefaction could potentially occur.

Slope Stability Hazards. Slope stability constraints focus on conditions or factors that result in the rapid erosion of hillsides. Slope instabilities include landslides, mudslides, slumps, and erosion.

Landslides. Landslides in the City area are best observed in the Topanga, Calabasas, and Modelo formations. These rock units are clay-rich and are often undercut by erosion. Although the Geologic Conditions Map (pg. VIII-6) included within the Seismic Safety Element of the City of Agoura Hills General Plan does not identify any significant landslides in the boundaries of the project area, the California Geological Survey Seismic Hazard Mapping Program (2002) indicates several areas within the southern project boundary where landslide hazards are a potential concern. Inadequate slope stability can result in landslides and landslides have occurred in the mountainous portions of the City, including the higher elevations of Ladyface Mountain (Figure 4.4-4).

Mudslides, Slumps, and Erosion. Mudslides and slumps are a more shallow type of slope failure compared to landslides. These typically affect the upper soil horizons, and are not bedrock features. Historically, mudslides and slumps occur during or soon after periods of rainfall. Erosion can occur along manufactured slopes that are improperly designed or not adequately revegetated. Mudslides and soil slumping have occurred within the City. Key factors which cause mudslide and soil slumping hazards include: the depth and type of soil; the direction and angle of the slope; the surface drainage configuration; and type and condition of natural ground cover. No incidences of mudslides or soil slumping have been identified at the site. However, the potential for mudslides is greatest within weathered colluvium found at the toe of steep slopes and within the project area.

Rockfalls. Rockfalls normally occur along steep ridges. Areas near steep outcroppings of Conejo Volcanic rocks can experience rockfalls. These rockfalls are often triggered by earthquakes or heavy rainfall. No specific locations within the project area have been identified as having a significant rockfall hazard. However, large boulders have or are locally eroding from the agglomerates of the Conejo Volcanics (Tcva). Where perched on slopes at the surface, these boulders may become dislodged and roll down slope. Rockfalls have been identified as a potential hazard in the upper slopes of Ladyface Mountain and within the southern central portion of the project site, where large volcanic outcrops, loose cobbles, or boulders from slopes are common.

Soil Hazards. Soil-related hazards include expansive soils, settlement, subsidence, and hydrocompaction. These types of hazards, and the areas within the City of Agoura Hills that could be subject to such hazards, are discussed below.

Expansive Soil. Expansive soils are soils that are generally clayey, swell when wetted and shrink when dried. Wetting can occur in a number of ways (i.e., absorption from the air, rainfall, groundwater fluctuations, lawn watering, broken water or sewer lines, etc.). Soil within the project area is identified as having a moderate to high potential for expansion.

Settlement. Settlement is the downward movement of the land surface resulting from the compression of void space in underlying soils. This compression can occur naturally with the accumulation of sediments over porous alluvial soils within river valleys. Settlement can also result from human activities including improperly placed artificial fill, and structures built on soils or bedrock materials with differential settlement rates. This phenomenon can alter local drainage patterns and result in structural damage. Although the magnitude of the seismically-induced differential settlement cannot be reliably predicted, it is not anticipated to occur within the Conejo Volcanics. Based upon the dense nature of the subsurface earth materials, the seismic settlement hazard is considered to be less than significant throughout much of the proejct area; however, compressible alluvium, colluvium, weathered bedrock and existing fill within portions of the project area are subject to settlement under loading.

Subsidence. Subsidence is the sinking of the ground surface caused by compression or collapse of earth materials. Subsidence can be caused by both groundwater extraction and seismically induced liquefaction. Groundwater withdrawal subsidence results from the extraction of groundwater from an unconsolidated aquifer. As water is removed from the aquifer, the total weight of the overburden, which was supported in part by hydrostatic pressure, is placed on the soil matrix compressing the now empty void spaces. This compaction produces a net loss in volume and, hence, a subsidence of the land surface. Damage caused by this type of subsidence is generally not of an immediate or violent nature. The consolidation of alluvium and settling of the land surface is a process that often occurs over many years, except when prompted by seismic shaking or wetting of highly collapsible soils. As yet, no recognized subsidence has occurred within the project area due to either groundwater or oil extraction.

4.4.2 Impact Analysis

a. Methodology and Thresholds of Significance. The analysis of potential geology-related impacts is based on a review of available literature on regional geology. Impacts relating to geology are considered significant if the project would:

- *Expose people or structures to substantial risk of loss, injury or death involving rupture of a known earthquake fault, seismic ground shaking, seismically related ground failure (including liquefaction), or landslides*
- *Be located on a geologic unit that is unstable or would become unstable as a result of the project, potentially resulting in landslide, lateral spreading, subsidence, liquefaction, or collapse*
- *Be located on expansive soil and thus create substantial risks to life or property*

All areas of Southern California are subject to certain risks associated with seismic and geologic activity. Therefore, impacts are considered significant if the project would be exposed to an unusually high potential for hazards relating to groundshaking, subsidence, liquefaction, or shrink-swell of soils without incorporation of appropriate design techniques to minimize the potential for structural damage.

b. Project Impacts and Mitigation Measures.

Impact GEO-1 Seismically induced ground shaking could destroy or damage structures and infrastructure, resulting in loss of property or

risk to human safety. This is considered a Class II, *significant but mitigable* impact.

No known active faults cross through the project area; therefore, the potential for fault rupture within the project area is minimal. However, any of several faults in the area could produce significant ground-shaking onsite. The faults listed in Section 4.4.1.c are not the only faults in the area that can produce earthquakes, but they are the most probable to affect the project area according to the latest data. Earthquakes along these faults could produce potentially significant impacts to structures onsite. The California Geological Survey (CGS) has modeled the project area has having a 10% probability of experiencing 0.4-0.5 g ground acceleration over the next 50 years. Although nothing can ensure that structures do not fail under seismic stress, proper engineering can minimize the risk to life and property.

The potential for groundshaking from blind thrust faults also exists in the area. Blind thrust faults are low angle detachment faults that do not reach the ground surface. Recent examples of blind thrust fault earthquakes include the 1994 Northridge (Magnitude 6.7), 1983 Coalinga (Magnitude 6.5), and 1987 Whittier Narrows (Magnitude 5.9) events. As described in Dolan et al (1995), much of the Los Angeles area is underlain by blind thrust faults. In their seismic model for Los Angeles, blind thrust faults are found at a depth of about 6 to 10 miles below ground surface and have the ability to produce magnitude 7.5 earthquakes.

Mitigation Measures. Development on all individual properties within the Specific Plan area would be required to comply with applicable requirements of the Uniform Building Code (UBC) and California Building Code (CBC). In addition, the following measures are required to reduce impacts to the greatest degree feasible.

GEO-1(a) Building Design. All buildings shall be engineered to withstand the expected design basis ground acceleration that may occur at the project site. All critical facilities shall be designed to withstand the upper bound earthquake ground motion. The design shall take into consideration the most current and applicable seismic attenuation methods that are available. All onsite structures shall comply with applicable provisions of the California Building Code and Chapter 1 of Article 8 of the Agoura Hills Municipal Code. Compliance with these requirements shall be verified by the City Building Official prior to issuance of a Building Permit or Grading Permit.

GEO-1(b) Geotechnical Recommendations. Future development shall require, and comply with, all recommendations contained in site-specific geologic, geotechnical, and structural design studies prepared for subsequent development activities. Subsequent subsurface investigations shall determine the possible presence of seismically induced hazards and appropriate means of mitigating such hazards. Recommendations contained in these site-specific studies shall be reviewed and approved by the City Building Official and incorporated in to final grading and structural design plans, as deemed appropriate by the City Building Official. At a minimum, any buildings considered essential facilities, as defined in the Uniform or California building codes, shall be designed to withstand upper bound earthquake ground motion. All on-site structures shall comply with applicable provisions of the 1997 Uniform Building Code and the 1998 California Building Code. The calculated design base ground

motion for the site shall take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available.

Significance After Mitigation. Any structure built in California is susceptible to failure as a result of seismically induced ground acceleration. However, the potential for structural failure due to seismic ground shaking would be reduced to a less than significant level through implementation of the most recent industry standards for structural designs.

Impact GEO-2 Future seismic events could result in liquefaction of soils within the Specific Plan area. Specifically, new development near the eastern boundary of the Specific Plan area would be most susceptible to liquefaction hazards. This is considered a Class II, *significant but mitigable* impact.

Liquefaction is a phenomenon in which the strength and stiffness of saturated soil is rapidly reduced, either by seismic shaking or other sudden loading. Severe shaking of the soil can increase the water pressure within the soil, allowing the soil particles to move independently of one another. The soil consequently behaves more like a viscous fluid than a solid, which could result in damage to building foundations and structures during soil failure. As shown on Figure 4.4-4, much of the Specific Plan area east of Cornell Road is potentially subject to liquefaction.

Full build out of the Specific Plan would add up to 44 new dwelling units and up to 190,000 square feet of new commercial/retail development to Zones D east and E. Zone E is currently vacant and Zone D east is developed with an existing 233,200 square feet of commercial/retail development. Both zones could experience liquefaction. Liquefaction could occur during seismic events and create moderate to severe damage to onsite structures if building foundations are not properly designed. This is considered a potentially significant impact.

Mitigation Measures. To more accurately determine the potential for liquefaction, site-specific geologic studies are required. Implementation of the following mitigation measure for all individual developments within the Specific Plan area would reduce impacts related to liquefaction hazards.

GEO-2 **Liquefaction Studies.** Prior to construction of new development within the Specific Plan area, site-specific geologic and soils studies shall be performed. The studies shall include site-specific depth to groundwater and soil composition identification, with minimum boring depths as set forth in CDMG 1997 (California Department of Conservation, Division of Mines and Geology, 1997, *Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117*). Areas having liquefiable sediments shall be identified, and structures shall be properly designed to Uniform Building Code and California Building Code standards to withstand the conditions. Such studies shall be conducted and submitted for review and approval by the City prior to issuance of a Grading Permit.

Suitable measures to reduce liquefaction include, but are not limited to:

- *Specialized design of foundations by a structural engineer;*
- *Removal or treatment of liquefiable soils to reduce the potential for liquefaction;*
- *In-situ densification of soils;*
- *Other alterations to ground characteristics.*

Significance After Mitigation. Implementation of the above measures would reduce impacts related to seismically induced liquefaction to acceptable engineering standards. Thus, impacts to development within the Specific Plan area would be reduced to a less than significant level.

Impact GEO-3 Slope instability can pose a geologic hazard onsite. The creation of unstable slopes is considered a Class II, *significant but mitigable,* impact.

Slope instabilities can be the result of man-made features (undercutting natural slopes, improper construction of cut or fill slopes) or natural features (mudslides, landslides, or rockfalls). The topography across the site is variable and could require relatively substantial topographic modification. Creation of manufactured slopes could create instability if appropriate engineering practices are not followed. If weathered bedrock, residual soil, or colluvium are encountered, significant slope stability impacts could result unless those materials are properly engineered as fill material. In addition, if grading were to occur along the banks of waterways, retaining walls may be needed in these locations, as well as along the base of Ladyface Mountain. If not properly engineered, this would potentially create slope stability problems and could expose new development to slope failures such as landslides, soil settlement, rock falls, etc. Potential impacts relating to slope stability hazards are therefore considered potentially significant.

Mitigation Measures. The following measures are required to reduce slope stability hazard impacts, in addition to compliance with applicable requirements of the Uniform Building Code (UBC) and California Building Code (CBC):

GEO-3(a) Geotechnical Evaluation. Individual developments shall provide site-specific geotechnical evaluations and geological reports that address onsite soils and slope stability hazards as part of the initial application process. Prior to approval of a specific development plan, these studies shall be submitted to the City Planning and Community Development Department and/or consultants hired by the City for review and approval as part of the initial application process. These evaluations shall determine the potential for adverse soil stability impacts and shall identify appropriate mitigation techniques. All mitigation recommendations identified in site-specific studies shall be implemented as a condition of future development. Such measures may include avoidance of development in areas found to have unmitigable soil or geologic hazards, soil or grading modifications to ensure

acceptable slope stability on manufactured slopes, structural measures to ensure slope stability, drainage control facilities to collect and direct water off of slopes, removal of loose cobbles and boulders from adjacent slopes, and/or other measures deemed appropriate to ensure proper slope stability. If site-specific geologic mitigation measures are found to cause secondary environmental effects not addressed herein (excessive import or export of soil material, retaining walls, blasting, etc.), subsequent environmental analysis, may be required.

GEO-3(b) **Erosion Control Plan.** A site-specific erosion control plan that incorporates best management practices shall be prepared by individual applicants and approved by the City prior to the granting of any grading permits for an individual development within the project area. Measures identified in such plans shall be implemented. Such measures may include slope protection measures, netting and sandbagging, landscaping and possibly hydroseeding, temporary drainage control facilities such as retention areas, etc. Landscaping shall be designed by a licensed landscape architect with final landscaping plans to be reviewed and approved by the City Building Official prior to project approval.

GEO-3(c) **City Oversight and Approval.** The City Engineer or equivalent shall inspect a project after the final grading report has been filed. The project shall not be approved for construction by the City Engineer or equivalent until all hazards either caused by project grading or associated with adjoining geologic and soils conditions, such as erosion and slope instability, are mitigated to the City's specifications.

Significance After Mitigation. If the above mitigation measures are implemented, impacts related to slope instability would be reduced to a less than significant level.

Impact GEO-4 **The project is underlain by Conejo Volcanics which would be difficult to excavate and blasting may be an option to perform some excavations. This is considered a Class II, *significant, but mitigable* impact.**

According to a Feasibility Level Geotechnical Site Investigation performed for Zone B by Gorian & Associates, Inc., in April of 1990, development within portions of the project area may encounter hard rock at the surface or at depth. The Conejo Volcanics exposed onsite are resistant and very indurated (hard). Whether indurated at the surface or at depth, excavation with conventional grading equipment may be slow and difficult. Requests to perform blasting to excavate in certain areas or to complete deep cuts may be submitted to the City. Areas where bedrock would be encountered, such as slopes west of Lindero Canyon Creek, would require overexcavation, overfill and compaction.

A shallow seismic refraction traverse survey performed in the southcentral portion of the site (between Kanan and Cornell Road and south of Agoura Road) found the surficial soil of the knoll at the southern-most boundary of the site to be very hard at the

near surface (>2 ft). The survey showed the areas directly west of Medea Creek to be very hard at depths below 9 to 14 ft and the areas directly east of Kanan Road to be weathered and rippable to depths of at least 22 to 25 ft. As these and other portions of the project area may be underlain by highly indurated materials, requests to perform blasting onsite may be necessary. Given landslide and rockfall potential within the area, potential blasting as part of the project is considered a Class II, significant but mitigable impact.

Mitigation Measures. The following measures are required to reduce blasting related impacts to a less than significant level:

GEO-4(a) Test Blast/Vibration Study & Blasting Plan. Blasting shall be discouraged. However, if a site-specific geologic, geotechnical, or structural design study deems blasting necessary for grading and excavation onsite, the applicant must perform a test blast/vibration study to evaluate the variation in vibratory ground motion intensity with respect to distance from the blast site. It must be shown that the blasting can be done safely with respect to existing improvements.

A blasting plan shall be provided as part of the vibration study, and submitted as part of the initial application submittal to the City Planning and Community Development Department, City Council and Fire Marshall for approval. Blasting permit approval would be subject to the City's discretion and may be denied. If the City were to approve the blasting plan, at a minimum it should be designed to minimize ground shaking away from the blast area. Any areas having unstable slopes or rockfall hazards shall be secured to prevent injury or property damage. If approved, the permittee shall provide sufficient supervisory control as determined by the building official during the grading operation to ensure compliance with approved plans and with the municipal code. When found necessary by the City Building Official, the permittee shall employ a qualified geologist and foundation engineer to assist in supervising the grading operation. If a blasting permit is denied by the City, the applicant shall prepare an alternative application for development which excludes the need for blasting.

Significance After Mitigation. If the required mitigation measure is implemented, impacts relating to blasting onsite would be reduced to a less than significant level.

Impact GEO-5 The proposed project is located in an area underlain by expansive soils. Impacts relating to expansive soils are considered Class II, *significant but mitigable*.

Multiple geologic and soils engineering explorations, as listed in 4.4.1.a. *Setting* above, have identified clayey materials throughout the project area. This type of soil can have a relatively high shrink-swell potential. In addition, imported soils may exhibit high expansion potential. Shrinking and swelling of soil beneath structures can potentially result in cracking of foundations and other structural damage. The potential for property damage relating to shrink-swell of soils is considered a potentially significant impact.

Mitigation Measures. The following measures are required to reduce soil expansion/contraction impacts.

GEO-5(a) Foundations and Project Infrastructure Design. As provided in mitigation measure GEO-3(a), a site specific geotechnical evaluations shall be conducted for individual projects and submitted to the City Planning and Community Development Department for review and approval as part of the initial application. If the project site is identified to be in a high expansive soil zone based on the site specific Geotechnical Investigation, the foundations and project infrastructure shall be designed by a structural engineer to withstand the existing conditions or the site shall be graded in such a manner as to address the condition.

Suitable measures to reduce impacts from expansive soils could include one or more of the following techniques, as determined by a qualified geotechnical engineer:

- *excavation of existing soils and importation of non-expansive soils; and*
- *foundation design to accommodate certain amounts of differential expansion such as posttensional slab and/or ribbed foundations designed in accordance with Chapter 18, Division III of the UBC;*
- *imported fill shall be tested to ensure it is suitable to be used as fill.*

GEO-5(b) Soils and Foundation Report. To avoid soil-related hazards, the individual project applicants shall provide a soils/foundation report as part of the initial project application to the City Planning and Community Development Department (standard requirement).

Plan Requirements: The required report shall be provided with building plans and shall evaluate soil engineering properties and provide foundation design recommendations. If site-specific measures are found to cause secondary environmental effects not addressed herein, subsequent environmental analysis may be required. **Timing:** The soils/foundation report shall be provided to the Building Division for review and approval prior to issuance of Building Permits. **Monitoring:** Building Division staff shall review and approve the required report (and the foundation design) prior to issuance of the Building Permit. Building inspectors shall make site inspections to assure implementation of approved plans.

Significance After Mitigation. If the mitigation measures above are implemented, the impacts related to soil expansion would be reduced to a less than significant level.

Impact GEO-6 Portions of onsite soil materials consist of fill materials and may not be suitable for compaction. Cut from the project site may also not be suitable for reuse as fill onsite as it could

settle during earthquakes or due to construction-related loading. This is considered a Class II, *significant but mitigable,* impact.

Excavations in the volcanic bedrock located south of Agoura Road can be expected to produce rock too large for placement in engineered compacted fill and special handling requirements are anticipated. The special handling may include on- or off-site rock disposal. An Engineering Geology Review (Slosson and Associates 1996) for the project area west of Kanan Road and south of Agoura Road found that "all natural soils, alluvium/colluvium, and/or non-engineered onsite fill are not considered suitable for the support of proposed engineered fill and/or improvements. As such, these materials shall be removed from areas planned to receive fill or where exposed in cut surfaces at final grade." Additionally, between April 1996 and November 1996, approximately 35,000 cubic yards of fill material were deposited on the southwest corner of the Kanan and Agoura Road intersection.

Construction on areas of compressible alluvium, colluvium, weathered bedrock and existing fill could be subject to settlement impacts. Because buildout of the Specific Plan would generate an abundance of cut material, and because additional areas onsite are currently unsuitable to receive fill, the impacts from the potential for settlement are presumed to be significant. Detailed geologic studies are required prior to development to evaluate the potential for settlement. If the site is found to have a high potential for settlement, this can generally be mitigated through proper foundation design and/or grading.

According to a review of preliminary development applications within the southern portion of the Specific Plan area, cut materials will likely need to be exported offsite. Based on these preliminary plans and reasonable grading estimates, there will be approximately 100,000 cubic yards of cut from the area located southwest of the intersection of Agoura and Kanan Road; about 500,000 cy of cut from the area located southeast of the same intersection; and about 67,000 cy of cut material will be removed from the site located on the southeast corner of Agoura and Cornell Road. It is presumed that cut will be processed and crushed onsite to less than 3 inches in diameter. Processed materials will either be delivered to local landfills for use as cover, or will be pre-sold to other developers in the region to use as fill. The ultimate disposition of these excess soil materials will be based on their specific composition and engineering characteristics. It is assumed that export of the soil will be to destinations no more than 12.5 miles[1] from the project site.

Mitigation Measures. Conventional soil removal and recompaction techniques, as well as the following measures, are required to reduce soil settlement hazard and other soil hazard impacts to a less than significant level:

GEO-6(a) Settlement Related Mitigation. Future development shall comply with all recommendations contained in site-specific geologic, geotechnical, and structural design studies as required to be prepared for subsequent

[1] Travel distance for soil export was based on an applicant's proposal to sell cut and fill to a developer in Las Virgenes Canyon. The proposed location for fill delivery is approximately six miles from the Specific Plan area. However, given the uncertainty of the viability of use for this location, this distance was effectively doubled to provide a worst case scenario in case the preferred location is unavailable.

development activities. Subsequent subsurface investigations shall determine the required degree of compaction and the proper moisture content and appropriate means of mitigating settlement related hazards. Recommendations contained in these site-specific studies shall be reviewed and approved by the City Planning and Community Development Department and City Building Official and incorporated into final grading and structural design plans, as deemed appropriate by the City Building Official prior to issuance of a Grading Permit and/or Building Permit. At a minimum, suitable measures to reduce settlement impacts shall include, but not be limited to:

- Removal of organic material in the area of the proposed grading
- Removal of non-engineered artificial fill in areas to receive engineered fill or in areas where structural support is required
- Placement of a keyway at the bottom of all fill slopes a minimum depth of 3 feet and down to the bedrock with the keyway a minimum of 10 feet wide (unless otherwise determined by the site-specific geological study)
- Fill soils shall be benched into the hillside
- Removal of upper soils to the bedrock

After excavation:

- All bottoms of the excavations and areas to receive slabs shall be scarified and compacted to 90%
- All fills and backfills should be placed in horizontal layers less than 8 inches in loose thickness
- Soils shall be compacted to a minimum of 90% of the maximum density rendered by the latest ASTM version
- Moisture content should not vary more than 2% from the optimum moisture content, although the grading process will be more easily accomplished with the soils being 1 – 2 % wetter than optimum moisture content
- Any utility trenches will need to be properly backfilled as detailed above
- Any import soils should be approved by a qualified geologist
- Slope faces shall be compacted to at least 90% of maximum compaction

GEO-6(b) **Additional Environmental Review.** If individual developers are unable to find a disposal site for construction cut within 12.5 miles of the Specific Plan area, or if processed soil is not suitable for fill, then individual projects may require additional environmental analysis. Individual developers must demonstrate a means for disposal of excess cut materials, within 12.5 miles of the project site, prior to approval by the City.

Significance After Mitigation. If the required mitigation measures are implemented, impacts relating to soil settlement would be reduced to a less than significant level. If developers are unable to process cut suitable for fill, or can not find a disposal facility within

12.5 miles of the project site, additional analysis would be required in order to determine the potential significance of offsite disposal.

c. Cumulative Impacts. The proposed project, in conjunction with other planned and pending development in the area (as shown in Table 3-1 in Section 3.0, *Environmental Setting*), would cumulatively add a total of 772 residences and about 2.0 million square feet of non-residential development. Such growth would cumulatively increase the potential for the exposure of people and property to seismic and geologic hazards that exist throughout the Southern California region.

Cumulative impacts related to fault rupture, seismically related ground shaking, liquefaction, expansive soils, and soil compaction would generally be similar to that described for the proposed project. However, because geologic and soil conditions can vary widely from location to location, geologic hazards must be addressed on a case-by-case basis. Assuming that all new development in the City conforms to applicable provisions of the California Building Code and Agoura Hills Municipal Code, cumulative impacts relating to geology and seismic hazards can be reduced to a level considered less than significant.

4.5 HAZARDS and HAZARDOUS MATERIALS

The project area is located in an urban/wildfire interface area that could be adversely affected by wildfires. In addition, the area is partially developed with a mix of commercial and retail uses, some of which may have historically involved use or storage of hazardous materials. Future redevelopment of these areas could be adversely affected if former site uses have resulted in onsite soil or groundwater contamination. This is considered to be a potentially significant but mitigable impact.

The potential hazards associated with transport of hazardous materials and accidental spill of such materials along US Highway 101(U.S. 101) and Kanan Road have the potential to adversely affect the project area; however, these issues are currently addressed in the City's Emergency Preparedness Plan and the County of Los Angels Hazardous Waste Management Plan and are considered less than significant.

In addition, the City's General Plan Public Safety Element identifies major natural gas pipelines located just north of Agoura Road and just east of Kanan Road in the project area. With proper site planning, these facilities are not expected to significantly impact development within the Specific Plan area.

Other onsite hazards that may affect the project area include land or rock slides and flooding associated with storm events. These issues are further addressed in Sections 4.4, Geology, and 4.7, Hydrology and Water Quality, of this EIR.

4.5.1 Setting

The Specific Plan area is located immediately south of U.S. 101 and is bisected by Agoura and Kanan Roads. The project area encompasses about 135 acres, of which about 32 acres are currently developed with various commercial uses including retail, restaurant, office, theatres, and services. About 103 acres of the planning area are vacant and currently undeveloped. The central portion of the project area (located east of Kanan Road and west of Cornell Road) is intermixed with vacant lots and developed lots with urban uses including various types of retail, industrial and office uses. The eastern portions of the project area (located east of Cornell Road) include the Whizins Center to the north and single-family residential and vacant land to the south. The southern boundary of the project area is adjacent to the base of Lady Face Mountain and areas designated as open space.

a. Wildland Fire Hazard. The Specific Plan area is identified in the City's General Plan Public Safety Element as being in an urban/wildfire interface area that could be adversely affected by wildfires. The undeveloped hillsides in the project area are covered mainly with grasses and brush, with scattered oaks. The general lack of rain from May to November in southern California causes this vegetation to become very dry, making the hillsides a high fire hazard. The California Department of Forestry has suggested that this rating should be considered an average for the area, rather than a delineation of exact conditions. Variations in slope, weather, fuel load, aspect, elevation, and air movement may influence hazard conditions in a specific location. Risk to any individual structure also depends on factors such as access, water supply, clearance, and structural characteristics.

The Los Angeles County Fire Department would be the first to respond to a fire in the City. The closest fire station to the project area is Station 65 located at 4206 N. Cornell Road immediately

south of the Specific Plan area. If a fire requires more than Los Angeles County Fire Department resources to suppress, mutual aid agreements are in effect with Ventura County, State, and Federal agencies to provide for additional resources.

b. Hazardous Materials. Improper use, storage, transport and disposal of hazardous materials and waste may result in harm to humans, surface and groundwater degradation, air pollution, fire, and explosion. Some hazardous materials commonly used in households, commercial and retail businesses and by industry have been linked to increased occurrences of cancer, birth defects, reproductive failures, and other irreversible health effects.

Existing Land Uses. As noted above, about 103 acres of the project area are currently undeveloped and 32 acres of the project area are developed with a mix of 372,042 square feet (sf) of commercial and retail uses. The following is a breakdown of existing land uses in the developed portion of the Specific Plan area:

Existing Land Uses Within the Developed Portion of the Agoura Village Specific Plan Area

Project Zone	Total Area of Zone (sf)	Land Uses within Zone	Existing Development Within the Project Area (sf)
A South	600,000	Retail / Office / Restaurant / Community Center/ Hotel	-
A North	250,000	Retail / Office / Restaurant	58,192
B	700,000	Retail / Office / Restaurant/Hotel	-
C	135,000	Service Commercial / Office	43,750
D West	210,000	Retail / Office / Restaurant	36,900
D East	1,200,000	Retail / Office / Restaurant	233,200
E	311,040	Office / Restaurant	-
F	215,000	Office	-
TOTAL	**3,621,040**		**372,042**

Based on a recent Phase I Environmental Site Assessment report prepared for the property located at the southeast corner of Agoura and Kanan Roads, there are several properties within or adjoining the project area that are listed in environmental databases as currently or previously having involved hazardous materials, use, storage, or a release. These sites are summarized as follows:

- **5051 Kanan Road – Chevron #9-5348** is listed on the LUFT, Cortese, BEP, and Haznet databases.
- **509 and 5015 Kanan Road – Agoura Cleaners** is listed on the RCRIS, Dry Cleaners and Haznet databases.
- **29300 Roadside Drive –** Pacific Bell is listed on the RCRIS, Cortese, LUST, UST, Hist UST, CA FID and Haznet Databases.
- **39338 Roadside Drive –** Globe Environmental Services is listed on the RCRIS, and Haznet databases

- **29403 and 29149 Agoura Road –** Agoura Building Materials is listed on the Cortese, LUST, and Haznet databases.
- **29439 Agoura Road –** Agoura Equipment Rental and Supplies is listed on the Cortese, LUST, CA FID, and Hist. UST databases.
- **29431 Agoura Road –** Hillside Rubbish/Westlake Truck is listed on the Cortese, LUST, CA FID, Hist. UST, and Haznet databases.
- **29020 Agoura Road –** Agoura Road Limited Volume is listed on the SWF/LF database.
- **5000 Kanan Road –** USA Gasoline Corporation #83 is listed on the UST database.

Source: Phase I Environmental Site Assessment Agoura Road and Kanan Road, Agoura Hills, Los Angeles County, California, Padre Associates, September 2003

Highway Accidents. The main arteries in the City utilized by transporters of hazardous materials and waste are U.S. 101 and Kanan Road. The City does not currently restrict travel ways for hazardous materials transportation. Trucks commonly carry a variety of hazardous materials, including gasoline and various crude oil derivatives, and other chemicals known to cause human health problems. When properly contained, these materials present no hazard to the community. But in the event of an accident or derailment, such materials may be released, either in liquid or gas form. In the case of some chemicals (such as chlorine), highly toxic fumes may be carried far from the accident site. Existing Federal, State, and Los Angeles County programs are in place to ensure the safe transport of hazardous materials and to minimize the hazards associated with accidental spill of such materials.

Routine Household Products. One of the most prevalent risks associated with hazardous materials are a result of improper use of common household products routinely used in the home and commercial/retail businesses. Waste oil is a common hazardous material that is often improperly disposed of and can contaminate surface water through runoff. Other household hazardous wastes (used paint, pesticides, cleaning products and other chemicals) are common and often improperly stored in garages, homes and businesses throughout the community. Because of their prevalence and proximity to residents, household products represent one of the most pervasive health and environmental hazards in the community.

Asbestos. Asbestos is a highly crumbly material often found in older buildings, typically used as insulation in walls or ceilings. It was formerly popular as an insulating material because it had the desirable characteristic of being fire resistant. However, it can pose a health risk when very small particles become airborne. These dust-like particles can be easily inhaled, where their microscopically sharp structures can puncture tiny air sacs in the lungs, resulting in long-term health problems.

The developed portion of the project area contains several older structures with the potential to contain asbestos. Pre-1979 construction often included asbestos and it should be assumed that the demolition of such structures as part of the revitalization of these areas may present this hazard. Proper asbestos abatement and disposal procedures are required to be undertaken whenever the demolition of older structures is considered.

Natural Gas Pipelines. The City's General Plan Public Safety Element identifies a major natural gas pipelines located just north of Agoura Road and just east of Kanan Road in the project area. Existing Federal, State, and Los Angeles County programs are in place to ensure the safe pipeline transport of hazardous materials, including natural gas, and to minimize the hazards associated with accidental release of such materials.

Regulatory Setting. Numerous Federal, State and local regulations regarding use, storage, transportation, handling, processing and disposal of hazardous materials and waste have been adopted since the passage of the federal Resource Conservation and Recovery Act (RCRA) of 1976. The goal of RCRA is to assure adequate tracking of hazardous materials from generation to proper disposal. California Fire Codes (CFC) Articles 79, 80 et al., which augment RCRA, are the primary regulatory guidelines used by the City and the County of Los Angeles to govern the storage and use of hazardous materials. The CFC also serves as the principal enforcement document from which corresponding violations are written.

Senate Bill 1082 (1993) established the "Unified Hazardous Waste and Hazardous Materials Management Regulatory Program". The Unified Program consolidates, coordinates, and makes consistent the following hazardous materials and hazardous waste programs (Program Elements):

- Hazardous Waste Generation (including onsite treatment under Tiered Permitting),
- Aboveground Petroleum Storage Tanks (only the Spill Prevention Control and Countermeasure Plan or "SPCC"),
- Underground Storage Tanks (USTs),
- Hazardous Material Release Response Plans and Inventories,
- California Accidental Release Prevention Program (Cal ARP), and,
- Uniform Fire Code Hazardous Material Management Plans and Inventories.

The County of Los Angeles Fire Department has been approved by the California Environmental Protection Agency (EPA) as a Certified Unified Program Agency (CUPA) for a large part of the greater Los Angeles area, including the City of Agoura Hills.

As the CUPA, the Los Angeles County Fire Department is responsible for administering the above programs required under Senate Bill 1082. This includes providing accurate information regarding the location, type, approximate quantity, and health risk of hazardous materials or waste to emergency response personnel, the public and other government officials. The threat from hazardous materials use throughout the City is significantly reduced by existing regulatory programs administered by Los Angeles County Fire Department that are in place to minimize such hazards.

4.5.2 Impact Analysis

a. Methodology and Thresholds of Significance. For the purpose of this analysis, a significant impact would occur if buildout of the Specific Plan would:

- *Create a significant hazard to the public or the environment associated with increased occurrence or exposure to wildfires;*
- *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;*
- *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;*
- *Be located on a site that has been adversely affected by a hazardous materials release or otherwise involves the disturbance of hazardous materials such as asbestos or lead-based paint. or*
- *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.*

b. Project Impacts and Mitigation Measures.

Impact HAZ-1 Future development in the Specific Plan area, and specifically future development in the hillside areas south of Agoura Road, would be in a wildland fire hazard area, which could create a public safety hazard. New development within the Specific Plan area would be required to comply with existing regulations intended to minimize the potential effects associated with wildfires. This is considered to be a Class III, *less than significant impact.*

A majority of the Specific Plan area is identified in the City's General Plan as an urban/wildfire interface area. Future development within this area has the potential to increase the likelihood wildfires impacts in two ways: 1) increased human activity within the interface area could result in greater probability of the ignition of a fire; and 2) encroachment of new development into the high fire hazard hillside areas, particularly those south of Agoura Road, would increase the risk that a wildfire would impact either people or their property. However, given the implementation of standard fire prevention measures and proper site design (as required of the Los Angeles County Fire Code, Title 32 of the Los Angeles County Code and Los Angeles County Fire Department), the potential effects associated with increased wildfire hazards would be reduced to less than significant.

Mitigation Measures. None required.

Significance After Mitigation. Impacts associated with wildfire hazards are considered less than significant without mitigation.

Impact HAZ-2 A release of hazardous materials associated with the use, storage, and transport of hazardous materials related to existing and new development within the Specific Plan area has the potential to result in adverse impacts to human health and safety and the environment. Existing regulations and hazardous materials management programs are in place to minimize the effects associated with unauthorized or accidental releases of hazardous materials. This is considered to be a Class III, *less than significant impact*.

The Specific Plan area is currently a mix of vacant undeveloped areas located primarily south of Agoura Road and mixed commercial and retail uses situated north of Agoura Road. Implementation of the proposed Specific Plan would involve revitalization and potentially modest expansion of those commercial/retail areas north of Agoura Road and potential new mixed commercial, retail, hotel, and residential use for those areas south of Agoura Road. While the area is fairly typical of a suburban commercial/open area interface, and not a heavily industrialized area, improper use, storage, and/or transport of hazardous materials have the potential to adversely affect the environment and current and future residents and visitors to the area. These impacts could result from existing and future land uses in the area, the existing natural gas pipeline(s) in the area, and routine transport of hazardous materials along roadway corridors within or adjoining the project area. Existing regulations and hazardous materials management programs (City of Agoura Hills General Plan and Los Angeles County Hazardous Waste Management Plan) are in place to minimize or avoid potentially significant impacts associated with unauthorized or accidental release of hazardous materials.

Mitigation Measures. None required.

Significance After Mitigation. Impacts associated with unauthorized or accidental release of hazardous materials are considered less than significant without mitigation.

Impact HAZ-3 The potential presence of hazardous materials on both developed and undeveloped properties within the project area has the potential to adversely affect future users, construction workers, and/or the environment. This is considered to be a Class II, *potentially significant but mitigable impact*.

The potential presence of hazardous materials associated with current uses in the project area is dependent upon the historic site uses and materials used in the construction of existing structures. Revitalization of these areas within the Specific Plan has the potential to expose people and/or the environment to hazardous materials, if they are present. Current documentation suggests that the land uses and the subsequent use, storage, and transport of hazardous materials in the project area are typical of a mixed-use commercial retail area (e.g. automotive service related uses, dry cleaners, building suppliers, etc.). Development of undeveloped areas within the Specific Plan area with mixed commercial, retail and residential land uses would introduce additional use, storage, and transport of hazardous materials into the area. However, given the nature of the proposed land uses and current regulations (City of Agoura Hills General Plan

and Los Angeles County Hazardous Waste Management Plan) that are in place to appropriately manage hazardous materials, these new uses are not expected to create significant hazards to people or the environment. It is possible that past uses (e.g. potential agricultural use, dumping or other use) on currently vacant properties may have resulted in onsite contamination that could adversely affect construction or future occupants of these areas. This relatively unlikely, but potentially significant impact can be minimized through the implementation of the mitigation measures listed below.

Mitigation Measures. The following measure is required to reduce impacts related to potentially existing hazardous materials to a less than significant level:

HAZ-3 **Phase I ESA.** As part of the initial project application submittal for a new project or for revitalization of an existing development, a project applicant shall be required to prepare a Phase I Environmental Site Assessment (ESA) to examine the potential for onsite contamination issues. For redevelopment of existing structures, the Phase I ESA shall include examination of the possible presence of asbestos containing materials and lead based paint. In the event that recognized adverse environmental conditions are identified, additional Phase II environmental testing shall be performed and recommended mitigation requirements implemented. If necessary, remediation activities (i.e. excavation and removal of contaminated soils, vapor extraction, removal of contamination source) shall be performed under the supervision of a lead oversight agency to be determined based on the nature of the issue identified. If remediation activities are required, the lead oversight agency shall provide confirmation to the City that onsite environmental issues have been mitigated to a level that is suitable for the anticipated site use or reuse.

Significance After Mitigation. If the required mitigation measure is implemented, impacts relating to potentially existing hazardous materials would be reduced to a less than significant level.

c. Cumulative Impacts. Cumulative development in the Agoura Hills area will have the potential to place people in areas with greater risk of wildland fires. In addition, development in the project area will have the potential to expose future area residents, employees, and visitors to hazardous areas by developing and redeveloping areas that may have previously been exposed to hazardous materials, including buildings containing asbestos or lead-based paint, and uses that have involved the use, storage, and/or transportation of hazardous materials. The magnitude of hazards for individual projects would depend upon the location, type, and size of development and the specific hazards associated with individual sites. Therefore, hazard evaluations would need to be completed on a case-by-case basis. Development on or near wildfire risk zones would be required to be designed appropriately to minimize the risk. If soil and groundwater contamination were found to be present on sites of future development, these conditions would be required to be mitigated. Specific review of individual projects in or near wildland fire risk areas and implementation of appropriate

remedial action on contaminated sites would avoid potential hazard impacts associated with cumulative development in the City.

4.6 HISTORIC AND ARCHAEOLOGICAL RESOURCES

The Agoura Hills region is considered rich in heritage resource remains. Heritage resources include: (1) prehistoric resources, which represent the remains of human occupation prior to European contact; (2) historic archaeological resources, which represent resources dating to post-European contact and may be part of a "built environment." These resources include structures or structural remains used for habitation, work, recreation, education and religious worship, and may also be represented by houses, factories, office buildings, schools, churches, museums, hospitals, bridges, trails and other similar remains; and, (3) Native American concerns, which include ethnographic elements pertaining to Native American issues and values. There is a high potential for encountering cultural or heritage resources within the Specific Plan boundaries.

Given that the soil is largely alluvial and formations within the area are generally not fossiliferous, there is little potential for encountering, paleontological resources within the project area. Currently, 32 acres of the 135-acre project area are developed with a mix of commercial and retail uses. The remaining 66 acres of open space contain four previously recorded prehistoric archaeological sites (CA-LAN-467, -1436, -1352, and -41). Several cultural resource investigations have been performed for this area. All applicable prior studies are referenced herein and available for review at the Agoura Hills City Hall. The impact of potential future development of these resources is considered significant but mitigable.

4.6.1 Setting

This analysis of cultural resources impacts is based upon the following studies, which are incorporated by reference herein and are available for review at the Agoura Hills City Hall.

- FUGRO WEST, INC. (July 1996). *Phase II Archaeological Investigation at CA-LAN-467 and an extended Phase I Archaeological Investigation at site CA-LAN-1436.* Report prepared for City of Agoura Hills Planning Department, Agoura Hills, CA.
- Merrill, Michael. (April, 2002). *A Spatial Analysis of Mapped Surface Artifacts in Several Early Period Sites in Los Angeles and Ventura Counties.*
- Parsons, Jeff A. (December, 2003). *Mapping of Subsurface Trench Exposures at LAN-41, Kanan and Agoura Roads, Agoura Hills*. Report prepared for Clay S. Singer, C.A. Singer & Associates, Inc., Cambria, CA.
- Singer, Clay A. (October, 2000). *Subject: Cultural resources survey and impact assessment for an 18+/- acre property at the junction of Kanan Road and Agoura Road in the City of Agoura Hills, Los Angeles County California: a status report on archaeological site CA-LAN-41.* Report prepared for Ted Moore, E.F. Moore & Co., Ojai.
- Singer, Clay A. (January, 2004a). *Subject: Forensic archaeology.* Report prepared for CraigSkinner and Jennifer Thatcher, Northwest Research Obsidian Studies Laboratory, Corvallis, OR.
- Singer, Clay A. (July, 2004b). *Phase II Archaeological Investigations at CA-LAN-41, a Prehistoric Deposit in the City of Agoura Hills, Los Angeles County, California.* Report prepared for Steven Craig, The Planning Corp., Santa Barbara.
- Singer, Clay A. (September, 2004c). *Cultural resources survey reevaluation of archaeological site CA-LAN-1352, and impact assessment for the Cornerstone @ Agoura Village Project in the City of Agoura Hills, Los Angeles, County, California.* Report prepared for Steven Craig, The Planning Corp., Santa Barbara.

a. Regional History. At the time of Spanish contact, the Hokan-speaking Chumash occupied the region. The Chumash were comprised of a large and diverse population living in contiguous autonomous settlements along the California coast. The villages could be found from Malibu Creek, in the southeast, to Estero Bay, in the north. Settlements were also located on the islands of San Miguel, Santa Rosa, and Santa Cruz, and as far as inland as Tejon Pass, Lake Casitas and the Cuyama River (Kroeber, 1925; Landberg, 1965; Grant, 1978; Santa Barbara Museum of Natural History, 1986; Miller, 1988; and C. King 1982, 1994, 2000).

The Chumash evolved over the last 9,000 years into a complex society by the time the Spanish arrived. According to Singer (1977), the Chumash occupying the area between AD 1200 and AD 1815 may have lived in small villages of 25 to 60 people, socially and economically allied with larger coastal villages that consisted of several hundred people. Chumash villages were relatively large, with some of them containing as many as one thousand people, although one or two hundred inhabitants were more typical. Interior villages may have contained populations varying from 15 to 250 people, much smaller than the coastal villages which contained as many as 1,000 inhabitants (Greenwood, Romani and Foster 1986).

Abundant and easily accessible food and mineral resources contributed to the social and economic development of the region during prehistoric times. The potential resource base for the Native American inhabitants of the area would have provided a diverse range of food and material resources, as well as an advantageous location for trade with Simi Valley, Conejo Valley, Oxnard and Malibu.

From the first explorations of Europeans, the early voyages of Juan Rodrigues Cabrillo (1542), and Sebastian Vizcaino (1602) to the land expeditions of Portola (1769) and Anza (1773-1775/1776), few changes took place along the coast between Ventura and Malibu. The result was that the Native American populations still had little interaction with Europeans until the Missions were established. The first recorded European contact with the Hokan-speaking Ventureno Chumash was by Juan Rodriguez Cabrillo in 1542, when he landed near the present city of Ventura. In 1769, Gaspar de Portola traveled down the Santa Clara River, and arrived at the village of Shisholop near Mission San Buenaventura. Portola was followed in 1776 by Juan Bautista de Anza, who camped near Mission San Buenaventura in 1774.

The Spanish Period was followed by the Mission Period when 21 missions were established along the California coast between 1769 and 1823. The missions were established roughly a day's ride from one another along the Camino Real, which connected San Diego with Solano. For the most part, Spanish influence was confined to this route, with only a few expeditions reaching the coastal and deep interior areas. The Native Americans were slowly assimilated into the Mission system through recruitment at which point they were relocated from their villages to help sustain the missions.

Following the decline of the Mission system during the Mexican Period, enormous land grants were deeded to army veterans and their families. Under the Mexican political system, a majority of the early land grants in the region became ranchos, including El Rio de Santa Clara o La Colonia, Guadalasca, Santa Clara del Norte, San Miguel, Calleguas, Saticoy, Las Posas, Las Virgenes, El Conejo, and Santa Paula. During this time, the land was primarily utilized for cattle grazing, agricultural development and other ranching activities.

b. Site History. The project area is located near the intersection of Agoura Road and Kanan Road in the City of Agoura Hills, in western Los Angeles County. The project area encompasses roughly 135 acres on the north and south sides of Agoura Road, from roughly 1,400 feet west of Kanan Road to about 750 feet east of Cornell Road. The project area currently contains approximately 32 acres of various commercial uses including retail, restaurant, office, theatres, and services. About 103 acres of the total planning area is vacant and currently undeveloped.

The project area was part of Rancho Las Virgenes, which was granted to Miguel Ortega between 1800 and 1802. In 1822, Mexico gained its independence from Spain, and in 1834, the Missions were secularized and mission lands were converted into large land grants. Rancho Las Virgenes was patented to Domingo Antonio Ignacio Carrillo in 1834 and the land was used primarily for cattle ranching.

During the American Period, ranching continued to be a major activity in the region. Gradually agricultural activities increased and the local economy diversified. Orchards and farming gradually replaced grazing and ranch lands. Since the creation of State Highway 101 between the San Fernando and Conejo Valleys in the 1960s, land use patterns have shifted to residential and commercial development. Increasing urbanization continues to be a major characteristic of the region's future. Today, the project area is bordered by open space, commercial and retail land uses.

Since 1970, over 50 individual archaeological reports have been generated within the City of Agoura Hills. Two doctoral dissertations are based on data from a destroyed village and mortuary site within the City limits along Medea Creek. Cultural resource investigations since the 1960s have yielded tremendous archaeological data about Native American settlement patterns, social systems and trade networks from sites that no longer exist.

During 1965 during one of many Ladyface Mountain surveys, a portion of the project area was examined by four students from the UCLA Archaeological Survey, Chester King, Linda Barbey, Clay Singer and Lynne Singer. These surveys were designed to locate new sites and relocate sites that were already recorded but incorrectly or poorly mapped. Formal archaeological surveys that included the project area were carried out in 1989 and 2000 (Singer and Atwood 1989; Singer 2000). The 2000 survey report included an archaeological records search that summarized information about known resources and reports available for the project area. The surveys and reports identified four archaeological sites within the project area. These sites are discussed in further detail below.

CA-LAN-467. *This site is located along the northern base of Ladyface Mountain, west of Kanan Road. Agoura Road runs through the project area. Extensive grading along the north side of the road has subsequently destroyed this prehistoric site.*

The south side of Agoura Road CA-LAN-467 is broken into east and west sections by a south-north trending drainage. The section east of the drainage is within the Agoura Village Specific Plan area. This section has been bulldozed or plowed in the past and is covered by non-native vegetation. The section west of the drainage contains scattered sage scrub species, and has a bulldozer cut running upslope.

CA-LAN-467 was initially recorded during 1972, and a more intensive survey of the property inclusive of the site area was completed by Singer & Associates in October of 1988. The 1988 study was designed to assess potential impacts to CA-LAN-467 by a proposed development. The results of the 1988 field investigation (along with CA-LAN-1436) indicated that a majority of the site was destroyed by prior construction activity. According to Singer (1988) the remaining observed cultural materials consisted of "unpatinated" gray andesite core tools and one spherical hammerstone from an area described as the "recently cleared eastern area of the site." Because the chipped stone items had no patination (weathering from a long period of exposure since being chipped), and the artifacts were observed in a bulldozed or plowed zone, it was reported that these items were most likely mechanically produced in recent times.

A Phase II archaeological investigation was conducted by Maki and Carbone in July of 1996. This study did not find evidence of the remains of CA-LAN-467. The site was considered either a satellite occupation area related to CA-LAN-1027, or remnant of the site that had eroded downslope. Based on this and prior investigations, CA-LAN-467 is not considered significant under CEQA. Further, the lack of material remains due to extensive modifications that have occurred to the site over the years, suggests that the archaeological resources associated with this site have been irreversibly compromised.

CA-LAN-1436. *This site is located on a finger ridge and associated bench and adjoining slopes near the eastern base of Ladyface Mountain, near the southern boundary of Zone B. The site is dominated by non-native grasses interspersed with sage scrub and chaparral species. The site is relatively undisturbed.*

Site CA-LAN-1436 was located by City of Agoura Hills archaeologist Richard Wessel in 1988. The site was also re-recorded along with CA-LAN-467 during the 1988 field investigations performed by Singer & Associates (1988). The site was determined to be a small, intact habitation site based on a surface evaluation. Subsurface testing was not performed at the time. The site contains andesite flakes and core tools, one bifacial mano, one Monterey chert flake, and chalcedony nodules.

An extended Phase 1 archaeological investigation of this site was performed in July of 1996 (Maki 1996). The testing phase discovered that the site was used for the acquisition of raw materials for stone tool manufacture. The investigation produced numerous chipped stone artifacts (48 catalogue entries contained single items and five of were represented by multiple artifacts). No evidence of habitation was observed at the site. No remains of hearths, living structures, or food consumption was discovered. However, due to the site's proximity to other recorded habitation sites, CA-LAN-1436 was determined to have the potential to yield important scientific information related to development of prehistoric settlement-subsistence systems, and the social, political, economic and religious evolution of the Chumash within the region. Therefore, CA-LAN-1436 represents a significant heritage resource under the California Environmental Quality Act (CEQA).

CA-LAN-1352. *This relatively undisturbed site is located on a knoll-top at the southeast corner of Cornell and Agoura Roads, east of the Medea Creek drainage. The site consists of a subsurface deposit at the toe of a finger ridge dividing Liberty Canyon and Medea Creek. The subsurface deposit within the site boundaries consists of a high density of local andesite flakes, cores, stone tools and large amounts of faunal remains related to food processing or consumption on the site.*

The first archaeological investigation at this location occurred in November 1987 when the City of Agoura Hills Archaeologist, Richard L. Wessel, surveyed the property, and discovered an

archaeological deposit in the northern portion of the property. At that time an archaeological site record form was prepared and submitted to the South Central Coastal Information Center for a permanent State of California trinomial; CA-LAN-1352. During 1988, archaeologist Robert J. Wlodarski (1988) conducted a test excavation of the site, which yielded abundant animal bone and numerous lithic materials and stone tool. Tentative dating based on obsidian samples and regional site comparisons suggested a Middle Period date. The report concluded that CA-LAN-1352 was significant under CEQA due to its integrity, potential to yield important scientific data and its age.

Recent examinations of the property (Singer 2004) have expanded the site dimensions, extended the site chronology and identified residential and non-residential activity areas. Essentially, the entire property now contains prehistoric archaeological deposits. A cultural resource investigation by Clay Singer (2004) discovered evidence that the resource was an important habitation site. The investigation revealed 45 stone artifacts, primarily tools and large flakes, eight manos, two metates, two globular mortars, one discoidal, two spherical hammers, eight prepared cores, eighteen unmodified flakes, two flake scrapers, one flake reamer, and one projectile point. Based on its potential to offer new and pertinent information related to prehistoric cultural traditions and resource exploitation patterns within the study region, Singer (2004) concurred with Wlodarski (1988) that CA-LAN-1352 represents a significant heritage resource under the California Environmental Quality Act (CEQA).

CA-LAN-41. *The site is located on the northern flank of the Santa Monica Mountains at the base of Ladyface Mountain next to Medea Creek. CA-LAN-41 is situated on the southeastern corner of the intersection of Kanan Road and Agoura Road, about 0.3 km south of U.S. Highway 101. The archaeological site primarily occupies a terrace just west of the Medea Creek channel, about 1.5 km northeast of the top of Ladyface Mountain. Site soils are generally clayey and exhibit high levels of disturbance.*

The first archaeological investigation was conducted by the UCLA Archaeological Survey in 1961 (T. Blackburn, E. Chandonet, M. Glassow and C. King). During the investigation, 230 stone artifacts were collected and catalogued by Chester King in 1962. During 1975, students from Reseda High School collected about 850 stone artifacts, along with pieces of shell and bone. These specimens were subsequently catalogued. During January of 2004, the 1961 and 1975 collections were examined and analyzed at the Fowler Museum at UCLA by Singer and new catalogs were generated for both collections.

A Phase II archaeological investigation was performed in July of 2004 (Singer 2004). The results indicated that the site did not contain a cemetery, or buried features such as hearths or house floors, etc. However, stone tools, artifacts, and ecofacts were discovered at the site. The investigation revealed stone artifacts that were utilized for cooking, hunting, cutting and chopping activities, burned faunal remains that indicated cooking took place on the site; marine shells that indicated acquisition from Malibu, carbonized seeds and habitation soils. Based on the results on prior investigations, CA-LAN-41 represents a significant heritage resource under the California Environmental Quality Act (CEQA).

c. Records Search. A thorough archival research phase was conducted on September 20, 2000 for the CA-LAN-41 archaeological site, using information obtained from historic maps, archival data, and prior research studies. The records search was performed by the California Historical Resources Information System (CHRIS), located at the South Central Coast Information

Center (SCCIC), on the campus of California State University, Fullerton (CSUF). The records search indicated that:

- *Ten prehistoric sites have been identified within a half mile radius of CA-LAN-41.*
- *No historic archaeological sites have been recorded within a half mile radius of CA-LAN-41.*
- *Twenty-one surveys and/or excavations have been conducted within a half mile radius of CA-LAN-41. One study overlaps a portion of the site.*
- *Twenty-five additional investigations are located within the Thousand Oaks quadrangle and are potentially within the project area.*
- *Based on systematic observations spanning 40 years, an estimated 80 to 85 percent of the archaeological sites in the city are now developed properties.*

Inspection of historic maps indicate that by the early 1900s, Vejor, Grape Arbor, Posifa, Cheseboro, Triunfo, Lindero, and Liberty Canyons, and Las Virgenes and Medea Creeks, and an east-west trending unpaved road (currently U.S. Highway 101) were in existence. By 1943, many roadways are delineated as improved roads, several communities appear, and numerous structures exist on either side of the Camino Real.

4.6.2 Impact Analysis

a. Methodology and Thresholds of Significance. Evaluation of significance under the California Environmental Quality Act (CEQA) is based on guidelines established by the National Register of Historic Places (NRHP). The NRHP is an effective planning tool for long term and short-term cultural resource management considerations. An evaluation of significance in prehistoric and historic sites is usually measured by a number of variables, which reflect their applicability to present and future research questions posed by scientists in describing and explaining culture change.

As a means of evaluating a resource's potential to yield significant data, criteria for eligibility have been established from which general research goals can be proposed to address the specifics of a site or feature. These goals are aimed at examining and documenting such broad behavioral patterns as: ethnicity, acculturation, and interaction; the organization and utilization of space by individuals or groups; changing land use patterns; the length and duration of occupation; technological advances and contributions; and, specialized activities and occurrences.

Archaeological materials are extremely fragile and non-renewable; thus, any activity that alters the surface of the land can affect resource remains. Consequently, all cultural resources can be considered significant to some extent because they are finite in number, unique, and non-renewable. Cultural resource impacts are considered significant if the proposed project would:

- *Cause a substantial adverse change in the significance of a historic or archaeological resource, as defined in Section 15064.5 of the CEQA Guidelines;*
- *Directly or indirectly destroy a unique historical resource or site or unique geologic feature; or,*
- *Disturb any human remains, including those interred outside of formal cemeteries.*

b. Project Impacts and Mitigation Measures.

Impact HA-1 New development within the project area has the potential to cause a substantial change to identified cultural resources located in the project area, and could expose previously undiscovered, buried cultural resources. This is considered a Class II, *significant but mitigable*, impact.

Ladyface Mountain is one of the most important prehistoric lithic resource areas in the Santa Monica Mountains. Regional prehistoric inhabitants regularly utilized chalcedony, quartz crystals, meta-cherts, siltstones, limestone, sandstone and tuff, along with other minerals collected from the slopes of the mountain (Singer and Atwood, 1989). Most of the recorded prehistoric sites found within the project area are located on the northern side of Ladyface Mountain and are in the elevation range of 800 to 1,000 feet.

Multiple studies (as described in Section 4.6.2.a. *Methodology and Significance Threshold*) conducted within the project boundary found evidence of prehistoric archaeological resources. Three out of four archaeological sites (CA-LAN-1436, CA-LAN-1352, and CA-LAN-41) were identified as significant under CEQA guidelines and would require additional mitigation measures to reduce proposed impacts to a less than significant level.

Although prior man-made and natural disturbances have compromised much of the surface integrity of the project area, several cultural resources were encountered during surveys conducted within the project area. Therefore, build out of the Specific Plan area will result in direct adverse impacts to several prehistoric archaeological resources. Additionally, there is a potential to disturb previously unknown buried cultural resources during grading and construction activities. Project impacts are therefore considered potentially significant, but mitigable.

Mitigation Measures. Pursuant to CEQA section 15064.5, *Determining the Significance of Impacts to Archeological and Historical Resources*, if an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The following measures are taken from Section 21083.2 of the California Public Resources Code and shall be required at a minimum to reduce potential impacts to known and as yet undiscovered, buried cultural resources on the project site.

HA-1(a) **Protection of Known Cultural Resources.** Prior to development, as part of the initial project application, a qualified archaeologist and Native American Monitor shall make a reasonable effort to identify archaeological resources from known archaeological sites (as listed above in Section 4.6.1.b) within the project area. If it can be demonstrated that a project will cause damage to a unique archaeological resource, a reasonable effort shall be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. As part of the applicant's initial project application, the preferred method of protection/treatment shall be submitted to the City's Community Development Department for review and approval. The Planning and Community Development Department shall determine the most appropriate

method of protection/treatment. Examples of that treatment, in no order of preference, may include, but are not limited to, the following:

- Planning construction to avoid archaeological sites where feasible.
- Deeding archaeological sites into permanent conservation easements.
- Planning parks, greenspace, or other open space to incorporate archaeological sites.
- Dedication of informational booth which explains Native American cultural heritage and displays recovered artifacts from the project site.
- Salvage and recordation of resources by a qualified archaeologist. These resources shall be preserved onsite in an interpretive center, designed under the review of both the Native American Heritage Commission and the City of Agoura Hills, or at another appropriate facility, such as the Fowler Museum of Cultural History at UCLA.
- Pursuant to Public Resources Code 21083.2.c., the project applicant shall provide a guarantee to the lead agency to pay one-half the estimated cost of mitigating the significant effects of the project on unique archaeological resources. In determining payment, the lead agency shall give due consideration to the in-kind value of project design or expenditures that are intended to permit any or all archaeological resources or California Native American culturally significant sites to be preserved in place or left in an undisturbed state. When a final decision is made to carry out or approve the project, the lead agency shall, if necessary, reduce the specified mitigation measures to those which can be funded with the money guaranteed by the project applicant plus the money voluntarily guaranteed by any other person or persons for those mitigation purposes. In order to allow time for interested persons to provide the funding guarantee referred to in this subdivision, a final decision to carry out or approve a project shall not occur sooner than 60 days after completion of this environmental impact report. For time and cost limitations refer to 21083.2(e).

HA-1(b) **Construction Monitoring.** Initial grading activities near archaeological sites CA-LAN-1436, CA-LAN-1352, and CA-LAN-41 shall be monitored by a qualified archaeologist and Native American Monitor. If cultural resource remains are encountered during construction or land modification activities, the applicable procedures established under CEQA (CEQA Guidelines §15064.5). In this event the City 's Department of Planning and Community Development shall be notified at once and work shall stop within a 100 ft radius until a qualified archaeologist satisfactory to the City has assessed the nature, extent, and potential significance of any cultural remains. If such remains are determined to be significant, appropriate actions to mitigate impacts to the remains shall be implemented per Section 21083.2 of the Public Resources Code. Depending upon the nature of the find, mitigation could involve avoidance, documentation, or other appropriate actions, to be determined by a qualified archaeologist.

HA -1(c) **Archaeological Discovery.** If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will then identify the person(s) thought to be the Most Likely Descendent (MLD) of the deceased Native American, who will then help determine what course of action should be taken in dealing with the remains.

Significance After Mitigation. With implementation of the above mitigation measures, impacts to cultural resources would be reduced to less than significant.

c. Cumulative Impacts. Full build out of the Specific Plan, in conjunction with other development in the Agoura Hills area, would cumulatively increase the potential to encounter sensitive cultural resources. Thus, potential cumulative impacts to cultural resources are considered potentially significant. However, because the potential to disturb cultural resources depends upon the specific site and nature of an individual development, cultural resource issues must be addressed on a case-by-case basis. Compliance with CEQA requirements, including the implementation of recommendations in site-specific cultural resource studies, on all new development would reduce cumulative impacts to a level considered less than significant. Such recommendations may include site avoidance, in-situ preservation, site salvage and documentation and/or other measures determined to be necessary based on the resources identified.

4.7 HYDROLOGY AND WATER QUALITY

The Specific Plan area is located in the upper portion of the Malibu Creek watershed, a part of the greater North Santa Monica Bay watershed management area (Los Angeles County Department of Public Works, 2005). Three major channels provide drainage in Agoura Hills and the Specific Plan area: Lindero Canyon, Medea, and Cheseboro Creeks. The Specific Plan area north of Agoura Road is partially developed with a mix of commercial and retail uses, and the area south of Agoura Road is predominantly undeveloped. Build out of the project area with residential and commercial uses could increase storm runoff causing increases in peak storm flows and could also result in an increase to the project areas' contribution to urban pollutants to surface and potentially groundwater resources. Construction activities could result in increased erosion and subsequent downstream sedimentation. New development in the project area has the potential to result in significant but mitigable impacts to local hydrology and less than significant impacts to water quality.

4.7.1 Setting

Several studies have been prepared that address the general hydrological conditions within the project boundaries and general vicinity. These studies are included in EIRs completed for the Ladyface Mountain Specific Plan, the Creekside Center EIR, the J.H. Snyder Mixed Use Development EIR, the City of Agoura Hills General Plan EIR, and a site specific Drainage Concept for the Cornerstone at Agoura Village Development (Pacific Coast Civil, Inc., 2004). Additionally, exhibits from the *City of Agoura Hills Master Plan of Drainage* were used to further evaluate hydrological conditions in the project area. These reports are incorporated by reference and are available for review at the Agoura Hills City Hall.

a. Regional Drainage. The Specific Plan area is located within the upper portion of the Malibu Creek Watershed (MCW). Approximately 109 square miles (69,760 acres) in area, the MCW is a part of the greater North Santa Monica Bay Watershed Management Area and is the largest watershed draining into the Santa Monica Bay (Los Angeles County Watershed Management, 2005). The southerly slopes of the Simi Hills, located about three miles north of the area, form the northern boundary of the MCW. The watershed includes portions of unincorporated Los Angeles and Ventura Counties, and all or part of five cities: Westlake Village, Agoura Hills, Calabasas, Malibu, and Thousand Oaks (See Figure 4.7-1). Much of the watershed is open space under jurisdiction of the State and Santa Monica Mountains Conservancy. The Santa Monica Mountains National Recreation Area, including the Malibu Creek State Park, comprises much of the watershed. Malibu Creek Watershed has eight major subwatersheds: Hidden Valley, Westlake, Lindero Canyon, Palo Comado, Las Virgenes Canyon, Triunfo Canyon, Cold Creek Canyon, and Malibu Canyon (North Santa Monica Bay Watersheds White Paper, LACDPW, 2002).

The climate of the area is Mediterranean, with an average annual precipitation in the southern portion of the watershed of about 24 inches due to the topographic influence of the Santa Monica Mountains, decreasing to 14 inches in the northern portion of the watershed. Rainfall is highly variable from year to year, with drought conditions producing only a few inches of rain and wet years experiencing rainfall greater than 40 inches. The City of Agoura Hills experiences an average annual rainfall of 19.5 inches.

Three major channels provide drainage in Agoura Hills (See Figure 4.7-2). The Lindero Canyon Channel drains the western flood control portion of the City, intercepting flow from Lindero Canyon Creek north of the City. This underground storm drain system outlets directly south of Agoura Road into Lindero Canyon Creek through a 20-foot wide by 11-foot high reinforced concrete box (RCB). The Specific Plan area north of Agoura Road (Zone D west) is drained by two 30-inch and 48-inch corrugated metal pipes (CMP), which drain into the RCB north of Agoura Road. Zones B, F, and G are currently drained via natural sheet flows that drain into the natural portion of Lindero Canyon Creek, south of Agoura Road. Roughly 1-mile upstream of the project area, Lindero Canyon Creek is also controlled by a 19-foot high earthen dam that forms Lindero Lake.

The Cheseboro Canyon Channel drains the eastern portion of the City, intercepting flow from both Cheseboro Canyon and Palo Comado Canyon. The western-most segment of Cheseboro Creek is contained within a 31-foot wide by 11-foot high rectangular concrete open channel (REC. O.C.) and flows underground into a 25-foot by 12-foot RCB near its intersection with Medea Creek, directly west of the intersection of Agoura Road and Cornell Road. The channelized portion of Cheseboro Creek is directed underground as it approaches Cornell Road. This subterranean segment of the channel is approximately 1,000 feet in length and resurfaces approximately 300 feet south of Agoura Road before draining into Medea Creek. The eastern portion of Zone E drains into this section of Cheseboro Creek via two 8-inch CMPs near the eastern boundary of the project area.

Medea Creek drains the central portion of the City. It intercepts flow from Medea Creek Canyon and is partially contained within constructed channels both north and south of U.S. 101. The portion of Medea Creek directly south of U.S. 101, receiving flows from Zones C and A north, is contained within a 30-foot wide by 12-foot high REC. O.C.. A 30-inch CMP collects drainage from Zone A north and drains into Medea Creek. Existing developments south of Agoura Road drain into one of two CMPs (12-inch or 24-inch) that also deliver runoff to Medea Creek. A 40-foot wide by 13-foot high REC. O.C. contains Medea Creek near its confluence with Cheseboro Creek. This expands into a 40-foot wide by ~14-foot high REC. O.C. which extends approximately 1,100 feet south of the Creek's confluence with Cheseboro Canyon Creek, where the creek returns to a natural channel. The natural portion of Medea Creek within the Specific Plan area continues adjacent to Cornell Road, extending south of the City limits. Medea Creek eventually drains into Malibou Lake, which then discharges to Malibu Creek and the Pacific Ocean.

The City's storm drain system generally has sufficient capacity to protect developed areas from flooding (City of Agoura Hills, 1992a, *Public Safety Element*). However, the City's Master Plan of Drainage identifies several localized areas in need of drainage improvements or that will need drainage improvements in conjunction with future development. Many of these improvements have already been implemented, such as the constructed channels of Medea Creek discussed above.

The City of Agoura Hills has participated in the National Flood Insurance Administration program through FEMA since 1986. FEMA has identified and mapped those areas of the City at risk from flooding (Revised Flood Insurance Rate Map [FIRM], August 1998) (See Figure 4.7-3). Two areas of the City have been mapped as being within the 100-year flood zone. The first

encompasses several parcels in and around Lake Lindero, located outside and northwest of the project area. The second is Medea Creek north of U.S. 101 and Medea Creek south of Agoura Road, within the project area. Development within the area north of U.S. 101 required a letter of map revision in order to construct drainage controls that removed the adjacent areas from the floodplain. Flooding during the 100-year storm event (Zone A) would still occur along the natural drainage located between Cornell Road and the confluence of Cheseboro Creek with Medea Creek.

The surface flows of the region are generally intermittent. Groundwater quantities are generally low and inconsistent in this area since they occur primarily within the limited alluvium or within the weathered or fractured portions of the underlying bedrock. Groundwater is not expected to be a concern in the upland portions of the project area. In the lowland portions of the site, groundwater can be expected to be encountered near the elevation of onsite streams.

In general, runoff within the southern half of the Specific Plan area is conveyed primarily in natural valleys or by overland flows. There are three main drainage areas within the project area, West Drainage Area VIII, Central Drainage Area IX, and East Drainage Area XI (Refer to Figure 4.7-2). The West Drainage Area VIII drains runoff from the entire Specific Plan area west of Kanan Road, as well as an area extending several hundred yards east of Kanan Road. Overland flows within this drainage are directed towards Lindero Canyon Creek. The Central Drainage Area IX drains the central portion of the Specific Plan area. This is the area between the Western Drainage Area boundary and the Eastern Drainage Area boundary, which begins near the intersection of Cornell Road and U.S. 101 and extends southeast towards the center of Zone E. Flows within the central drainage are directed towards Medea Creek. The Eastern Drainage Area drains overland flows near the eastern boundary of the project area, directing runoff into Cheseboro Creek.

The quality of surface waters in the project region are influenced most directly by urban storm water runoff pollutants and septic system leachates. According to the LARWQCB (2004), the major issues of concern in Malibu Creek Watershed include:

- Excessive freshwater, nutrients, and coliform; contributions from (public owned treatment works facilities) POTW
- Urban runoff from upper watershed
- Impacts to swimmers/surfers from lagoon water
- Septic tanks in lower watershed
- Appropriate restoration and management of lagoon
- Access to creek and lagoon by endangered fish (steelhead trout and tidewater goby)

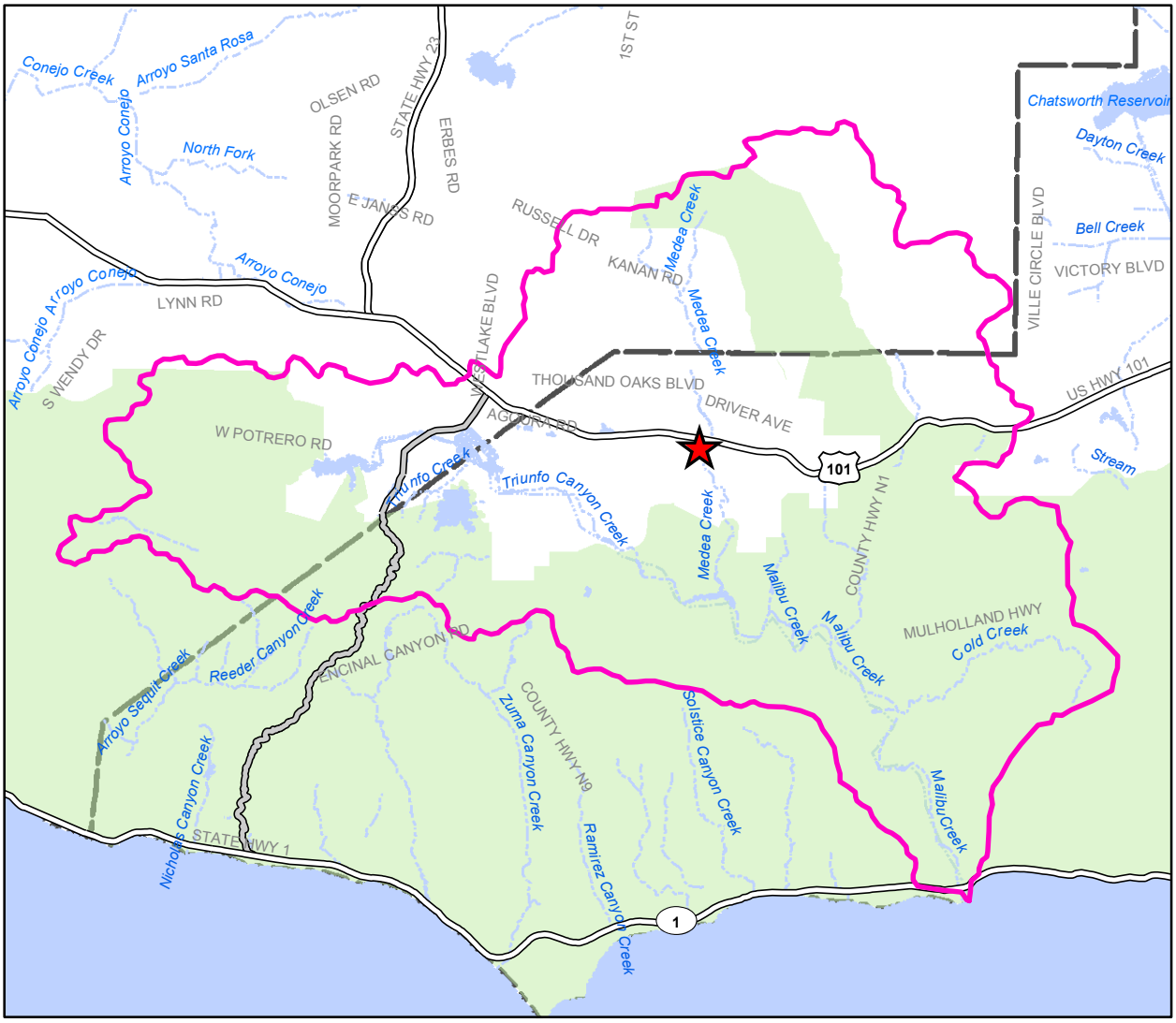
The greatest impact on surface waters are from urban pollutant runoff constituents such as oil, grease, heavy metals, coliform and pesticide residues. These constituents could also affect underlying shallow groundwaters. However, groundwater in and around the project area is not used as domestic water supplies, and therefore, little information is available concerning the quality and quantity of these waters.

b. Site Flood Hazards. As discussed above, the Los Angeles County Department of Public Works (LACDPW) presently owns and maintains three major flood control facilities within the Specific Plan area. These facilities are known as the Lindero Canyon Channel, the Cheseboro Channel, and parts of Medea Creek. Medea Creek bisects the project area in a north-south direction. Lindero Canyon Creek also extends in a north-south direction, parallel with the western boundary of the project area. Cheseboro Creek extends east-west from the eastern boundary of the project area to its intersection with Medea Creek near the center of the proejct area.

The Specific Plan area consists of variable topography. From its prominent ridgeline, Ladyface Mountain descends dramatically in a northerly direction to Lindero Canyon Creek and Agoura Road. The areas north of Agoura Road are predominantly built out and relatively flat. The areas south of Agoura Road are generally undeveloped and descend in a south to southeasterly aspect. The Specific Plan area south and east of Cornell and Agoura Road is perched on a knoll and is generally at a higher elevation than the westerly portions of the project area. The presence of these conditions and the relative impermeability of the on-site soils due to their high clay content and the underlying layers of volcanic formations contribute to the occurrence of on-site flooding in the southern central and southern western portions of the project area during peak storm events.

The August 3, 1998 FIRM for the site area indicates that during the 100-year storm event much of the southern half of the project area is flooded (see Figure 4.7-3). The entire length of the unchannelized portions of Lindero Canyon Creek and Medea Creek within the southern half of the project area would be affected by 100-year flood flows. Flooding is caused by poor offsite drainage and the rising water level in the creek, which forms a side pool.

It is important to distinguish between the floodway and the floodplain. Encroachment onto floodplains, such as artificial fills and structures, reduces the capacity of the floodplain and increases the height of floodwaters upstream of the obstructions. An aspect of floodplain management involves the balancing of economic gain associated with land development within the floodplain against the increased flood hazard. The concept of a floodway is used as a tool to assist local communities in this aspect of floodplain management. The 100-year floodplain is divisible into two sections: the floodway and the floodway fringe. The floodway is that portion of the stream channel plus adjacent floodplain areas that must be kept free of obstructions to allow passage of the 100-year storm without increasing the flood height more than one foot, provided that hazardous velocities are not produced. The floodway fringe is that area of the floodplain that can be encroached on without raising the flood height more than one foot. Obstruction within the floodway fringe could include raising the ground surface above the flood height, construction of flood protection structures, or temporary uses.



Source: US Bureau of the Census TIGER 2000 data, Malibu Creek Watershed boundary derived from: http://ladpw.org/wmd/nsmb/.

Project Location

Malibu Creek Watershed Boundary

Santa Monica Mountains National Recreation Area

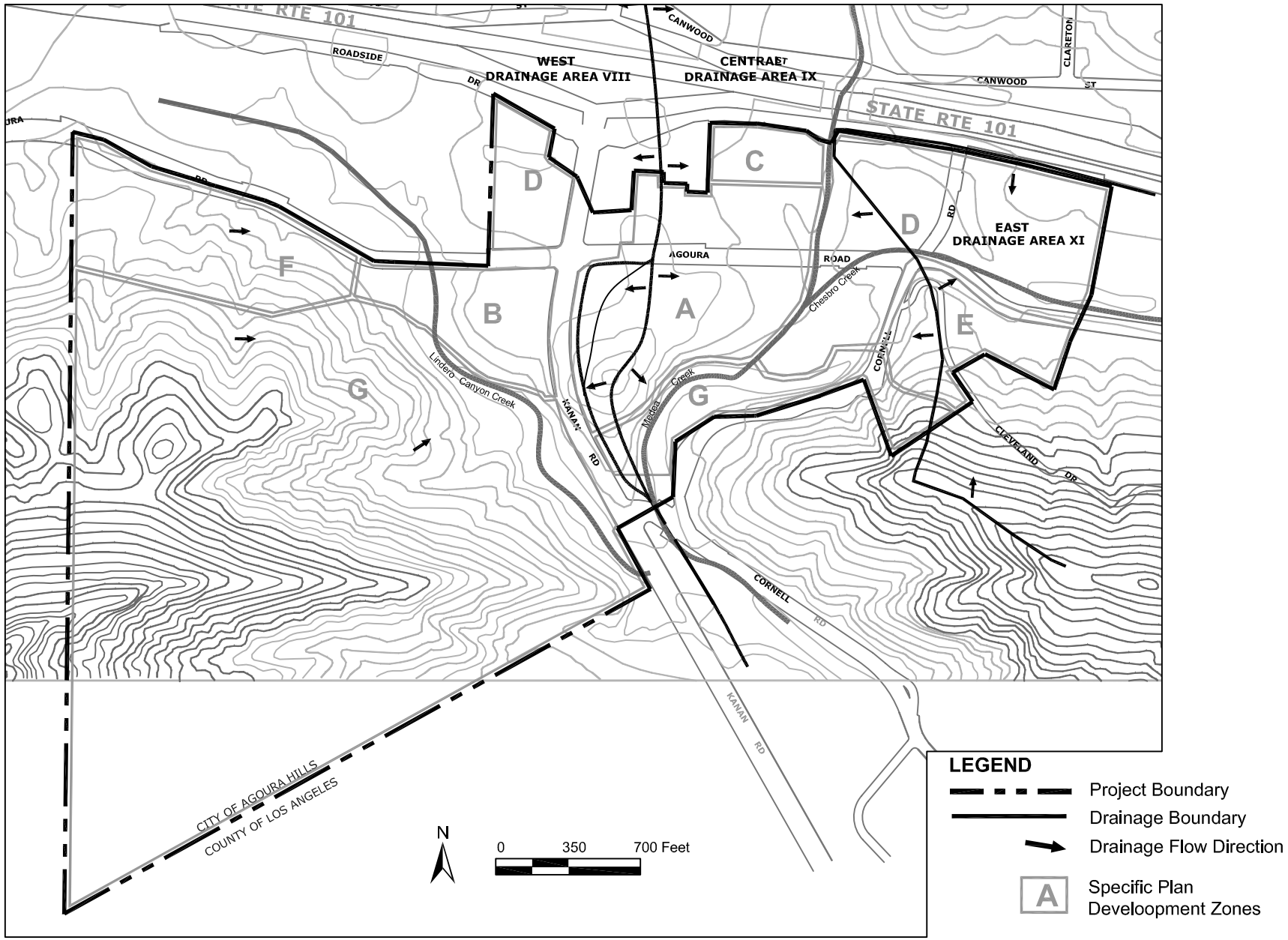
N

0 1.25 2.5 3.75 5 Miles

Malibu Creek Watershed

Figure 4.7-1

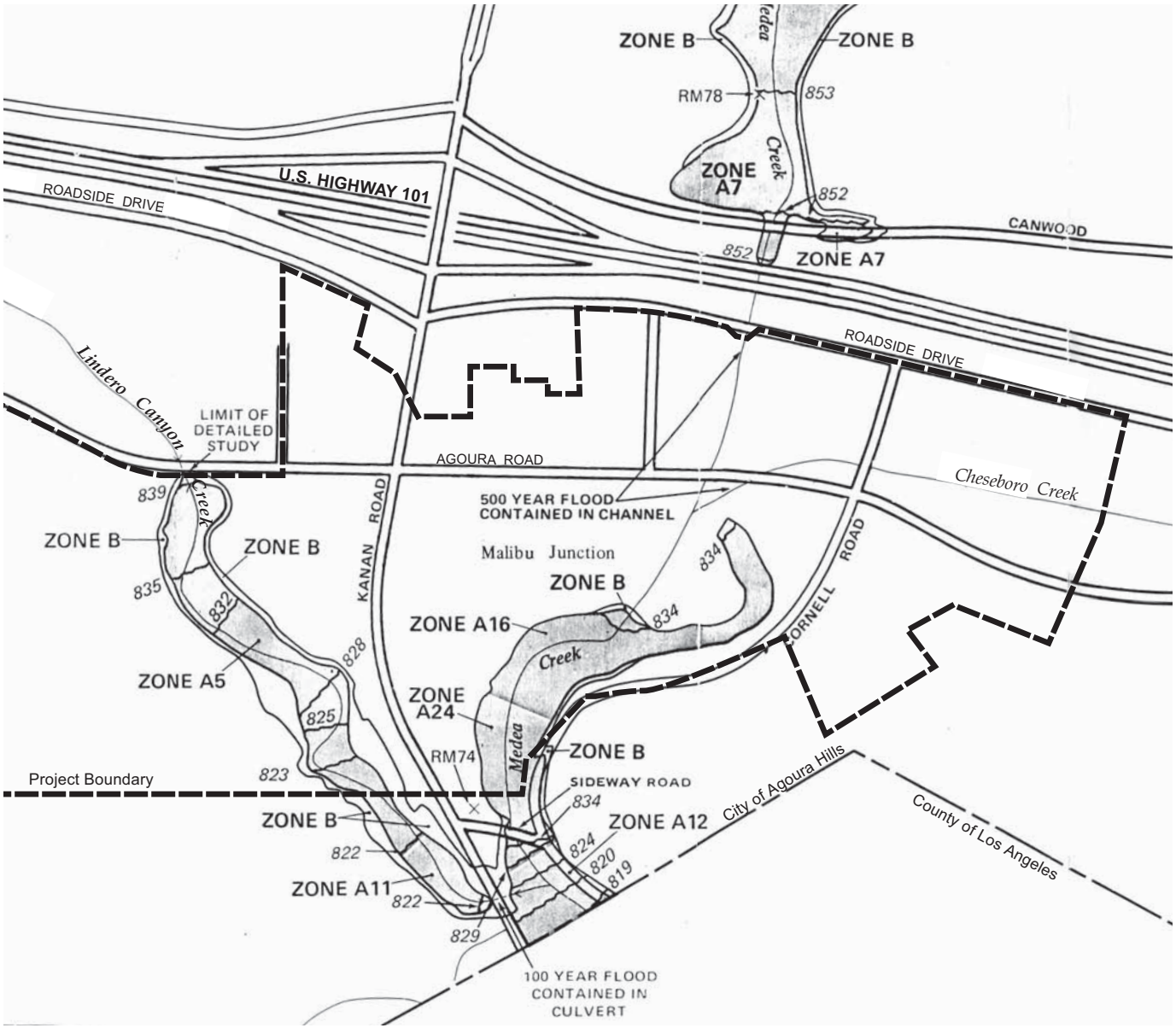
This page intentionally left blank



Existing Drainage Conditions

Figure 4.7-2

Base Drawing Source: City of Agoura Hills, May 2008.



EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood: base flood elevations and flood hazard factors not determined.
A1-A30	Areas of 100-year flood; base flood elevatons and flood hazard factors determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)

KEY TO MAP

500-Year Flood Boundary
100-Year Flood Boundary
Zone A Designations
100-Year Flood Boundary
500-Year Flood Boundary

Base Flood Elevation Line within elevation in Feet** — 834

Elevaton Reference Mark — RM74x

** Referenced to the National Geodetic Vertical Datum of 1929

0 300 600
Scale in Feet

N

Source: FEMA, FIRM 065072 0001B, Revised August 1998

Flood Insurance Rate Map

Figure 4.7-3

c. Existing Water Quality Concerns. Land use in the Malibu Creek Watershed has changed rapidly in the last 20 years from a predominantly rural to a steadily developing area that has doubled in population. The use of imported water needed to support the growing population base and drainage controls on several major tributaries to Malibu Creek have increased dry weather flows and peak flows during wet weather conditions, creating an imbalance in the natural flow regime in the watershed. Urbanization has had a significant effect on the riparian and wetland resources of the watershed, primarily through filling, alteration of flows, and decrease in water quality. According to the Los Angeles Regional Water Quality Control Board (LARWQCB), nonpoint source pollution, including ill-placed or malfunctioning septic systems and runoff from horse corrals, is responsible for much of the impairment of streams within the MCW.

In terms of land use patterns, about 80% of the land in Malibu Creek Watershed is undeveloped. The developed land is a mix of residential (13%), commercial/industrial (4%), and agricultural (3%) land uses (Los Angeles Regional Water Quality Control Board, 2004). Multiple commercial, retail, and restaurant land uses and their associated parking areas currently occupy the majority of the northern half of the Specific Plan area, as well as several acres south of Agoura Road, between Cornell Road and Medea Creek, and directly west of Medea Creek. Impermeable surfaces within the project area are generally limited to these developed areas and consist of buildings, roads, and parking areas. The southern portion of the project area is generally disturbed with non-native grasses comprising a majority of the site and areas adjacent to Agoura Road identified as paved, bare ground, or disced. The majority of runoff from existing development within the project boundaries currently flows to the Medea Creek channel located near the center of the project area.

Although no site specific water testing data is available, stormwater runoff from development within the project area would be expected to contribute some sediment and debris to downstream areas. Under existing conditions, sediment would typically contain undissolved solids from erodible soils, while larger materials such as plant material generally characterize debris. Erosion of soil is a natural process that occurs on all areas with open spaces. Runoff could also contain trace amounts of automobile-derived pollutants such as oils, greases, heavy metals, and rubber, as a result of vehicle traffic and parking areas within the area.

Section 303(d) of the Federal Clean Water Act requires states to establish maximum limits of pollutant(s) that streams, rivers, lakes, and the ocean can accept before their beneficial uses such as swimming, fishing, and industrial uses are impaired. Such limits are referred to as Total Maximum Daily Loads (TMDLs). Section 303(d) lists the pollutants of concern for specific water bodies (LACDPW North Santa Monica Bay Watersheds White Paper, 2002).

The southerly reaches of both Lindero Canyon and Medea Creek within the Specific Plan area are listed as impaired on the California list of impaired water bodies under Section 303(d) of the federal Clean Water Act. Medea Creek is listed as impaired due to nonpoint sources of algae, high coliform bacteria, sedimentation and siltation, selenium, and trash (Los Angeles Regional Water Quality Control Board, 2004). Lindero Canyon is noted as having nearly the same impairments with the exception of sedimentation and siltation, in addition to unnatural scum/foam.

Storm water runoff in Malibu Creek has been monitored since 1994 at mass emissions stations under the Los Angeles County NPDES storm water permit monitoring program. Table 4.7-1 provides selected monitoring data for Malibu Creek at Station S-02, located at the intersection of Malibu Creek with Piuma Road in unincorporated Los Angeles County. The table demonstrates an increase in Total Suspended Solids (TSS), Biological Oxygen Demand (BOD), Total Kjedahl Nitrogen (TKN). The levels of total phosphorus, copper, lead, zinc, and oil and grease are so small that the changes noted below are considered negligible.

Table 4.7-1 Storm Water Monitoring Data for the Malibu Creek Watershed

Constituent	Concentration, milligrams per liter (mg/l)			
	Malibu Creek (S-02)			
	Range [1a]	Median 1998-1999[1]	Median 1994-2000[2]	Median 2002-2003[3]
Total Suspended Solids (TSS) [b]	2-588[b]	120[b]	139	208.5
Biochemical Oxygen Demand (BOD)	2.46 - 12.0[c]	5.99[c]	6.0	11.1
Total Kjedahl Nitrogen (TKN)	<0.1 - 6.12[c]	1.26[c]	1.4	1.79
Total Phosphorus	<0.05 - 0.86[c]	0.5[c]	0.5	0.5
Copper	<0.005 - 0.036[b]	0.012[b]	0.009	0.009
Lead	<0.005 - 0.045[b]	<0.005[b]	n/a	<0.001
Zinc	<0.005 - 0.145[b]	0.065[b]	0.025	0.058
Oil and Grease	<1.0 – 4.5[c]	<1.0[c]	n/a	0

[1] Source: *Los Angeles County Department of Public Works: Monitoring Data for 1998-1999 for Malibu Creek Station S-02:*
[2] Source: *Los Angeles County Department of Public Works: 1994-2000 Integrated Receiving Water Impacts Report.*
[3] Source: *Los Angeles County Department of Public Works: 2002-2003 Stormwater Monitoring Report.*
a Less than (<) value indicates that monitored data was less than detection limit indicated.
b Values estimated from plotted data.
c Winter season 1998-1999 only.
n/a – Statistically invalid data, not enough data above detection limit collected

d. Regulatory Setting. The Los Angeles County Department of Public Works is responsible for the planning and implementation of watershed management in Los Angeles County. The City of Agoura Hills currently administers annual maintenance contracts with Los Angeles County for Street Maintenance, Sewer Maintenance, Signal Maintenance, Striping and Signing Maintenance, and Flood Control Maintenance. With respect to flooding, the LACDPW requires that facilities and structures be designed for the Capital Flood, which is considered to be the runoff associated with a 50-year frequency storm. Because of the likelihood of fires in the mountains and canyons of Los Angeles County, the Capital Flood requires that the 50-year frequency storm be modified to account for burning and debris bulking. The Capital Flood level of protection applies to open channels, closed conduits, debris basins, and culverts under major and secondary highways that are constructed to intercept flood waters from natural watercourses. All facilities in developed areas that do not fall under the Capital Flood criteria must have flood protection designed to contain the Urban Flood. The Urban Flood, as defined by LACPWD, is runoff from a 25-year frequency storm.

Flood hazard policy in the City of Agoura Hills is directed by the Public Safety Element of the

General Plan. The Public Safety Element includes several implementation measures that are potentially relevant to the project site:

- **Implementation Measure 1.3:** Implement to the maximum extent possible actions outlined in the *Master Plan of Drainage for the City of Agoura Hills* to eliminate existing and potential flooding hazards in the City.
- **Implementation Measure 1.5:** Land uses and flood control facilities shall be designed so that no structures of substantial value for human use or habitation exist in flood hazard areas. Channel types shall be consistent with policies of the Conservation and Open Space Element (Note: Policies 3.5 and 3.6 of the Open Space and Conservation Element encourage protection and enhancement of riparian habitats and watercourses).
- **Implementation Measure 1.6:** Land uses and flood control facilities shall be designed so that structures for human use or habitation are capable of surviving anticipated flood levels without major structural damage.
- **Implementation Measure 1.7:** Preservation of flood plains as open space shall be considered as an alternative to channelization in project EIRs.

In addition to the above policies, the City's Floodplain Ordinance (Section 3706(b)(4)) of the Agoura Hills Municipal Code), prohibits an increase in flood elevation of greater than one foot as compared to the pre-development condition. Section 9511-9520 of the City Municipal Code is also applicable to potential future development within the project area as it concerns the "D" Drainageway, Floodplain, Watercourse Overlay District. This overlay district requires a conditional use permit for structures that may be placed within the floodplain subject to specific requirements. Section 9513(A)(4) prohibits encroachment, including fill, unless certified by a registered professional engineer or architect that such encroachment does not cause any increase in flood levels. Section 9514(B) prohibits encroachments that increase the 100-year flood elevation by more than one foot or that cannot be fully offset by stream improvements. As stated in Section 9511, it is contemplated that where flood control measures are provided to eliminate flood hazards, the "D" District would be removed from the protected portion of the property.

The primary federal law regulating Water Quality is the Clean Water Act of 1972. Under amendments to the Federal Clean Water Act in 1987, the National Pollutant Discharge Elimination System (NPDES) program establishes requirements for stormwater discharge. Guided by the California State Water Resources Control Board (SWRCB), the Los Angeles Regional Water Quality Control Board regulates the Counties of Los Angeles and Ventura municipal stormwater and urban runoff discharges through NPDES Permits. The goals of the permit include protecting the beneficial uses of water bodies and reducing stormwater pollution.

The LARWQCB developed the Water Quality Control Plan for the Los Angeles Region in 1975 and subsequently updated or amended it in 1978, 1990, 1991, 1992, 1994, 1997, 2001, 2003, and February 2004. The Plan guides conservation and enhancement of water resources and establishes beneficial uses of inland surface waters, tidal prisms, harbors, and groundwater basins within the region. Existing beneficial uses for the Malibou Lagoon, Malibu Creek and Medea Creek are shown in Table 4.7-2.

Table 4.7-2 Existing Beneficial Uses of Surface Waters in the Malibu Creek Watershed

Beneficial Use	Malibou Lagoon	Malibu Creek	Medea Creek
Municipal Water Supply		Potential	Potential
Navigation	X		
Groundwater Recharge			Intermittent
Contact and Non-contact Recreation	X	X	Intermittent / X
Estuarine Habitat	X		
Marine Habitat	X		
Wildlife Habitat	X	X	X
Rare or Endangered Species Habitat	X	X	X
Migratory Habitat	X	X	
Spawning Habitat	X	X	
Warm Freshwater Habitat		X	Intermittent / X
Cold Freshwater Habitat		X	Potential
Wetland Habitat	X	X	X

Source: LARWQCB, 2004.

The LARWQCB issued a National Pollutant Discharge Elimination System (NPDES) permit (Board Order No. 96-054) on July 15, 1996, under the federal Clean Water Act to the incorporated cities within, and the County of, Los Angeles regarding discharges associated with storm water drainage to the municipal separate storm sewer system (MS4), also known as the storm drain system. The Los Angeles County Department of Public Works updated its 1996 NPDES permit on January 31, 2001. The County of Los Angeles and 84 incorporated cities within the County, including Agoura Hills, are co-permittees. The County of Los Angeles Department of Public Works is the lead administrator of the permit for the County of Los Angeles (LACDPW North Santa Monica Bay Watersheds White Paper, 2002).

The SWRCB has issued a construction general permit for most construction activities covering greater than 1 acre, that are part of a Common Plan of Development exceeding 5 acres or that have the potential to adversely impair water quality. Some construction activities may require an individual construction permit. All projects that are subject to the construction general permit require a Storm Water Pollution Prevention Plan (SWPPP). Subject to the LACDPW's review and approval, the contractor is responsible for the SWPPP. The SWPPP would identify construction activities that may cause pollutants in storm water and measures to control these pollutants.

e. Storm Water Quality Management Plan (SQMP). Pursuant to provisions within the NPDES permit, the County is required to submit Standard Urban Storm Water Mitigation Plans (SUSMPs). The SUSMPs are plans that designate best management practices (BMPs) that must be used in specified categories of development projects. The County's SUSMP's were revised in 2002.

When Los Angeles County Department of Public Works updated its 1996 NPDES permit in 2001, the update included a Storm Water Quality Management Plan (SQMP) and a Monitoring Program. The SQMP contains the following programs previously approved under Board Order No. 96-054 in the following areas:

- Public Information and Participation
- Development Planning
- Development Construction
- Public Agency Activities
- Illicit Connection/Illicit Discharge Elimination Program

A key element of the SQMP is the attainment of pollutant control to the maximum extent practicable (MEP), as provided through the SUSMPs previously adopted. The requirements are intended to reduce impacts of urban runoff and construction on local waterways and the Pacific Ocean. Each new development or redevelopment project of a specified size (for example 10 or more residences) shall include post-construction Treatment Control BMPs, at a minimum, either a volumetric or flow based treatment control design standard, or both, as identified below to mitigate (infiltrate, filter or treat) storm water runoff:

<u>Volumetric Treatment Control BMP</u>

(a) The 85th percentile 24-hour runoff event determined as the maximized capture storm water volume for the area; or
(b) The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment; or
(c) The volume of runoff produced from a 0.75 inch storm event, prior to its discharge to a storm water conveyance system; or
(d) The volume of runoff produced from a historical-record based reference 24-hour rainfall criterion for "treatment" (0.75 inch average for the Los Angeles County area) that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event.

<u>Flow Based Treatment Control BMP</u>

a) the flow of runoff produced from a rain event equal to at least 0.2 inches per hour intensity; or
b) the flow of runoff produced from a rain event equal to at least two times the 85th percentile hourly rainfall intensity for Los Angeles County; or
c) the flow of runoff produced from a rain event that will result in treatment of the same portion of runoff as treated using the volumetric standards above.

As part of the Development Planning Program instituted under the 2001 MS4 NPDES permit, each permittee was required to implement, no later than February 1, 2005, a numerical criteria for peak flow control. The LACDPW adopted the following interim peak flow standards in January of 2005 (LACDPW, 2005).

a) All postdevelopment runoff from a 2-year, 24-hour storm shall not exceed the predevelopment peak flow rate, burned, from a 2-year, 24-hour storm when the predevelopment peak flow equals or exceeds five cubic feet per second.
b) Postdevelopment runoff from the 50-year capital storm shall not exceed the predevelopment peak flow rate, burned and bulked, from the 50-year capital storm.
c) The peak flow standard shall apply only to areas tributary to Natural Drainage Systems, including, but not limited to, the Malibu Creek Watershed.
d) The peak flow standard shall prohibit construction within County-adopted floodways in compliance with FEMA.

The Peak Flow standard shall apply to the following discretionary priority projects whose applications have not been approved or deemed complete according to County Department of Regional Planning's Development Monitoring System in the following categories only:

a) Housing developments of 20 units or more;
b) A 2-acre or more hydraulically connected impervious surface area industrial/commercial development;
c) Automotive service facilities with 10,000 square feet or more of surface area;
d) Retail gasoline outlets with 10,000 square feet or more of surface area and with projected Average Daily Traffic (ADT) of 200 or more vehicles;
e) Restaurants with 10,000 square feet or more of surface area;
f) Parking lots with 10,000 square feet or more of surface area;
g) Projects located in, adjacent to, or discharging directly to an Environmentally Sensitive Area that create 5,000 square feet or more of hydraulically connected impervious surface area and that discharge stormwater and urban runoff that is likely to impact a sensitive biological species or habitat;
h) Redevelopment projects in the above categories that meet redevelopment thresholds.

Among other measures, development projects may use greenbelts, source reduction methods, active treatment (filtration or other approved method), catch basins, screening devices, or other technology to achieve the desired results. The purpose of these measures is to control the pollutants associated with "first flush" events that occur when the first substantial rainfall of the rainy season washes the pollutants accumulated during the dry season from the developed watershed. General land planning is also to include conservation of natural areas; protection of slopes and channels; provision of storm drainage system stenciling and signage; proper design of outdoor material storage areas, and proper design of trash storage areas.

The permit requires the City of Agoura Hills as a co-permittee to specifically develop and implement a planning program that will require all development and redevelopment projects to:

a) Minimize impacts from storm water and urban runoff on the biological integrity of natural drainage systems and water bodies in accordance with requirements under CEQA, Section 404 of the CWA, local ordinances and other legal authorities;
b) Maximize the percentage of permeable surfaces to allow more percolation of storm water into the ground;

c) Minimize the quantity of storm water directed to impermeable surfaces and the MS4;
d) Minimize pollution emanating from parking lots through the use of appropriate treatment control BMPs and good housekeeping practices; and
e) Provide for appropriate permanent measures to reduce storm water pollutant loads in storm water from the development site.

Current regulations and policies require that individual project applicants develop and submit a SUSMP that provides sufficient measures to meet the numerical standards as part of its Section 404/401 permitting. In addition, the individual projects will be required to provide verification of maintenance provisions for structural and treatment control BMPs.

4.7.2 Impact Analysis

a. Methodology and Significance Thresholds. The potential impacts associated with build out of the proposed Specific Plan on drainage runoff quantity and quality were based on comparison of the proposed uses and their locations relative to existing uses. Flood hazards were based on comparison of the proposed uses and their locations relative to existing flood hazards. The proposed drainage facilities for these projects are to be designed to the acceptance and satisfaction of the City of Agoura Hills and Los Angeles County Department of Public Works. The LACDPW requires on-site conveyance structures be designed for the Capital Flood, 50-year storm peak flow, and facilities in developed areas that do not fall under the Capital Flood criteria be designed to contain the Urban Flood, 25-year frequency storm. In addition, the LACDPW requires developers to identify inadequate downstream structures so that detention facility design can take these inadequacies into account.

Hydrology and water quality effects of the proposed projects are considered significant if the projects would:

- *Violate any water quality standards or waste discharge requirements.*
- *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.*
- *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 which would result in substantial erosion or siltation on- or off-site.*
- *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.*
- *Otherwise substantially degrade water quality.*
- *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.*
- *Place within a 100-year flood hazard area structures which would impede or redirect flood flows.*
- *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, seiche, tsunami, or mudflow.*

b. Project Impacts and Mitigation Measures.

Impact HYD-1 During construction activities, the soil surface would be subject to erosion and temporary sedimentation and discharges of various pollutants to the downstream watershed. However, the federal Clean Water Act requires development of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of appropriate best management practices (BMPs). Therefore impacts are considered Class III, *less than significant*.

Construction grading is expected to occur primarily during the spring and other periods of low rainfall. Nevertheless, if large amounts of bare soil are exposed during the rainy season, or in the event of a thunderstorm, finely grained soils of the site could be entrained, eroded from the site and transported to downstream drainages. The amount of material potentially eroded from the site during construction is greater than under existing conditions since soils would be less protected from the direct rainfall impact and the disturbance of the soils would allow them to more readily erode. Uncontrolled discharges of sediment could significantly affect the quality of surface water in Medea Creek and Lindero Canyon Creek.

Regulations under the federal Clean Water Act require that a National Pollutant Discharge Elimination System (NPDES) storm water permit be obtained for projects that would disturb greater than one acre during construction. The proposed project would be subject to this requirement. Acquisition of an NPDES permit is dependent on the preparation of a Storm Water Pollution Prevention Plan (SWPPP) that contains specific actions, termed Best Management Practices (BMPs), to control the discharge of pollutants, including sediment, into the local surface water drainages. In the State of California, Regional Water Quality Control Boards administer the NPDES permit process.

Full build out of the Specific Plan area would include the construction of between 235 and 293 residential units; a total of up to 575,958 square feet of new office, retail, restaurant, community center, and hotel building area; and redevelopment of the existing 372,042 square feet of office and retail space with a higher density development within the same footprint. Preliminary estimates of grading for the development of the southern half of the Specific Plan area provide for approximately 500,000 cubic yards of cut from the area located on the southeast corner of Kanan and Agoura Roads, 100,000 cubic yards of cut from the area located on the southwest corner of Kanan and Agoura Roads (based on previous environmental documentation, 1996 Creekside EIR), and approximately 67,000 cubic yards from the area located on the southwest corner of Agoura and Cornell Roads (Refer back to Section 2.0, *Project Description*). (Note - this is a worst-case scenario assuming that removal of the knoll in Zone B would be necessary. At this time there is no proposal to remove the knoll; however, it may be a component of a future proposal and thus is addressed here).

Such grading would be required for the removal of non-compactable soils, removal of stockpiled non-engineered fill, construction of buildings and roadways, and may result in erosion or sedimentation of bare soils during heavy rain events and exacerbate historical drainage problems within the area. Although these impacts are considered to be potentially

significant impacts, preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) would reduce these potential impacts to a less than significant level. Therefore, the overall construction related impacts to water quality are considered less than significant.

Mitigation Measures. Regulations under the federal Clean Water Act and the State require projects disturbing greater than one acre during construction to comply with the State General Construction NPDES Permit. Build out of individual properties in the Specific Plan area is likely to include disturbance of project sites greater than one acre in size that would be subject to this permit requirement. The NPDES Permit requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP) that contains specific actions, termed Best Management Practices (BMPs), to control the discharge of pollutants, including sediment, into local surface water drainages. A Notice of Intent (NOI) to perform work under the Permit must be filed with the State.

The preparation of a SWPPP requires the individual developer to implement BMPs that are designed to specifically address the potential pollution risks that would be incurred during project construction. BMPs are selected from an approved list of documents (i.e., the California Storm Water BMP Handbook, the Caltrans Storm Water Handbook, the EPA database, and the ASCE database), which describe practices that have a proven track record of effectively preventing stormwater pollution from construction sites. BMPs appropriate for construction activities are organized into four major categories:

1. *Erosion Control: Measures that prevent erosion and keep soil particles from entering stormwater, lessening the eroded sediment that must be trapped, both during and at completion of construction.*
2. *Sediment Control: Feasible methods of trapping eroded sediments so as to prevent a net increase in sediment load in stormwater discharges from the site.*
3. *Site Management: Methods to manage the construction site and construction activities in a manner that prevents pollutants from entering stormwater, drainage systems or receiving waters.*
4. *Materials and Waste Management: Methods to manage construction materials and wastes that prevent their entry into stormwater, drainage systems or receiving waters.*

The BMPs to be implemented within the Specific Plan area would be developed as part of each SWPPP required for individual parcel construction. Implementation of the SWPPP is the responsibility of the construction site contractor with oversight and inspection by the City of Agoura Hills and the LARWQCB. Effective implementation of the specific measures in the SWPPP would comply with the General Construction Permit requirements and therefore would not violate applicable waste discharge requirements. No further mitigation is necessary.

Significance After Mitigation. Implementation of a SWPPP and required BMPs during construction has significantly reduced water quality impacts at numerous construction sites throughout the State. The implementation of well-designed SWPPPs during construction within the project area is expected to generate similar results, reducing temporary water quality impacts associated with project construction to a less than significant level. With the implementation of BMPs, no substantial erosion would result, no substantial addition of

pollutants to downstream waters or groundwater resources would occur, and no violation of waste discharge requirements would be anticipated. Thus, impacts during project construction would be less than significant without additional mitigation.

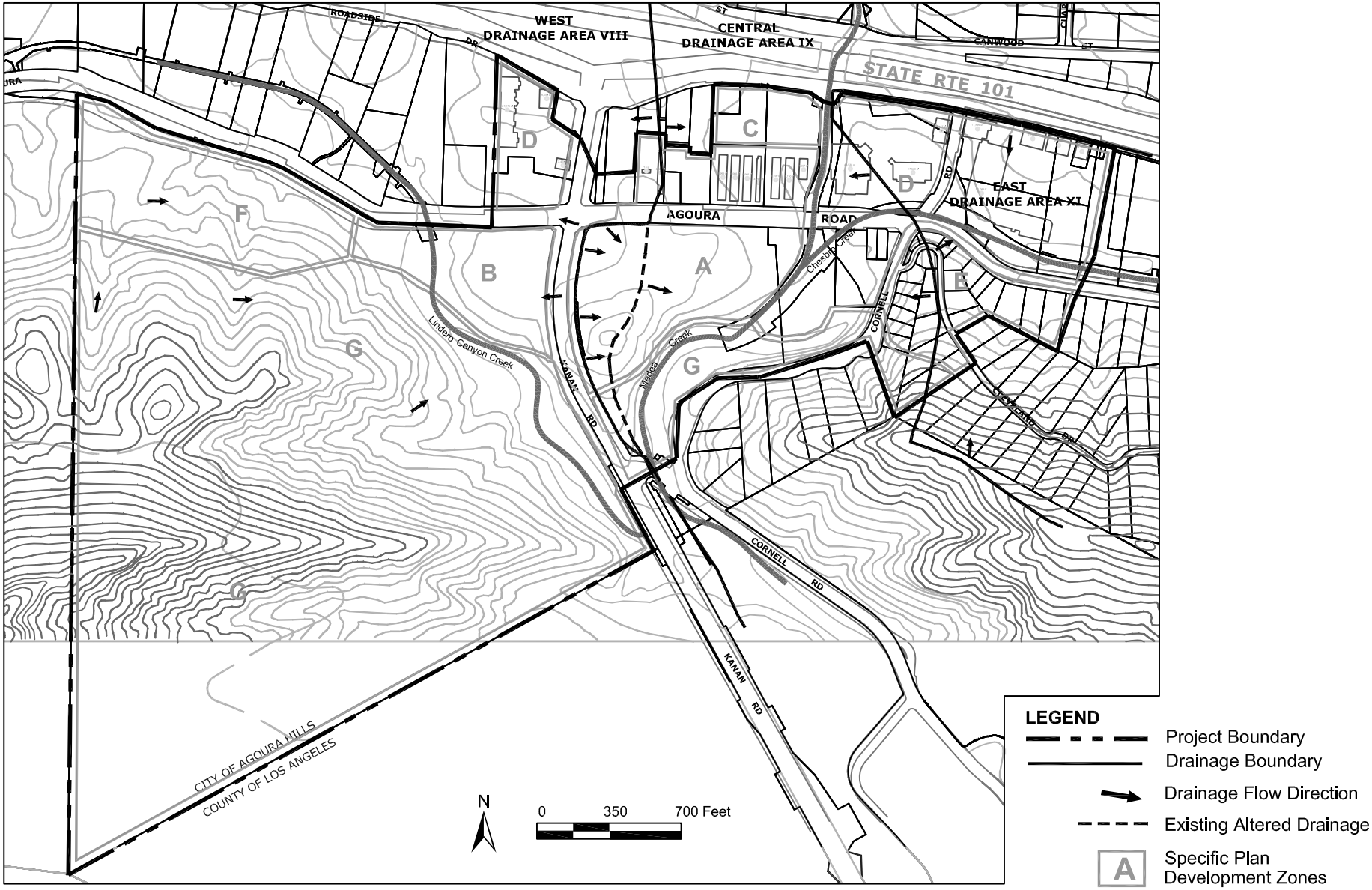
Impact HYD-2 The proposed project would substantially alter the existing drainage pattern of the Specific Plan area. This would increase peak storm water flows and would contribute runoff water which may exceed the capacity of existing or planned stormwater drainage systems. These impacts are considered Class II, *significant but mitigable*.

As noted in the *Setting*, the northern half of the Specific Plan area is currently developed, while the southern half consists of mostly open space, riparian and aquatic habitats, oak/willow woodlands, and a few small developments (~ 3 acres). When an undeveloped or partially developed watershed is changed to support urban land uses with impervious surfaces the hydrology of the watershed changes. Urbanization changes the hydrology of a watershed typically by reducing infiltration during storm events through the over-covering and compaction of soil surfaces and by reducing the overall surface roughness of the flow paths, thereby allowing storm water runoff to pass through the area quicker and before infiltration.

Additionally, changes in landforms or the addition of impediments to surface flows (new developments) may also redirect overland sheetflows and thus, change the hydrology of the watershed. Changes in sheetflow direction could result in the redistribution of runoff to different drainages. Because drainage control systems are designed to handle the runoff of specified areas, the redistribution of sheetflows could contribute runoff waters, which may exceed the capacity of existing drainage systems. Thus, the increase in, and redistribution of, volume, velocity, and discharge duration of storm water runoff from developed areas has the potential to accelerate downstream erosion, increase sediment transport downstream, contribute to flooding potential, and impair stream habitat in natural drainages.

Currently, the northern half of the project area is developed with a greater than 90% impervious surface. Although the proposed project may increase the density of development within this area, this would not substantially increase the percentage of impervious surface. Additionally, redevelopment of this area is not anticipated to substantially alter the existing drainage patterns onsite. Therefore, Specific Plan buildout within Zones A north, C, D east, and D west (Refer to Figure 4.7-2) would not substantially increase impervious surfaces and would not substantially increase runoff levels to local drainages, or substantially alter the drainage pattern in the area.

Development of the southern half of the project area (Zones A south, B, E, and F) would substantially alter existing drainage patterns. Although not currently proposed, potential removal of the knoll located east of Kanan Road, near the southern boundary of the Specific Plan area, could redirect sheet flow to the east, towards Medea Creek. Thus, the West Drainage Area VIII boundary would shift to the west, along Kanan Road (Refer to Figure 4.7-4). This alteration would transfer approximately six acres from the West Drainage Area to the Central Drainage Area, and would contribute to an increase in peak runoff volumes from the site to Medea Creek.



Base Drawing Source: City of Agoura Hills, May 2008.

Post Project Drainage Boundary

Figure 4.7-4

City of Agoura Hills

Existing and post runoff peak flows for the project area were modeled using the simplified rational approach. The model incorporated the reallocation of six acres from the West to Central drainage area and, as shown in Table 4.7-3, estimated an increase in peak runoff of up to 183 % (see calculations provided in Appendix D). This estimate assumes that approximately 44 acres within the southern half of the project area would be developed, and that these lands would be converted from a "vacant land use" density with a 0.1 to 0.25 runoff coefficient (10 – 25% imperviousness) to a "neighborhood business" density with a 0.5 to 0.7 runoff coefficient (50 – 70% imperviousness). As shown below in Table 4.7-3, the total increase in runoff from the Specific Plan build out would be approximately 88 cubic feet per second (cfs).

Table 4.7-3 Peak Runoff Flows for Pre- and Post Project Conditions*

	Existing Drainage Acreage	Post Project Acreage	Existing (cfs)	Post Project (cfs)	Increase (cfs)	Percent Increase
Medea Creek Drainage						
Zone A South	7.7	13.7	8	42	34	425%
Subtotal	**7.7**	**13.7**	**8**	**42**	**34**	**425%**
Cheseboro Creek Drainage						
Zone E	7.4	7.4	8	23	15	188%
Subtotal	**7.4**	**7.4**	**8**	**23**	**15**	**188%**
Lindero Canyon Creek Drainage						
Zone B	22.1	16.1	24	49	25	104%
Zone F	7.2	7.2	8	22	14	175%
Subtotal	**29.3**	**23.3**	**32**	**71**	**39**	**122%**
TOTAL	**44.4**	**44.4**	**48**	**136**	**88**	**183%**

Calculations modeled using the Simplified Rational Approach
* Assumes 25 year storm event

The project would add 34 cfs, 15 cfs, and 39 cfs (max increase for a 25 year storm event) to the existing flow of 7,200 cfs within Medea Creek (J.H. Snyder Mixed Use Development EIR, 2002), 2,859 cfs within Cheseboro Creek, and 3,040 cfs within Lindero Canyon Creek (Master Plan of Drainage, 1992), respectively. Thus the project would add a total of 88 cfs to the peak storm flow draining into Malibu Creek. Although each of these increases in peak flow would be minimal compared with the total existing flow within each creek, the Los Angeles County Flood Control District requires that no increase in peak flows in receiving waters should occur. Any increases in runoff over existing conditions from the Specific Plan area could result in increased channel erosion, and sediment transport downstream, which could result in greater siltation in downstream catchments such as Malibu Lake. Therefore, the alteration of the onsite drainage pattern and the increase in impervious surfaces is considered a significant, but mitigable impact.

Mitigation Measures. The Specific Plan includes a number of development and design standards that would maximize pervious surfaces and minimize water runoff (pages 4-46 through 4-48). Example standards include, but are not limited to the following:

- Development shall relate to the natural surroundings and grading shall be minimized by following the natural contours;
- Graded slopes shall be rounded and contoured to blend with the existing terrain; and
- Significant natural vegetation shall be retained and incorporated into the project whenever possible.
- To minimize water borne pollution into local creeks and watersheds, all projects shall adhere to National Pollutant Discharge Elimination System (NPDES) requirements for both construction and on-going operational impacts. Use of bioswales and natural filter systems are encouraged.

However, implementation of the following measures is required to further mitigate potential impacts relating to increased peak surface water runoff from the Specific Plan area.

HYD-2 **Final Drainage Plans.** Individual project applicants shall be required to prepare and submit a final drainage plan, prior to issuance of a grading permit, to the City's Planning and Community Development Department and Los Angeles County Flood Control for approval. Plans shall include detailed design and hydraulic analysis of the drainage facilities that capture and convey on- and off-site runoff. Each developer shall be required to evaluate the extent of potential flood hazards present utilizing the Modified Rational Method (or the latest model approved by Los Angeles County Flood Control) and to implement mitigation measures required to reduce such impacts to a level of insignificance. The drainage plan for each project shall include post development designs for runoff detention and on site infiltration to reduce 50-year frequency storm peak discharge to the pre development level. These drainage facilities shall meet the design requirements and capacities of the *Master Plan of Drainage for the City of Agoura Hills, The Los Angeles County Department of Public Works Hydrology Manual and the Hydrology and Sedimentation Appendix,* or other revised hydraulic analyses as determined by the City Engineer, and shall not increase the base flood elevation above or below the project site. Additionally, mitigation shall meet all interim peak flow standards, or the most up to date standards, as established by the LACDPW. The plans shall be subject to review and approval by the City Engineer.

Significance After Mitigation. Implementation of the above measures would reduce downstream flood potential and reduce impacts to a less than significant level.

Impact HYD-3 Specific Plan buildout may place structures within the 100-year floodplain, and may alter the existing conditions of Medea and Lindero Canyon Creeks. These are considered Class II, *significant but mitigable*.

Based on a review of current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), areas surrounding Lindero Canyon Creek and Medea Creek are within the

100-year hazard zone (100-year floodplain). The 100-year floodplain is defined as that area susceptible to being inundated by stream-derived waters with a one percent chance of being equaled or exceeded in any given year. The floodway is defined as a part of the floodplain otherwise leveed or reserved for emergency diversion of water during floods and must be kept clear of encumbrances to facilitate the passage of floodwater. The southern-central and southwestern boundaries of the Specific Plan area are located within the currently mapped 100-year floodplain (Figure 4.7-3). The majority of the site is located in Zone C, which is defined as an area outside the 100-year flood, or where there is minimal flooding. According to preliminary plans available for two pending development applications within the Specific Plan area, structures may be placed within the 100-year floodplain. This is considered a significant, but mitigable impact.

The project would be subject to the City's Floodplain Ordinance and FEMA requirements. These regulations require that all structures located within a floodplain be floodproofed as appropriate, such that encroachment would not cause any increase in downstream or upstream flood levels. Thus, any structures proposed within the floodplain would be required to protect the area from erosion and inundation, if approved by the City's Planning and Community Development Department.

Additionally, the Specific Plan calls for improvements and restoration of portions of Medea Creek. Potential modifications to Medea Creek may alter channel flow characteristics during typical rainfall events, and thus would impact downstream waters. Channel velocities greater than 5 feet per second (fps) are generally considered erosive, though flow rates around 5 fps occur under typical conditions along Medea Creek and do not appear to result in serious visible erosion (J.H. Snyder Mixed Use Development EIR, 2002). However, rates much greater than this are likely to result in both bank and channel erosion. As plans for alterations to the creek are not available at this time, if project build out were to involve alterations to the open drainage channels onsite, several agencies that regulate activities in stream channels would also be involved. They include, at a minimum, the U.S. Army Corps of Engineers (USACOE), the California Department of Fish and Game (CDFG), and the LARWQCB. Additionally, sewer manholes within the creek area of the proposed project should be protected from damage and inflow (Refer to Section 4.10, *Public Services*). Impacts related to development within, and alterations to, the floodplain are considered potentially significant, but mitigable.

Mitigation Measures. The following mitigation measures are required, in addition to mitigation measure HYD-2, to reduce the impacts for the proposed project regarding flooding and to comply with anticipated FEMA flood protection procedures.

HYD-3(a) Hydrology Study. If any onsite open channels are altered, a channel bed erosion study shall be conducted as part of a hydrology report submitted to the City as part of the initial application submittal. The erosion study shall determine if additional grade stabilization structures are necessary for any restored areas within Medea Creek or within Lindero Canyon Creek. Recommendations of this study shall be fully implemented subject to review and approval by the City of Agoura Hills and Los Angeles County Public Works Department. Design of modifications to Medea Creek shall meet the standards of the City of Agoura Hills and Los Angeles County Public Works

Department, and shall be approved by the City prior to the issuance of grading permits.

HYD-3(b) Public Facilities Flood Protection. Any trunk sewer manholes located adjacent to Lindero Canyon Creek and Medea Creek shall be protected from peak flows laden with debris by further armoring via cement casing, piering, or other appropriate method. A plan to protect the sewerline and exposed manholes from erosion and flooding and from construction activity shall be submitted to the Las Virgenes Municipal Water District for review, comment, and approval prior to the issuance of grading or building permits.

Significance After Mitigation. Implementation of the above mitigation measures would reduce impacts from flooding to a less than significant level.

Impact HYD-4 Urban land uses could adversely affect the quality of surface runoff because of increased pollutant loading, including such pollutants as oil, pesticides, herbicides, and organic waste (horse manure). This is considered a Class III, *less than significant*.

The Specific Plan identifies new development within the southern portion of the project area and potential redevelopment of that area north of Agoura Road. Future development of the area with the mixed commercial and residential uses would replace most of the currently unpaved areas of the project area with pavement, a large portion of which would be devoted to the parking and circulation of vehicles. Such development and urbanization increases and concentrates pollutant loads. Paved surfaces replace natural vegetated pervious ground cover, which can both absorb water and filter out pollutants. In contrast, paved surfaces accumulate pollutants such as deposits of oil, grease, and other vehicle fluids and hydrocarbons. Additionally, urban development creates new pollution sources as the increased density of human population brings proportionately higher levels of vehicle emissions, vehicle maintenance wastes, municipal sewage waste, pesticides, household hazardous wastes, pet wastes, trash, and other anthropogenic pollutants (NPDES permit, 2001). Traces of heavy metals deposited on streets and parking areas from auto operation and/or fall out of airborne contaminants are also common urban surface water pollutants. During storm events, these pollutants would be transported into drainage systems by surface runoff, to Lindero Canyon Creek, Cheseboro Creek, or Medea Creek, and ultimately into the regional watershed. It is noted that these urban pollutant sources are currently present within the developed portion of the project area and that redevelopment of these areas would provide for upgrading of existing drainage and water quality control systems to current standards. This upgrade and improvement of drainage systems within the developed portion of the project area has the potential to improve down stream water quality provided that new measures are effectively implanted in these areas and that the effects of new development are properly managed as discussed further below.

As noted in the 2001 NPDES permit, studies have demonstrated a direct correlation between the degree of imperviousness of an area and the degradation of its receiving waters. Significant declines in the biological integrity and physical habitat of streams and other receiving waters have been found to occur with as little as 10 percent conversion from natural to impervious

surfaces. Therefore, percentage impervious cover is a reliable indicator and predictor of potential water quality degradation expected from new development (NPDES permit, 2001).

Although pavement of the site would reduce the amount of exposed, erodable dirt at the project site, and would result in a reduction in sediment loading, the contaminants related to motor vehicle activity, and resulting discharge of these contaminants to onsite creeks during storm events would increase and pose a significant adverse impact on the watershed. In addition to motor vehicle related contaminants, the project would introduce landscaping and associated maintenance chemicals such as fertilizers, pesticides, and herbicides. Irrigation and storms could wash some of these landscape chemicals into and through local drainage systems and into the watershed.

Additionally, the AVSP includes provisions within its recreational component that would promote construction of an equestrian trail linking the existing equestrian trail that runs adjacent to Cheseboro Creek and Agoura Road and currently terminates at Cornell Road. The proposed equestrian trail extension would continue from the existing terminal point along Medea Creek and extend to the southern boundary of the project area. The accumulation of organic waste along the trail could potentiall contribute to the contamination of nearby waterways with excess nutrients, bacteria and salts.

Urban runoff can have a variety of deleterious effects. Oil and grease contain a number of hydrocarbon compounds, some of which are toxic to aquatic organisms at low concentrations. Heavy metals such as lead, cadmium, and copper are the most common metals found in urban storm water runoff. These metals can be toxic to aquatic organisms, and have the potential to contaminate drinking water supplies. Nutrients from fertilizers, including nitrogen and phosphorous, can result in excessive or accelerated growth of vegetation or algae, resulting in oxygen depletion and additional impaired uses of water. Table 4.7-4 shows estimates of the amount of material anticipated to be washed from the project area following build out based on typical pollutant loading values for mixed commercial and residential land uses. The introduction of urban pollutants to runoff from the project area would have potentially significant impacts to surface water quality.

Table 4.7-4 Estimated Contaminant Levels in Surface Runoff*

Pollutant	Pounds per Year
Biochemical Oxygen Demand	950
Suspended Solids	9,889
Total Nitrogen	165
Total Phosphorus	36
Lead	10
Copper	3
Zinc	14

Source – *SMADA PLOAD 1.0 Analysis; See Appendix D*
**Based on 44 acre development envelope.*

The Agoura Village Specific Plan area is within the region covered by the Los Angeles County Municipal Storm Water NPDES Permit No. CAS004001 issued by the LARWQCB. The purpose of this permit is to govern the non-point discharges associated with storm water drainage. The permit is a joint permit, with the City of Agoura Hills as one of the co-permittees.

The permit includes implementation of a Los Angeles County Standard Urban Storm Water Mitigation Plan (SUSMP). The SUSMP serves as a model guidance document for use by builders, land developers, engineers, planners, and others in selecting post-construction Best Management Practices (BMPs) and in obtaining municipal approval for the urban storm water runoff mitigation plan for a designated project prior to the issuing of building and grading permits. The requirements are intended to reduce impacts of urban runoff and construction on local waterways and the Pacific Ocean.

The SUSMP contains design standards for treatment control BMPs for stormwater runoff for most new construction and redevelopment projects. The SUSMP contains a list of the minimum required Best Management Practices (BMPs) that must be used for a designated project. However, additional BMPs may be required by ordinance or code, or the City. Developers must incorporate appropriate SUSMP requirements into their project plans in order to achieve the primary objectives of the municipal storm water program, which are to:

1. Effectively prohibit non-storm water discharges, and
2. Reduce the discharge of pollutants from storm water conveyance systems to the Maximum Extent Practicable (MEP) statutory standard.

Careful design of site-specific drainage systems will be necessary to ensure that the drains from individual projects are properly routed through control devices to remove pollutants prior to discharge to Medea, Cheseboro, and Lindero Canyon Creeks.

As mentioned under Impact HYD-2, the Specific Plan includes a number of development and design standards that would maximize pervious surfaces and minimize water runoff. These standards would also effectively reduce pollutant loading from development onsite. Additionally, implementation of Mitigation Measure AQ-4, Section 4.2 *Air Quality*, would reduce impacts to Medea and Lindero Canyon Creeks from equestrian trail use. Therefore, compliance with the SUSMP would reduce surface runoff related impacts to the maximum extent practicable and impacts would be considered less than significant.

Mitigation Measures. None required.

Significance After Mitigation. Compliance with the SUSMP would reduce potential storm water quality impacts to a less than significant level.

Impact HYD-5 Groundwater near the project site is not utilized for consumption and is not anticipated to be adversely affected by the project. Therefore, impacts related to groundwater are considered Class III, *less than significant.*

Groundwater recharge is dependent on the amount of area and water available for infiltration. As discussed under Impact HYD-4 above, Specific Plan development would result in decreased

infiltration rates. Groundwater quantities are generally low and inconsistent in this area since they occur primarily within the limited alluvium or within the weathered or fractured portions of the underlying bedrock. However, groundwater was not encountered within the project area during multiple geotechnical investigations prepared for specific projects within the area (Refer to Section 4.4, *Geology*).

Although no groundwater has been encountered within the project area, there is the potential for groundwater levels to reach near surface levels adjacent to Lindero Canyon and Medea Creek. As discussed in the Los Angeles County SUSMP, urban areas where groundwater is greater than 10 feet deep generally do not infiltrate urban pollutants into the underlying groundwater. Therefore, build out of the Specific Plan would not be anticipated to affect groundwater supplies and impacts to groundwater are considered less than significant. Both surface and groundwater quality issues were discussed above.

Mitigation Measures. None Required.

Significance After Mitigation. Impacts to groundwater resources are considered less than significant without mitigation.

c. Cumulative Impacts. Planned and pending projects in the Agoura Hills area (see Table 3-1 in Section 3.0, *Environmental Setting*), in combination with build out of the Specific Plan area, would add a total of 772 residences and about 2.0 million square feet of non-residential development. This cumulative development would incrementally increase impervious surface area in local watersheds, thereby increasing the amount of surface water entering the area drainages. This could cumulatively contribute to the risk of flooding at the proposed project site and in down stream areas. However, individual projects would be expected to provide their own interim water detention facilities to mitigate peak flows and downstream flooding. Project-specific mitigation measures on all new development would reduce cumulative impacts to a less than significant level, though an overall increase in water entering the drainage system would occur as additional areas are developed.

Cumulative development will also increase the discharge of urban pollutants to surface and groundwater. Storm runoff concentrations of oil, grease, heavy metals, and debris will increase as the amount of urban development increases in the watershed. However, water quality requirements of the Regional Water Quality Control Board and the City of Agoura Hills would be expected to mitigate any adverse impacts resulting from new developments. Cumulative impacts would therefore be less than significant, assuming implementation of appropriate mitigation measures on all new development.

4.8 LAND USE AND PLANNING

This section evaluates impacts relating to land use and planning. Both land use compatibility issues and consistency with land use policies are discussed. The proposed Specific Plan involves changing the current land use designations and introducing new development standards and design criteria in order to accomplish the goal of establishing a mixed use "village" setting for the project area. While the Specific Plan proposal for mixed use would offer many advantages over more traditional land use patterns in the areas of pedestrian circulation, preservation and restoration of natural areas, opportunities for alternative transportation, balancing of jobs and housing, aesthetic continuity, creation of a greater sense of place and other features, the Plan also introduces potential policy inconsistencies and land use compatibility issues that could cause significant environmental effects. As a result of traffic calming measures proposed under the Specific Plan, increased traffic generation, which has been identified as an unavoidable adverse impact of the Specific Plan, would generate an inconsistency with the General Plan Circulation Element. This would be considered an unavoidable adverse impact of the project and would require a General Plan Circulation Element amendment in order to find the project consistent with the City's General Plan. With approval of amendments to the City's General Plan Circulation Element, impacts relating to consistency with City land use policies would be considered Class III, less than significant. Additionally, since the City already exceeds locally recognized population and housing forecasts, any addition of new population or housing is considered significant. Other land use and policy impacts can be mitigated to less than significant levels either through implementation of suggested mitigation measures contained herein or through the implementation of development standards and policy requirements outlined in the Specific Plan.

4.8.1 Setting

a. Project History. The Agoura Village Specific Plan and the Agoura Village Strategic Action Plan are the result of an effort launched by the City of Agoura Hills to prepare a plan that will lead to the revitalization, the appropriate use, and the beautification of the Agoura Village area located just south of Highway 101 and east of Kanan Road in the community of Agoura Hills. The Agoura Village area is presently characterized by a mix of land uses and parcels of various shapes and sizes -- some viable, some marginal -- but with little sense of place and cohesion.

In 1997 - 1998, Agoura Village was the subject of a "design brainstorming" effort lead by the City and a consulting team that derived a "Village Concept Plan" embracing a pedestrian-friendly, vibrant, and entertainment-oriented vision for the area. The City Council and the community were supportive of this vision, and as a result, an overlay zone was placed on the Village as an interim solution to prevent inappropriate uses from developing until detailed planning documents were developed. The Agoura Village Specific Plan is intended to provide land use, urban design, elements and to set in place regulations to implement the Agoura Village vision developed as part of the Agoura Village Strategic Action Planning process and as described in the Agoura Village Strategic Action Plan. The Specific Plan includes the following components:

- Chapter 1 Introduction – Describes the project history, vision and planning principals.
- Chapter 2 Existing Conditions – Describes physical conditions in the area and market feasibility of the proposed uses.
- Chapter 3 Mobility – Describes circulation, parking and traffic calming strategies.

- Chapter 4 Land Use and Development Standards – Describes allowable land uses and project specific development standards.
- Chapter 5 Design Guidelines – Describes design review process, site planning and design and building design principals.
- Chapter 6 Street Beautification and Public Improvements - Describes gateways, streetscapes, and landscaping.
- Chapter 7 Infrastructure and Public Services – Describes public services and how they will be provided to the area.
- Chapter 8 Plan Implementation – Describes phasing, funding, financing strategies and business attraction methods that may be used.
- Chapter 9 Plan Administration – Describes authority of Specific Plan and relationship to other planning documents and how various components of the plan will be implemented.

The Specific Plan articulates a vision statement and urban design goals, plan recommendations for the Village, architectural and streetscape design and development criteria, and plan implementation measures. It depicts how the Village could develop physically with a logical system of circulation and parking, improvements to the streetscape, existing and future buildings, and a cohesive set of public improvements. Supporting these recommendations is a set of Recommended Amendments to the City's Zoning Ordinance that identifies areas in the City's codes and ordinances that are proposed to be modified to ensure proper planning and design, provide flexibility to respond to market changes, and to implement unique development proposals called for in the Plan. These recommendations, if implemented, are intended to lead to the creation of a unique and pedestrian-friendly village in Agoura Hills.

b. Existing Land Use. The site is located around the intersection of Agoura and Kanan Road. The site covers an area on both the north and south side of Agoura Road, from about 1,400 feet west of Kanan Road to about 750 feet east of Cornell Road. Roadside Drive and U.S. Highway 101 border much of the project to the north. Figure 2-3, *Project Description* shows the land uses that are currently located within the project area.

The project area currently contains about 32 acres of various commercial uses including retail, restaurant, office, theatres, and services. About 103 acres of the total planning area are vacant and currently undeveloped. The project area can generally be characterized as having two distinct components: 1) the area north of Agoura Road is largely developed; and 2) the area south of Agoura Road is largely undeveloped. The developed portion of the project area consists of mix of uses including various types of retail, industrial and office uses. The southern half of the project area consists of predominantly vacant lands and a few single-family residential dwellings. The northern half of the project is bounded by U.S. Highway 101 and the southern half of the project is bounded Ladyface Mountain and areas designated as open space.

Table 4.8-1 summarizes existing conditions and land use characteristics of the project area. Table 4.8-2 summarizes existing development within the project area. Existing land use patterns are shown on Figure 2-3 in the *Project Description*.

Table 4.8-1 Land Use Information for the Project Area

Site Characteristic	Description
General Plan Designation	Commercial-Retail Service (CG), and Business Park - Office/Retail (BP-O/R), Ladyface Mountain Specific Plan, Restricted Open Space (OS-R)
Zoning	Specific Plan – Agoura Village Overlay (SP-AV); Open Space – Agoura Village Overlay (OS-AV); Retail Service Commercial – Freeway Corridor- Agoura Village (CRS-FC-AV); Retail Service Commercial – Drainage Way, Flood Plain, Watercourse – Agoura Village (CRS-D-AV); Business Park Office Retail – Agoura Village (BP-OR-AV); Retail Service Commercial - Freeway Corridor- Old Agoura Design - Agoura Village (CRS-FC-OA-AV)
Site Size	135 acres
Current Land Use	103 acres vacant, 32 acres developed with commercial uses including retail, restaurant, office, theatres, and services (see Table 4-2 below for detailed breakdown)
Surrounding Land Use	*North:* Roadside Drive and US Highway 101 *South:* Ladyface Mountain and unincorporated Los Angeles County Open Space *East:* Business park (northeast) and open space (southeast) *West.* Conejo Valley U-Store-It (northwest) and Ladyface Mountain southwest) Restaurant; Kanan Road
Regional Access	From US HWY 101
Local Access	From Kanan Road, Agoura Road, and Roadside Drive
Utilities and Public Service Providers	*Water:* Las Virgenes Municipal Water District *Sewer:* Los Angeles County Department of Public Works *Gas*: Southern California Gas Company *Electric:* Southern California Edison *School District:* Las Virgenes Unified School District

Table 4.8-2 Existing Land Uses Within the Developed Portion of the Agoura Village Project Area

Land Use	Square Footage	% of Total Developed Area
Restaurant	49,503	17.4
Other Retail	36,013	12.7
Antiques	12,066	4.2
Service Station	2,614	0.9
Building Materials	2,352	0.8
Movie Theaters	32,660	11.5
Other Entertainment	10,500	3.7
Public Facilities	1,000	0.4
Office	14,476	5.1
Residential	2,240	0.8
Self-Storage	104,600	36.8
Services	16,586	5.8
Total	284,610	100

Source: Stanley R. Hoffman Associates, Agoura Village Market Feasibility Study, March 2002.

c. Regulatory Setting.

Local Planning Framework. Of the 135 acres that make up the Agoura Village project area, approximately 103 acres have an existing zoning designation of Commercial Retail Service-Freeway Corridor-Agoura Village Overlay (CRS-FC-AV) and a General Plan land use designation of Commercial-Retail /Service (CG). About 1.5 acres of the property located on the southeast corner of Agoura Road and Kanan Road are designated Open Space Agoura Village Overlay (OS-AV). There are approximately 10 acres located on the southeast corner of Agoura and Cornell Roads that are zoned for Business Park-Office Retail-Agoura Village Overlay (BP-OR-AV) and which have a General Plan designation of Business Park-Office/Retail (BP-O/R). In addition, the southwest corner of Kanan Road and Agoura Road (22 acres) is zoned Specific Plan (SP) and is located in the Ladyface Mountain Specific Plan area. The General Plan designation for the 22 acres is also Ladyface Mountain Specific Plan.

As part of the proposed project, the zoning and General Plan land use designations for all of the properties within the project area will be changed to Agoura Village Specific Plan. In addition, the Ladyface Mountain Specific Plan will need to be amended concurrently with the adoption of the AV Specific Plan, as Zone B proposed under the Agoura Village Specific Plan will be removed from the Ladyface Mountain Specific Plan. In addition, the Plan will essentially replace the Agoura Village Overlay Zoning District and includes certain elements that involve modification to the provisions to the current Agoura Village Overlay District. These revisions are summarized below in the impact analysis section.

With the adoption of the proposed Specific Plan, the Plan would become the regulatory guidance document for the project area. In any instance where the Specific Plan may conflict with the requirements of the City of Agoura Hills Municipal Code, the Specific Plan would take precedence. In cases where the Specific Plan is silent on a particular topic, the Agoura Hills Zoning Ordinance requirements would continue to apply. The project's relationship to other City planning documents is as follows:

1. City of Agoura Hills General Plan – The Agoura Hills General Plan would be amended such that Agoura Village Specific Plan would become the land use designation for the project area. Upon adoption, the Plan would establish the regulatory framework that would guide future development within the project boundaries.

2. Agoura Village Overlay – This overlay district would be superceded in all respects by the Specific Plan and would be removed from the City of Agoura Hills Municipal Code.

3. Freeway Commercial Overlay – This overlay district will be removed from the Specific Plan area.

4. Hillside and Significant Ecological Area Provisions and the Grading Ordinance – the provisions of the Hillside and Significant Ecological Area (Section 9652.13 A and B of the Zoning Ordinance) would not apply within the Agoura Village Specific Plan area. These requirements would be replaced by land use development standards, design criteria, and other provisions of the Specific Plan that are intended to protect, preserve, and

restore natural areas and to protect hillsides within the project area. The remainder of the provisions would apply.

5. Zoning Ordinance Parking Design Standards – all of the provisions of the City's parking code as outlined in Section 9654-9654.5 of the City's Zoning Ordinance would apply. However, every development permit would be subject to the preparation of a parking study, and exceptions to the current Ordinance relating to the location and placement of parking; provisions for reduced parking for mixed uses; and provisions for shared parking may be approved based on the findings and analysis in the parking study.

6. Ladyface Mountain Specific Plan – where the proposed Plan overlaps with the Ladyface Mountain Specific Plan (i.e. at the southwest corner of Kanan and Agoura Roads, Zone B), such areas will be removed from the Ladyface Specific Plan and moved to the AVSP. Thus, Zone B will no longer be in the Ladyface Specific Plan.

Regional Planning Framework. In addition to the above locally adopted planning framework, regional policy documents that apply to the project area include the Southern California Association of Governments' (SCAG) Regional Comprehensive Plan and Guide (RCPG) and the South Coast Air Quality Management Plan (SCAQMP). The SCAQMP is discussed in Section 4.2, *Air Quality* under Cumulative Impacts. Other applicable plans are discussed below.

Regional Comprehensive Plan and Guide. The Southern California Association of Governments (SCAG) is a regional planning agency that serves as the Metropolitan Planning Organization for six counties: Los Angeles, Orange, San Bernardino, Riverside, Imperial, and Ventura. SCAG is mandated by federal law to draw up regional plans for transportation, growth management, hazardous waste management, and air quality.

SCAG has adopted a Regional Comprehensive Plan and Guide (RCPG) to provide direction to local governments in addressing regional issues such as population growth for the six-county region. The RCPG includes policy guidance with respect to such issues as mobility, quality of life, equity, air quality, and water quality. Specific RCGP policies that are relevant to the Specific Plan area are discussed below.

4.8.2 Impact Analysis

As described in the project description, the Specific Plan divides the project area into seven zones denoted A-F and an open space zone (Zone G) along the southern portion of the project area (see Figure 2-4). Within each zone, specific land uses are identified that are either allowed or allowed with the issuance of an Agoura Village Development Permit (AVDP). These allowable uses are described in Table 2-4 in the Project Description. All future development applications within the Specific Plan area must follow the requirements and provisions of the City's AVPD process. This process is designed and intended to provide for the orderly development of land in conformance with the vision contemplated by the Specific Plan. The Development Permit would allow for innovations and special features in site development, including the location of structures, conservation of natural land features and efficient utilization of open space. The process is intended to allow for flexible design that would ultimately establish an environment equal to or better than that resulting from the application

of the minimum standards of the Zoning Ordinance. Land uses that are not listed on Table 2-4 would not be allowed unless the City Planning and Community Development Director finds the use to be compatible with the vision of the village.

a. Methodology and Significance Thresholds. Land use compatibility impacts were assessed based upon the level of physical impact anticipated in the various issues that can affect compatibility (air quality, noise, safety, and aesthetics). The analysis also includes an evaluation of the project's consistency with local land use policies, including the City's General Plan and Zoning Ordinance. Impacts are considered significant if the proposed development would:

- *Physically divide an established community;*
- *Conflict with any applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;*
- *Conflict with any applicable habitat conservation plan or natural community conservation plan.*

It should be noted that although this EIR includes a policy evaluation, the final determination of consistency with local planning policies rests with the City decisionmakers.

b. Project Impacts and Mitigation Measures.

Impact LU-1 **Buildout of the Specific Plan would introduce residential land uses south of US 101, an area that is generally commercial in nature. While this would not physically divide an established community, it would allow for residential uses that are separated from other more traditional residential areas of the community, north of US 101. This is considered a Class III, *less than significant.***

Integral to creating a functional "village" is the development of an appropriate balance of land uses and design elements. As such, the proposed Specific Plan would allow for development of a mix of land uses that includes commercial, retail, services, office and residential development. The project area is currently a mix of built out commercial uses and vacant parcels presently designated for future commercial uses. The project area is not an established community and thus, buildout of the Specific Plan would not result in the division of an established community.

The project would result in the introduction of up to 293 residential units into an area that is primarily commercial. While there is some residential development south of US Highway 101 (US 101) within the City of Agoura Hills, a majority of the residential communities and related services (such as schools, neighborhood commercial uses etc.) are located north of US 101. Therefore, while the project would not divide an established community, it would allow for new residences that are separated from the balance of the other residential areas of the City, namely those areas north of US 101. From a land use perspective, the proposed Specific Plan involves a tradeoff between incorporating residential uses that are considered integral to the success of a downtown village and allowing for new residential uses that are not optimally

located relative to other residential areas and residential support services within the community. However, due to the current existence of residential uses south of the project area and the proposed balance of commercial/retail and residential uses onsite, impacts would be considered less than significant.

Mitigation Measures. None required.

Significance After Mitigation. Impacts would be considered less than significant without mitigation.

Impact LU-2 The proposed Specific Plan would generally be compatible with the existing surrounding commercial, freeway, and open space land uses and over time is intended to enhance the existing commercial uses within the project area. However, buildout of mixed uses (including possible density bonuses if specific criteria are met) as an integral part of the Specific Plan would potentially result in land use conflicts between planned new commercial and residential land uses and between proposed equestrian uses and residential uses. This is considered a Class II, *significant but mitigable,* impact.

Development of the proposed Specific Plan would place new high-density residential uses immediately adjacent to commercial uses. Permitted and conditionally permitted uses are described in Table 2-4 in the project description. A majority of these uses have limited capacity to cause significant environmental impacts in and of themselves. However, uses such as bar/tavern, performing arts center, farmers market, and possibly other uses have the potential to result in increased traffic, including pedestrian traffic, possibly noise sources such as amplified music, and nighttime lighting that may cause nuisance effects with adjoining or nearby residential uses. While the Plan incorporates many features to ensure compatibility between these uses, potential land use compatibility impacts associated with noise, aesthetics, public services, and traffic and circulation are considered to be significant but mitigable. The mitigation measures required in Sections 4.1, *Aesthetics*, 4.2 *Air Quality*, 4.9, *Noise,* and 4.11, *Traffic and Circulation* would reduce these potential conflicts to a less than significant level.

The commercial use, in combination with new residential development, would also introduce more traffic onto Agoura Road, which would increase noise levels. The noise analysis presented in Section 4.9, *Noise,* indicates that while increased traffic would not audibly increase noise levels in the Plan area, ambient noise levels associated with US 101 and Agoura Road together would exceed noise compatibility levels identified in the City's General Plan Noise Element (e.g. above 65 dBA). This is considered a significant but mitigable impact for those residential uses that will have exposures to these noise sources. Delivery activities associated with the commercial use could also create noise conflicts. However, compliance with the City's Noise Ordinance and implementation of mitigation measures identified in Section 4.9, *Noise,* would reduce the potential for these conflicts to a less than significant level.

The location of commercial uses in close proximity to residential uses also has the potential to result in nighttime lighting conflicts if lighting systems are not properly designed. However, as noted in Section 4.1, *Aesthetics*, although new development within the planning area would

generate new sources of light, implementation of development standards included in the Specific Plan for exterior lighting would avoid the generation of significant lighting impacts.

The location of the proposed equestrian/hiking trail linking Agoura Road to the proposed equestrian center has the potential to result in odor effects near the trailhead at Agoura Road and adjacent commercial uses unless appropriate buffers and waste management measures are implemented to reduce noise and odors.

Mitigation Measures. Mitigation measures identified in Sections 4.1, *Aesthetics*, 4.2, *Air Quality,* 4.9, *Noise,* and 4.10, *Traffic and Circulation* would reduce land use compatibility impacts associated with mixed uses to less than significant.

Significance After Mitigation. With implementation of the mitigation measures recommended in the sections referenced above, land use impacts associated with the mixing of commercial and residential uses would be reduced to less than significant.

Impact LU-3 The proposed project requires modification of the City's General Plan and zoning designations for the project area. On balance, these changes could be found to be consistent with the intent of the General Plan and other land use policies that apply to the project area. Impacts relating to consistency with City land use policies are considered Class III, *less than significant*.

As noted above, all future development applications within the Specific Plan area must follow the requirements and provisions of the City's Agoura Village Development Permit (AVPD) process. The process is intended to allow for flexible design that would ultimately establish an environment equal to or better than that resulting from the application of the minimum standards of the Zoning Ordinance. A discussion of applicable City land use policies and how the project affects such polices is summarized below.

Consistency with the General Plan Polices.

Land Use Element. The Land Use Element of the City's General Plan contains the following goals, polices and implementation measures that apply to the Agoura Village Specific Plan and immediate project area.

> *Goal 1: Provide for a mix of land uses which meets the diverse needs of Agoura Hills residents, offers a variety of employment opportunities, and allows for capture of regional growth.*

The proposed Specific Plan includes a mix of land uses intended to serve the diverse needs of the community. It would also offer a variety of employment opportunities. Therefore, the proposed Specific Plan appears to meet the intent of this goal.

> *Policy 1.1: Provide opportunities for a full range of housing styles, locations and densities to address the community's housing needs, and to provide market support for existing and future commercial land uses in Agoura Hills.*

The proposed Specific Plan would provide a unique mix of housing integrated into a downtown village setting. Therefore it appears consistent with this General Plan policy.

> *Policy 1.7: Encourage the use of Specific Plans as a tool to implement general plan policies to provide for cohesive coordinated development in high profile areas of the community. Implementation Measure 1.2: Pursue adoption of special planning areas in the following areas:*
>
> - *Agoura Road East*
> - *Agoura Road West*
> - *Kanan Road*

The proposed Specific Plan implements this General Plan policy.

> *Goal 2: Maintain and enhance community identity and development quality for the City and its neighborhoods.*

The Specific Plan is intended to enhance and redefine the identity of the Agoura Road Corridor. It includes design guidelines that would help to ensure that consistent design themes are incorporated into new development and, over time, will serve to guide consistent redevelopment of existing developed areas within the Plan boundaries. The Plan also includes street beautification, such as signage, decorative banners, street furnishings, lighting and other design elements that will help to enhance the identity of the Agoura Road Corridor. Therefore the Specific Plan is consistent with this General Plan goal.

> *Policy 2.7: Design review of buildings and exterior spaces will favorably consider features that are of human scale and encourage pedestrian activity, and will be critical of personal designs which do not consider such features.*

Design guidelines and pedestrian enhancements contained in the Specific Plan appear to be consistent with this General Plan policy.

> *Implementation Measure 2.7: All four quadrants at the Kanan/Agoura intersection provide substantial opportunities for proactive planning. A special study on the design, development and land uses shall be prepared for this area.*

The Agoura Village Specific Plan and previous planning efforts for the project area are consistent with this implementation measure.

<u>*Circulation Element.*</u> In order to meet the General Plan Circulation Element objectives, the Circulation Element addresses the transportation improvements needed to provide adequate capacity for future land uses. The Circulation Plan establishes a hierarchy of transportation routes with specific development standards for each category of roadway. Regional goals and programs that are related directly or indirectly to transportation also influenced the designations of City roadways.

> *In order to meet the City's Circulation Element Policy 1.1, to maintain Level of Service "C" for all signalized intersections and freeway interchanges, a major realignment, signalization, and*

widening of the project's westerly gateway intersection of Kanan Road and Agoura Road will be required.

Based upon projected traffic volumes, the Circulation Element identifies Agoura Road as a Four Lane Primary/Secondary Arterial with corresponding speeds of 45 miles per hour. In recognition of the Agoura Village Concept Plan the City Council previously addressed the possibility of reducing the width of Agoura Road to two lanes east of the intersection of Kanan Road and Agoura Road. This narrowing of the roadway is reflected in the Specific Plan.

Goal 3 Encourage the use of alternative transportation modes.

The Agoura Village Specific Plan is intended to facilitate pedestrian accessibility throughout the project area and includes linkages of key nodes of activity. Design enhancements and circulation concepts intended to facilitate internal mobility are addressed in the Mobility Chapter of the Specific Plan. Improvements along Agoura Road at the heart of the village (between Kanan and Cornell) will consist of one 12 ft travel lane in each direction, an 8 ft. buffer/Class II bike route in each direction, a 10 ft landscaped median in the center, a 16 ft diagonal parking on either both or one side of the street (depending upon available width) and a 9 ft sidewalk and 7 ft sidewalk setback on both sides of the street. The Plan also includes a pedestrian/equestrian linkage between the proposed equestrian center and Agoura Road. The Specific Plan also makes a provision for implementing a centrally located bus stop and other measures to promote use of alternative modes of transportation.

Implementation of the proposed roundabout includes clearly marked pedestrian crossings as well as pedestrian refuge areas in the medians in order to provide shorter crossing distances for safe pedestrian crossing. Compared to a more traditional intersection, the roundabouts create greater potential pedestrian accessibility and safety conflicts; however, these potential impacts can be mitigated as identified in Section 4.10, *Traffic and Circulation* of this EIR. The development of mixed commercial and residential uses as identified in the Specific Plan will facilitate use of alternative modes of transportation for commercial/residential trips. With the implementation of measures identified in Section 10, *Traffic and Circulation*, the proposed project appears to be consistent and would tend to further the alternative transportation goals of the City.

The Circulation Element (Figure C-3) and the City's Master Bikeway Plan identify Agoura Road as a Class II Bike Lane.

A reduction of Agoura Road to two lanes with angled parking has the potential to adversely affect bicycle safety along this route. The Specific Plan would involve development of a Class II (striped) bike lane, as identified in the Circulation Element, on both sides of Agoura Road.

Additional mitigation measures identified in Section 4.10, *Traffic and Circulation* would further reduce these impacts to less than significant. The proposed project is not expected to conflict with this Circulation Element provision.

<u>*Scenic Highway Element.*</u> Agoura Hills' important visual resources, specifically Ladyface Mountain, and surrounding hillsides, are visible from the Ventura Freeway and many of the City's arterial highways. The designation of various roadways through Agoura Hills as scenic

highways is intended as a means of assuring the integration of the Circulation Element with the surrounding visual environment and for the protection of these visual amenities within the scenic corridor. The Scenic Highway Element of the General Plan provides an inventory of these highways and outlines specific needs of each corridor. Agoura Road through the project area is designated as a Local Scenic Highway. The Scenic Highway Element identifies the following needs along Agoura Road:

- Design guidelines and a specific design for street widening and realignment, including landscaping, pedestrian and equestrian trails where appropriate, and preservation of existing oaks adjacent to the roadway.
- Naturalistic landscaping at project edges to preserve rural character.
- Open space corridor connections at the Zuma Ridge Trail and Medea Creek.
- Setbacks to preserve rural character following widening.
- Restrict street lighting.
- Screening of unsightly uses, e.g., contractor yards and storage yards.

A portion of Kanan Road is also located within the project area and serves as a Gateway into the City and the project area. Kanan Road is designated as both a Local Scenic Highway and a Primary County Scenic Highway south of the Ventura Freeway. The following needs are identified within the General Plan for the Kanan Road corridor:

- Naturalistic landscaping where possible in new development and in the existing parkway where possible.
- Preserve scenic entry at southerly City limits.
- Open space corridor connections at Medea Creek and the Zuma Ridge Trail.
- Monument signs at City entry points.

The Scenic Highways Element addresses these needs through a single Goal and a set of Policies and Implementation Measures. The primary goal is to "Create a network of scenic highways in Agoura Hills which is related to the City and creates a special awareness of the environmental character and natural and man-made resources of the community". The pertinent policies and implementation measures to the project area include:

> *Policy 1.4: Maintain a quality visual experience along the entire length of the scenic highways through protection and enhancement of views and development of appropriate landscaping.*

The proposed Specific Plan includes land use and development standards, design guidelines and a street beautification program intended to enhance the visual appearance of the proposed area. Roadway improvements would include pedestrian-oriented features such as a specific furniture palette (e.g., lighting, banners, benches, waste receptacles, bicycle racks, and tree grates), while street-front buildings would utilize wall/hardscape design elements to enhance the Village area. As discussed in Section 4.1, *Aesthetics,* existing developed sites between Roadside Drive and Agoura Road would be subject to new development in accordance with the proposed Specific Plan standards; thus, foreground views from U.S. 101 could be altered by the construction of new buildings up to 45 feet (ft) in height and roadway landscaping. Redevelopment within this area would generally be considered an improvement in the visual character of the area. Moreover, development of Zone A south between Kanan Road and

Cornell Road, south of Agoura Road, could also be developed with buildings up to 45 ft in height and could require alteration of the natural topography from grading activities and the use of retaining walls. Such development would alter views to nearby scenic highways and roadways. However, land use and development standards, design guidelines and a street beautification program outlined under the Specific Plan, are anticipated to enhance the visual appearance of the proposed new development and redevelopment of existing development within the Plan area. Therefore, the project appears to be consistent with this policy.

> *Policy 1.7: Preserve the hillside backdrop and natural landforms visible from the designated scenic corridor in their present state to the extent possible.*

The Specific Plan contains policies and performance standards intended to protect the visual character of the hillside backdrop of the project area. However, it is anticipated that relatively substantial natural landform modification may be needed to accomplish the project objectives of creating a "village" along the Agoura Road Corridor. Individual, future projects developed within the Specific Plan area would be required to undergo project specific review to determine whether landform modification has been minimized to the extent feasible. The proposed Specific Plan appears consistent with the hillside preservation provision of this policy and with the review of future projects to determine that landform modification has been minimized to the extent possible. Therefore, it appears that the Specific Plan is generally consistent with this policy. It is important to note that a majority of the project area is currently designated by the City's General Plan for urban use. Therefore, the proposed Specific Plan would not materially change the plans for the project corridor. The Plan includes about 32 acres designated for Open Space. This acreage encompasses the southern portion of the project area and includes about 23 acres west of Kanan Road and about 9 acres east Kanan Road. This Open Space area is intended to help to preserve the hillside backdrop of the project area.

> *Policy 1.10: Provide enhanced paving, entry monuments, and other special design features at key entry points to the City.*

One of the purposes of the Specific Plan is to better define the project area and to develop specific design criteria and features that will enhance this important gateway to the City. The Specific Plan includes a street beautification program that includes demarcation of the Village area and gateway to the City. It also includes special design features and enhanced paving to accentuate the visual appearance of the area. Therefore, the Specific Plan appears to be consistent with this General Plan policy.

> *Policy 1.11: Establish uniquely identifiable districts in Agoura Hills that enhance the City's image from its scenic highways.*

The Specific Plan is intended to establish a uniquely identifiable sense of place that will enhance the City's image from US 101, Agoura Road and Kanan Road. It also includes consistent design, streetscape, and landscape guidelines that would enhance the currently developed portion of the project area and would help to guide uniform development of the presently undeveloped portions of the project area. Therefore, the project appears to be consistent with this policy.

> *Implementation Measure 1.5: The City shall maintain to the highest extent practical landscaped medians, parkways, and street trees along designated scenic corridors.*

The Specific Plan includes comprehensive design guidelines, including street beautification and streetscape guidelines, intended to enhance the appearance of the project area from Agoura and Kanan Roads. The project appears to be consistent with this implementation measure.

> *Implementation Measure 1.6: Establish review guidelines for development along scenic routes encouraging appropriate signage and landscape screening.*

The proposed Specific Plan establishes review guidelines for future development along the Agoura Road Corridor. The Plan establishes signage, streetscape design, and landscaping intended to enhance the project area. The proposed Specific Plan appears consistent with this implementation measure.

> *Implementation Measure 1.7: Continue to preserve vistas of the hillsides within Agoura Hills through implementation of City's hillside regulations contained in the adopted Zoning Ordinance.*

With the approval of the Specific Plan, most provisions of the City's Hillside Grading Ordinance would continue to apply to development within the Plan area. The design guidelines in the Specific Plan also include specific policies regarding site grading and the preservation of natural landforms. Therefore, the Specific Plan appears to be consistent with this implementation measure.

> *Implementation Measure 1.8: Create the following regulations to maintain scenic highways in Agoura Hills:*
>
> - *Require all structures based on their height to be set back a specific distance from the scenic roadway:*
> - *Review plans for all new construction for conformity with the surrounding structures and environment;*
> - *Encourage the installation of underground utilities;*
> - *Develop landscaping requirements.*

The Specific Plan would establish new requirements for the project corridor. All new development and modifications of existing development would be required to conform to the provisions of the Plan. Therefore, while the Plan would change the development standards for the project area compared to current General Plan and Zoning Ordinance, it would be generally consistent with this implementation measure.

> *Implementation Measure 1.11: Undertake improvements that provide a strong identity to entry points and principal districts of the City. Such improvements shall include design features (e.g., signage, plaques, landscape and monuments).*

The proposed Specific Plan is intended to create a strong identity for the project area as a key entry point to the City. As such, the Plan appears consistent with this implementation measure.

Implementation Measure 1.12: Pursue adoption of Design District Guidelines for the following areas:

- *Agoura Road East*
- *Kanan Road*

The proposed Specific Plan includes design guidelines for those portions of Agoura and Kanan Roads within the project area. The Plan appears to be consistent with this implementation measure.

Other Plans and Policies. Many of the above Policies and Implementation Measures are repeated and/or implemented through various City Ordinances and adopted design criteria. The Agoura Village Specific Plan embraces many of these criteria; however, several may require some adjustments in order to accommodate the objective of creating a pedestrian village. For example, several references are made regarding the widening and realignment of Agoura Road in keeping with the Circulation Element objective of widening it to a four lane Primary/Secondary Arterial as opposed to a two-lane roadway with angled parking. Also to be included in the issue of widening Agoura Road and Kanan Road is the Scenic Highway Elements' identified need to preserve existing oak trees adjacent to the roadway.

Another issue is the intended restriction and limited use of street lighting along Agoura Road as called for in the Scenic Highway Element. This restriction has been implemented through an adopted Council Policy that limits street lighting to intersections only along Agoura Road. A pedestrian oriented roadway, however, is typically visually and security wise enhanced through the use of street lighting. In order to meet both objectives and to minimize the overall effects of new lighting sources, the Plan incorporates several design parameters to be followed regarding future lighting for the project area.

A third consideration addressed in the Scenic Highways Element and also in the Parks and Recreation Element is the need for open space corridor connections at the Zuma Ridge Trail and Media Creek. The majority of Medea Creek that passes through the project area is located within an engineered concrete lined channel. In addition, the Agoura Village Concept Plan envisioned retaining the existing engineered structure with the possible exception of covering it south of Agoura Road in order to facilitate a parking lot. The City's Park and Recreation Element shows the Zuma Ridge Trail extending along Agoura Road and terminating just past the intersection of Cornell Road and Agoura Road. In recognition of the equestrian center within the project area, the Parks and Recreation Element may need to be amended to show the future extension of the trail and the contemplated use, operation, and ownership of the equestrian center.

Ladyface Mountain Specific Plan. The Ladyface Mountain Specific Plan contains approximately 747 acres located south of Agoura Road and west of Kanan Road. The southwest quadrant of the intersection of Kanan Road and Agoura Road is included within the boundaries of the Ladyface Mountain Specific Plan. The Agoura Village Specific Plan would require an amendment to the boundaries of the Ladyface Mountain Specific Plan, deleting that area from the Ladyface Mountain Specific Plan while incorporating it into the Agoura Village Specific Plan. The proposed Specific Plan limits development at the base of Ladyface Mountain and

below the 1,100-foot elevation. Those portions of the Specific Plan area located above the 1,100-foot elevation would be restricted to open space use only.

Consistency with the Zoning Ordinance. The proposed Specific Plan requires a zone change and an amendment to the Zoning Map to allow development of a mixed use "Village" along the Agoura Road Corridor. The existing Zoning Ordinance and resulting land use patterns in Agoura Hills are almost entirely based upon separation of commercial and industrial uses from residential use. The concept of mixing residential uses with commercial uses is prohibited in all commercial and residential zones except in the Agoura Village Overlay District. Adoption of the Specific Plan and enabling ordinance would establish new zoning criteria specifically designed to implement the "Village" concept for the project area.

Agoura Village Overlay District. The Agoura Village Overlay District was established as an interim measure to protect the project area from certain uses that would conflict with the pedestrian friendly atmosphere as envisioned by the Agoura Village Concept Plan. Special development standards were also included restricting size of buildings in order to retain a small village atmosphere. Building setbacks, coverage and design were made more flexible in order to accommodate the development of the village concept. Residential development was also included as a permitted use subject to approval of a Conditional Use Permit in order to promote the neo-traditional mixed use concept into the project area. The proposed Specific Plan would supercede the Agoura Village Overlay Zone and this overlay would be removed from the City Municipal Code.

Open Space District. The Zoning Ordinance specifies "the purpose of the Open Space (OS) district is to designate areas which, because of natural habitat, visual and aesthetic value or other reasons, should be preserved as natural open space by restricting or transferring development rights." No uses are permitted within the OS district without a conditional use permit. Conditional uses include one single family dwelling unit per lot, parks and trails, wildlife preserves, light agricultural uses, and public or private recreational uses. All uses and structures not specifically provided for are strictly prohibited. In addition, Section 9487 of the Municipal Code indicates that permitted or conditionally permitted uses shall not be added to this part unless such uses are first approved by voters of the City by a two-thirds majority of those voting on the question. Additionally, this zoning designation cannot be removed from this site without approval by the voters of the City by a two/thirds vote of the majority of those voting on the question.

Currently, the project area has about 1.5 acres designated OS. This area is roughly located on top of the knoll on that parcel located at the southeast corner of Kanan and Agoura Roads. According to City staff, the original designation of this area as Open Space was driven by the belief that the knoll was occupied by a sensitive cultural resource site. Since that time, further study has shown that this location, while visually prominent, is not a sensitive cultural resource site. Although some prehistoric artifacts were detected on the surface, the area is highly disturbed, has little soil, and very few prehistoric artifacts. A cultural resources survey performed by C.A. Singer and Associates in 2000, concluded that the hilltop has little or no potential of producing significant archaeological resources because it has little or no soil.

As part of the project, the zoning for the entire project area would be changed to a Specific Plan designation with all areas zoned G remaining designated as Open Space. To determine consistency of this change with the current Ordinance provisions, it is necessary to examine how the Plan incorporates open space features and to compare the Plan provisions to Open Space provisions of the current Ordinance. Whereas the current zoning for the project area includes about 1.5 acres designated OS, the proposed Specific Plan includes approximately 32 acres designated as Open Space. These areas are all along the southern portion of the Specific Plan and include about 9 acres located southeast of the intersection of Kanan and Agoura Roads (along Medea Creek), including the 1.5 acres located along the hilltop knoll near Kanan Road. Additionally, 23 acres located southwest of the Kanan/Agoura Road intersection would be included as Open Space. With this relatively substantial increase in overall Open Space acreage for the project area, it appears that the Specific Plan meets the general intent of the Open Space District of the City's Zoning Ordinance.

Hillside and Significant Ecological Areas. The special regulations that govern development in hillsides and significant ecological areas are similar in design and purpose to those outlined in the Open Space District above. Section 9652 defines hillside has having an average slope before grading of greater than ten (10) percent. All of the provisions of this section would apply to the project area except Section 9652.13 A and B, which address density and development area standards.

In addition to the hillside management criteria, several parcels located northeast of Cornell Road and Agoura Road (outside of the Specific Plan area) are identified as Significant Ecological Areas (SEAs). These areas have been identified as having unique or rare habitat value or migratory paths. Development in these areas requires findings that demonstrate that the project has been designed to be highly compatible with the biotic resources present, including the setting aside of appropriate and sufficient undisturbed areas. Because the proposed Specific Plan contains development standards with similar objectives to the current zoning requirements, the proposed project appears to be generally consistent with this provision of the Zoning Ordinance.

Zoning Ordinance Parking Requirements. As noted above, all of the provisions of the City's parking code as outlined in Section 9654-9654.5 of the City's Zoning Ordinance would apply except where the Specific Plan outlines more specific criteria that will be used within the planning area. The exceptions to the current Ordinance primarily relate to the location and placement of parking, provisions for reduced parking for mixed uses, and provisions for shared parking. The Specific Plan identifies a process and specific criteria under which parking reductions may be allowed within the Specific Plan area. This process requires that an applicant for new development demonstrate that adequate parking is provided before a parking reduction is granted. Therefore, the proposed exceptions to the current Zoning Ordinance parking requirements are not expected to result in parking deficiencies or inconsistency with the Ordinance objectives of ensuring new projects provide adequate parking.

Freeway Corridor Overlay District. The purpose of the freeway corridor overlay district is to recognize the importance of the land use, architectural design, and appearance of development within the freeway corridor to the city's identity and character. In addition to development

criteria governing the preservation of views and open space and attention to building design and setbacks, the overlay district also prohibits certain types of uses i.e., off-sale liquor establishments and adult oriented businesses. This overlay district will be removed from the Specific Plan and replaced with more stringent standards and design guidelines. Standards included within the Specific Plan shall ensure preservation of views and open space, and improvements to design and development standards. Additionally, those uses prohibited by the freeway corridor overlay district shall be prohibited by the Specific Plan.

Redevelopment Plan. The Agoura Village Specific Plan includes properties that are located within the boundaries of the City's Redevelopment Plan. The proposed Agoura Village Specific Plan would be generally consistent with the Redevelopment Plan in that it would facilitate economic and physical revitalization of the developed portion of the project area. In addition, by implementing consistent design standards, the project would help to eliminate blighted physical conditions within the area. According to City staff, implementation of the Agoura Village Specific Plan would not require amendment to the City's Redevelopment Plan. Further, the potential future availability of Redevelopment funds may help to facilitate implementation of public improvement elements of the Agoura Village Specific Plan to the extent that such funds can be used for such activities under current redevelopment law.

Mitigation Measures. As discussed above, the proposed Specific Plan (including the proposed amendment to the Agoura Hills General Plan and Zoning Ordinance described above and in Section 2.0, *Project Description*), in combination with mitigation measures recommended in the technical sections identified above, appears to be consistent with locally adopted City plans and policies.

Significance After Mitigation. With the mitigation measures recommended in this EIR, the proposed project, and Plan and Ordinance amendments, as proposed, impacts related to consistency with City land use policies are considered less than significant.

Impact LU-4 **In general, the proposed project would implement a majority of the applicable policies of SCAG's Regional Comprehensive Plan and Guide. However, since the City already exceeds locally recognized population and housing forecasts, any addition of new population or housing is considered potentially significant. Therefore, impacts related to consistency with a regional plan are considered Class II, *significant but mitigable*.**

As discussed in Section 5.0, *Growth Inducing Impacts*, buildout of the Specific Plan would further exacerbate the City's existing exceedance of SCAG's population forecast. Therefore, using the most recent housing and population data available, the project would cause an exceedance of SCAG projections for both population and housing. However, this exceedance in and of itself is not a physical impact of the project and results largely because the SCAG forecasts have not been updated to reflect current City conditions and planning policies.

The following discussion further evaluates the project's consistency with relevant policies of SCAG's Regional Comprehensive Plan and Guide.

Regional Mobility

4.01 Transportation investments shall be based on SCAG's adopted Regional Performance Indicators: Mobility, Accessibility, Environment, Reliability, Safety, Livable Communities, and Equity.
4.02 Transportation investments shall mitigate environmental impacts to an acceptable level.
4.04 Transportation Control Measures shall be a priority.
4.16 Maintaining and operating the existing transportation system will be a priority over expanding capacity.

The proposed Specific Plan includes policies and design criteria intended to create a cohesive, pedestrian friendly, downtown village area along the Agoura Road corridor in the vicinity of Kanan Road. The Plan includes features such as mixed use that will serve to enhance overall regional mobility by reducing or shortening trip lengths. In addition, it includes pedestrian and public transit features that will serve to reduce overall trip generation. The Plan also includes features intended to slow traffic and to create a better "sense of place" for the Village area. These include reduction of the ultimate width of Agoura Road from four lanes shown on the current General Plan to two lanes, inclusion of angled parking along Agoura Road and two roundabouts along Agoura Road; one located at Kanan Road and one located at Cornell Road. Although these features are intended to constrain and thereby slow local automobile traffic flows, they are not expected to have a significant adverse effect on regional mobility.

Improvement of the Regional Quality of Life/Standard of Living

3.12 Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.
3.13 Support local plans to increase density of future development located at strategic points along the regional commuter rail, transit systems, and activity centers.
3.15 Support local jurisdiction's strategies to establish mixed-use clusters and other transit-oriented developments around transit stations and along transit corridors.
3.16 Encourage developments in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment.
3.18 Encourage planned development in locations least likely to cause environmental impact.
3.20 Support the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.
3.21 Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.
3.22 Discourage development or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.
3.23 Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would

reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.

The Specific Plan is intended to create a downtown village along the Agoura Road corridor. It includes mixed commercial and residential land uses where people can live, work, and shop thereby reducing the need to rely on automobiles to obtain basic goods and services. The project is intended to create a "sense of place" with consistent design guidelines and improvements designed to integrate and enhance the continuity of the area. These improvements include features to improve street network, pedestrian and bicycling facilities, and open space areas in the project area. In addition, the project would facilitate revitalization of existing development within the Plan boundaries, which would further enhance the development quality within this portion of the project area.

As discussed in Section 4.3, *Biological Resources*, Section 4.4, *Geological Resources*, and Section 4.6, *Historical and Archaeological Resources*, new development south of Agoura Road has the potential to adversely affect sensitive natural and cultural resources in that area. However, with the mitigation measures identified herein, impacts associated with these issues can be mitigated to a less than significant level. Therefore, the Specific Plan is considered to be consistent with policies addressing regional quality of life/standard of living.

Provision of Social, Political, and Cultural Equity

3.27 Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.

The proposed project includes a land use mix and other amenities that are intended to develop a sustainable downtown village along the Agoura Road corridor. The Specific Plan includes public improvements that would facilitate and enhance multimodal access to the project area. This would facilitate equal access to all members of society. With the mitigation measures identified in Section 4.10, *Public Services* and Section 4.11, *Traffic and Circulation*, the project is not expected to adversely affect public facilities, and is therefore considered consistent with this policy.

Air Quality Chapter

5.11 Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.

As noted above, the proposed Specific Plan is intended to create a downtown village along the Agoura Road corridor. It includes mixed commercial and residential uses and would create a place where people can live, work, and shop thereby reducing the reliance on automobiles to obtain basic goods and services. Build out of the Specific Plan has the potential to involve substantial landform modification in those undeveloped areas south of Agoura Road. The construction impacts associated with the grading required in this area, along with the increased

traffic associated with new commercial and residential development, has the potential to result in both short and long term impacts to air quality. Mitigation measures identified in Section 4.2, *Air Quality*, together with project specific measures that may be required as part of individual project review, would mitigate impacts to the extent feasible.

Although the proposed project would implement a majority of the applicable policies of SCAG's Regional Comprehensive Plan and Guide, the project would cause an exceedance of SCAG population and housing forecasts. This is considered a Class II, significant but mitigable impact.

Mitigation Measures. Mitigation measures included in 4.2, *Air Quality*, 4.3, *Biological Resources*, Sections 4.4, *Geology and Soils*, 4.7, *Hydrology and Water Quality*, 4.10, *Public Services* and 4.11, *Traffic and Circulation* are required in order to reduce impacts related to compliance with SCAG policies to the degree feasible. Additionally, the following measure would be required in order to reduce impacts related to consistency with SCAG's Regional Comprehensive Plan to a less than significant level.

LU-4 **Regional Forecast Update.** The City shall provide population, housing, and job data to the Forecasting Section, under the Community Development Division, Planning and Policy Department, of the Southern California Association of Governments prior to development of SCAG's next 5-year socio-economic forecast update. The City shall provide the most current data at the time of baseline development for future forecasts.

Significance After Mitigation. With the recommended measures, the project appears to implement most relevant SCAG policies and would reduce impacts to a less than significant level.

c. Cumulative Impacts. Cumulative development in and around the project area in accordance with the City's General Plan and Los Angeles County General Plan will modify existing land use patterns and the general setting of the area, continuing the trend toward suburbanization. While the proposed Specific Plan involves a change in the planned land uses within the project area, it is important to note that the project area is currently designated for urban use. In this regard, the Specific Plan does not involve a change in the planned urban character of the area.

Planned cumulative development will reduce open space areas, largely through the development of land that is currently planned for urban development. This new development would adversely affect natural and cultural resources, however many of these impacts can be reduced to within acceptable impact thresholds through the implementation of Ordinance, policy, and other mitigation programs that will be imposed as part of the individual development review process. In addition, cumulative development would be expected to create certain land use compatibility conflicts relating to issues such as noise, lighting, and traffic. Similarly, these conflicts can also be addressed and mitigated through careful site design and planning during individual project review.

Existing policies of the City's General Plan and Zoning Ordinance, are specifically intended to address compatibility and natural resource issues associated with development in the City. Thus, cumulative land use impacts are not considered significant.

4.9 NOISE and VIBRATION

This section evaluates the noise impacts associated with full build-out under the AVSP. Both temporary construction-related impacts and long-term impacts related to project operation are addressed. Significance thresholds for noise impacts utilized those contained in the City Noise Ordinance and Municipal Code, the Noise Element of the City of Agoura Hills General Plan Update, and recommendations of the Federal Interagency Committee on Noise. Class II significant but mitigable impacts are associated with construction and operational activities, and with possible blasting related noise and vibration. Mitigation measures have been incorporated that reduce the potential impacts of project related noise and vibration on sensitive receptors to a level of insignificance. Appendix E contains the spreadsheets that were used to assess noise impacts due to project and cumulative traffic on study area roadway segments.

4.9.1 Setting

The City of Agoura Hills General Plan Noise Element (December 1992) provides basic information regarding the physical characteristics of noise and the existing noise environment in the area. This Element is incorporated by reference in its entirety. The following is a summary of the information contained in the Noise Element and pertinent additional information, and is intended to provide sufficient background to allow consideration of the potential noise impacts of the proposed development.

a. Overview of Sound Measurement. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment of the actual sound power levels to be consistent with that of the human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). In addition to the actual instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time. Typically, the Leq is summed over a one-hour period.

The sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Decibels cannot be added arithmetically, but rather are added on a logarithmic basis. Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dBA and a sound that is 10 dBA less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1 to 2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40 to 50 dBA, while those along arterial streets are in the 50 to 60+ dBA range. Normal conversational levels are in the 60 to 65 dBA range, and ambient noise levels greater than that can interrupt conversations. Table 4.9-1 lists a variety of common environmental noises and their corresponding sound levels (dBA).

Noise levels typically attenuate (lessen) at a rate of 6 dBA per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance, while noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance.

Table 4.9-1 Common Environmental Noise Source Sound Levels

Sound Level (dBA)	Type of Noise		Sound Level (dBA)
	Outdoor	Indoor	
130	Military Jet w/afterburner take off on Aircraft Carrier @ 50 feet	Oxygen Torch	120
118	Turbo Fan Aircraft (take off power at 200 feet)	Rock-N-Roll band	108-114
103	Jet Flyover at 1000 feet	Newspaper Press	97
84	Diesel Truck (40 mph at 50 feet)	Food Blender	88
76 ± 6	Freeway (50 feet from edge of pavement)	Vacuum cleaner	70
60	Air Conditioner@ 100 feet	Conversation	60

Source: Adapted from Agoura Hills General Plan Update Table N-1, reproduced from Melville C. Branch and R. Dale Beland, "Outdoor Noise in the Metropolitan Environment" ,1970.

The actual time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the daytime. To evaluate community noise on a 24-hour basis, the day-night average sound level was developed (Ldn). Ldn is the time average of all A-weighted levels for a 24-hour period, with a 10 dB upward adjustment added to those noise levels occurring between 10:00 PM and 7:00 AM to account for the general increased sensitivity of people to nighttime noise levels. The Community Noise Equivalent Level (CNEL) is similar to the Ldn except that it adds 5 dB to evening noise levels (7:00 PM to 10:00 PM). Thus, both the Ldn and CNEL noise measures represent a 24-hour average of A-weighted noise levels with Ldn providing a nighttime adjustment and CNEL providing both an evening and nighttime adjustment.

b. Sensitive Receptors. Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hospitals, schools, guest lodging, and libraries are most sensitive to noise intrusion and therefore have more stringent noise exposure targets than manufacturing or agricultural uses that are not subject to impacts such as sleep disturbance. Sensitive receptors most likely to be affected by the project include a single-family residence located within the new AVSP proposed boundary at Agoura Road, approximately 400 feet east of Cornell Road; a resident family living in the storage facility caretaker unit in Zone A North, along Agoura Road; and a single-family residence at Agoura Road, adjacent to the eastern edge of the AVSP boundary. The closest school is Agoura High School, which is located 0.6 miles northeast of the project area on the northern side of U.S. 101. The closest hospital is Westlake Medical Center, which is located 3.4 miles west of the project area.

c. Existing Noise Sources. Roads are the most common source of noise in developed areas. The Ventura Freeway (U.S. Highway 101) bisects the City of Agoura Hills and forms the

northern boundary of the project site. This is the most significant source of noise within the City due to the high volume of daily traffic. Other significant roadways within the project area include Agoura Road, which is an east-west arterial, and Kanan Road, which is a north-south arterial connecting the inland valley to the coastal city of Malibu. Another source of noise within the AVSP boundary is generated by the existing commercial development that is parallel to U.S. Highway 101 between Roadside Drive and Agoura Road.

Noise levels in the project vicinity were projected during the development of the City's Noise Element in 1992. The City mapped noise exposure contours based on the CNEL methodology and the Federal Highway Traffic Noise Prediction Model for existing major noise sources, including freeways, primary arterial highways, and railroads. Contour designations were formulated for conditions at the time the document was drafted (Figure N-1, 1991 Noise Contours, Agoura Hills General Plan Update, 1991), and for projected growth under the General Plan Update Land Use Policies through 2010 (Figure N-2, Future Noise Contours, Agoura Hills General Plan Update, 1991).

Actual noise measurements in the vicinity of the project site were taken adjacent to the northern boundary of Highway 101 for another proposed development. The noise levels and approximate distances from the Highway are shown in Table 4.9-2. Measured Leq's within the boundary of the first 300-foot noise contour range from 58.4 to 68.6 dBA. Sound level measurements taken between 350 and 750 feet from the highway range from 49.5 to 68.0 dBA. Topographical and structural components within the landscape may dissipate or reflect noise, resulting in dramatic differences among measurements taken at approximately the same distance from the highway.

Table 4.9-2 Measured Noise Levels in the Site Vicinity

Location	Leq (dBA)	Distance from Hwy. 101 (feet)
1	49.5	750
2	68.6	150
3	58.4	200
4	60.5	200
5	58.5	750
6	68.0	350

Source: J.H. Snyder Mixed Use Development EIR, Section 4.9, City of Agoura Hills, 2001

For example, location 1 and location 5 were both approximately 750 feet from the highway; however, resultant readings for the two locations differed by 9 dBA. Measured noise levels were generally lower in locations that had better shielding from U.S. Highway 101 due to intervening structures or topography, or a combination thereof.

d. Planned Improvements. Existing noise levels in the vicinity of the project are strongly influenced by traffic flows at the U.S. 101/Kanan Road interchange. This diamond interchange cannot handle the amount of traffic it receives on a daily basis, and traffic-flow backs up along Kanan Road, Canwood Street and Roadside Drive during peak hours. The new interchange will reduce traffic congestion by eliminating all left hand turns to the freeway, relocating traffic signals, increasing the number of lanes in exit ramps, and improving the interchange overall.

The final phase of the project is anticipated for completion in 2006. Additional improvements in the vicinity of the project include the Reyes Adobe Interchange Project, which is located approximately one mile west of the project area.

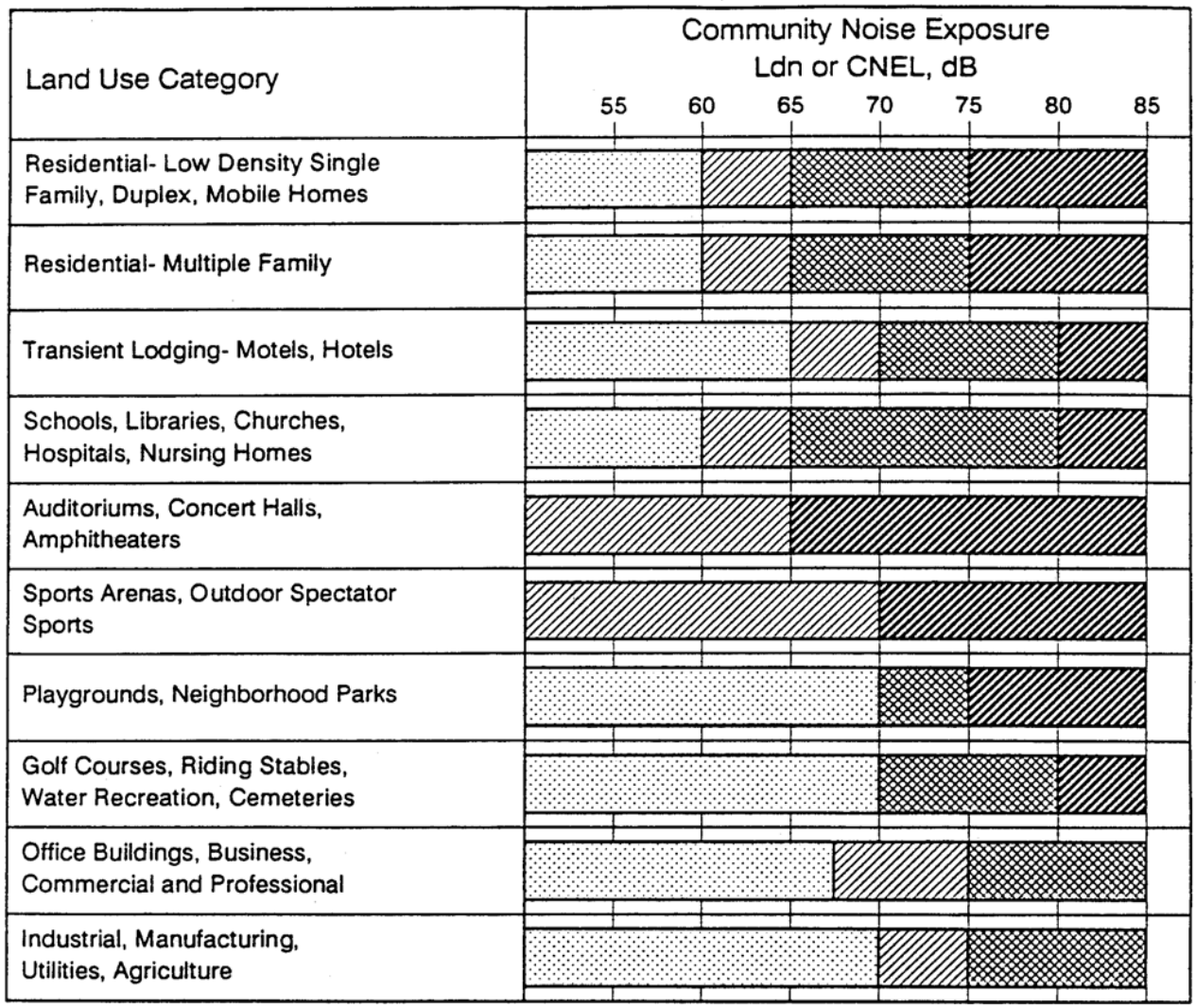
e. Regulatory Setting. The City identifies the State Office of Noise Control land use compatibility guidelines as the standards for development within the City. Figure 4.9-1 shows the ranges of noise exposure, for various land uses that are considered acceptable, conditionally acceptable, or unacceptable under the State Office of Noise Control guidelines. An acceptable noise environment is one in which development may be permitted without requiring specific noise studies or specific noise-reducing features. A conditionally acceptable noise environment is one is which development should be permitted only after noise mitigation has been designed as part of the project, to reduce noise exposure to acceptable levels. In unacceptable noise environments, development generally should not be undertaken. As outlined in the Noise Element, the maximum normally acceptable exterior level for new multi-family residential development is 60 dBA CNEL. Levels of 60-65 dBA CNEL are considered "conditionally acceptable" for multi-family residences, meaning that such noise levels are acceptable if appropriate noise insulating features are incorporated. Noise levels over 65 dBA CNEL are considered "normally unacceptable."

The City of Agoura Hills General Plan Update Noise Element provides the framework for noise related goals and policies that have guided development within the city limits since 1993. The noise contour maps contained within the General Plan Update were designed to aid as a guide to the location of noise tolerant uses in areas of higher ambient noise, such as land near the freeway.

The City planned for increases in the ambient noise level adjacent US Highway 101 by creating a Future Noise Contour Map (Figure N-2, Noise Element, Agoura Hills General Plan Update, 1993), which was modeled based on General Plan buildout and projected traffic volume increases ending in the year 2010.

Figure 4.9-2 shows the Agoura Village General Plan Update 2010 projected noise contours overlain with the six proposed development zones.

The City of Agoura Hills has adopted a noise ordinance (Ordinance 9656) that establishes ambient noise standards for all property within various noise zones. This ordinance sets an exterior noise standard of 55 dBA (1-hour Leq) between 7:00 a.m. and 10:00 p.m. and 50 dBA between 10:00 p.m. and 7:00 a.m. for residential properties. The interior noise level for residential properties is set at 45 dBA for all hours. However, if the pre-project ambient noise level exceeds any of the listed standards, the ambient noise level is treated as the baseline for determining compliance of the project with the other provisions of the noise ordinance.



Normally Acceptable
Specified land use is satisfactory, based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

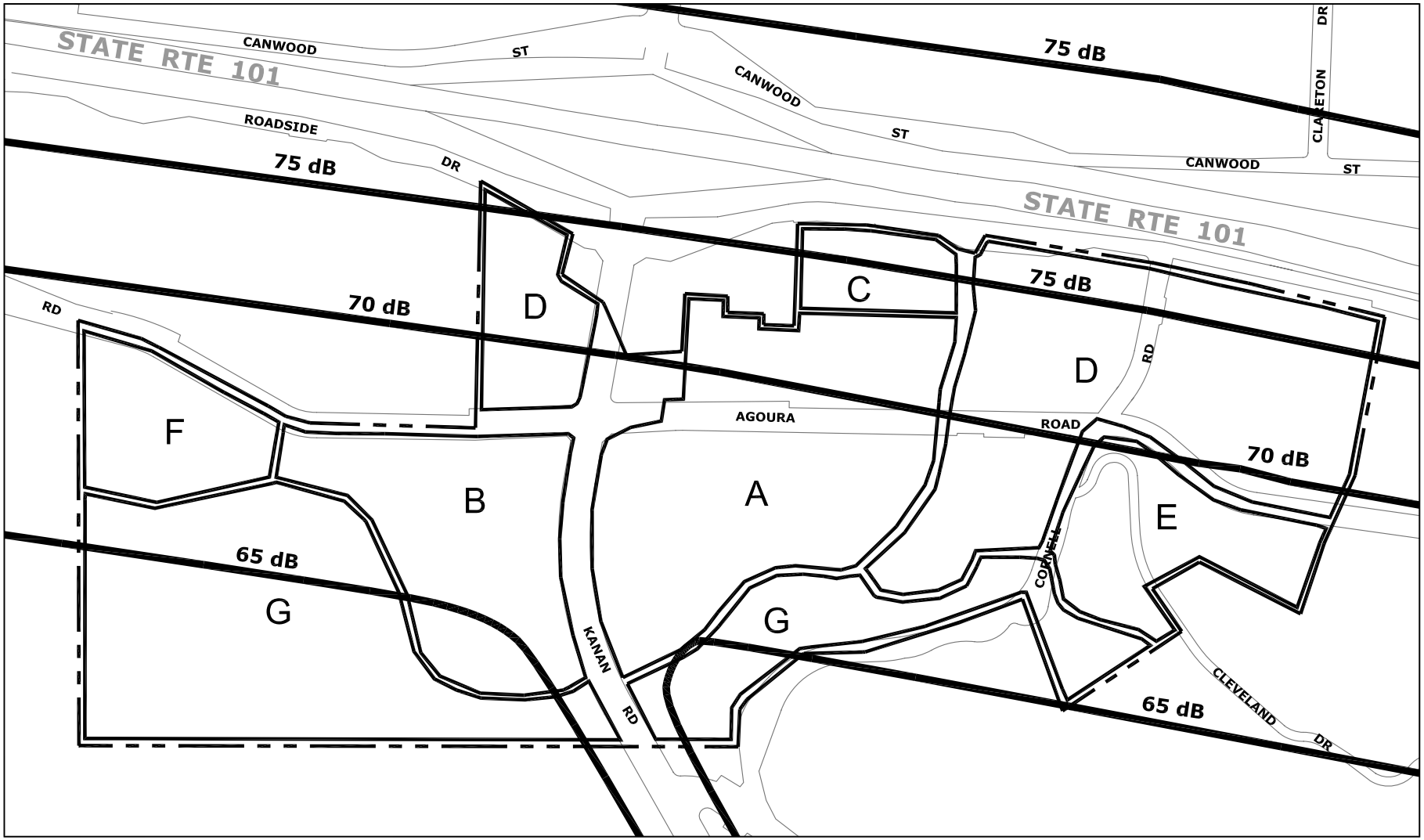
Conditionally Acceptable
New construction or development should be undertaken only after detailed analysis of noise reduction requirements is made and needed noise insulation features are included in design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, is normally sufficient.

Normally Unacceptable
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable
New construction or development should generally not be undertaken.

Source: Cotton/Beland/Associates. Modified from U.S. Department of Housing and Urban Development Guidelines and State of California Standards.

Noise Compatibility Matrix Figure 4.9-1



LEGEND

Project Boundary

Noise Contours

A Zone Areas

N

0 250 500 Feet

1993 Agoura Hills General Plan Update
2010 CNEL Noise Contours

Figure 4.9-2

Aerial Source: City of Agoura Hills, 2002

4.9.2 Impact Analysis

a. Methodology and Significance Thresholds. Existing and future traffic noise levels on local roadways and the freeway were calculated using standard mathematical equations in a spreadsheet model based on the average sound level algorithms from the Federal Highway Administration's Traffic Noise Model® (TNM) and current and forecasted traffic volumes. Traffic volumes (average daily trips) were obtained from the traffic analysis that was prepared for this project, and U.S. Highway 101 truck traffic was obtained from Caltrans (2003-Annual Average Daily Truck Traffic on the California State Highway System, 2004). Construction noise was estimated based on methodologies contained in the Handbook of Noise Control (C.M. Harris, 1979) and adapted to a spreadsheet program. Appendix E contains the spreadsheet input and output results. Noise and vibration with possible blasting during construction were estimated based on information from the City of Glendale, July 2001 *Oakmont View Phase V Revised Draft EIR*. Noise and vibration data are based upon a blasting assessment for a northern California mining project involving a 293-pound charge under average normal confinement.

Construction related noise. Construction-related noise would be considered significant if construction related activities occurred between the hours of 8 p.m. and 7 a.m., as stated in Section 9656.4 of the City of Agoura Hills Municipal Code. Under City Code, noise sources associated with construction or grading of any real property are exempt from the provisions of the noise regulations provided that construction noise is not generated between the hours of 8:00 p.m. and 7:00 a.m. on weekdays and Saturday, or, at any time Sunday or a legal holiday.

Operational Noise. The threshold of significance for operational roadway noise impacts is based on City standards for noise exposure, the standards from the State Office of Noise Control, and the recommendations of the Federal Interagency Committee on Noise (FICON). The FICON recommendations were developed as a result of studies that relate aircraft noise levels to the percentage of people highly annoyed by various noise levels. Although these recommendations were developed specifically for aircraft noise impacts, they are considered applicable to all noise sources that use noise exposure metrics such as the Ldn and CNEL. The level of significance changes with increasing noise exposure, such that smaller changes in ambient noise levels result in significant impacts at higher existing noise levels. Table 4.9-3 shows the significance thresholds for increases in operational noise levels caused either by the project alone or by cumulative development.

Significant impacts due to operational roadway noise could occur in three ways: 1) if residential development or other sensitive receptors would be exposed to traffic noise increases exceeding the criteria outlined in Table 4.9-3; or 2) if project-related on-site activities would generate noise exceeding the allowable standards in the City's Noise Ordinance; or 3) if any of the uses proposed for the site would be exposed to traffic-related noise levels exceeding the "normally acceptable" noise level for that use as shown on Figure 4.9-1.

Table 4.9-3 Significance of Changes in Operational Roadway Noise Exposure

Ambient Noise Level Without Project (Ldn or CNEL)	Significant Impact
< 60 dB	+ 5.0 dB or more
60 – 65 dB	+ 3.0 dB or more
> 65 dB	+ 1.5 dB or more

Vibration. Vibration associated with blasting is considered potentially significant if it would potentially exceed vibration standards for commercial districts as set forth in Section 9305.E of the Municipal Code. This section states that no operation or activity is permitted which will cause vibration noticeable without instruments at the perimeter of the subject property.

b. Project Impacts and Mitigation Measures.

Impact N-1 Project construction, including possible blasting along the bases of the hillside areas within the project area during site preparation, would create temporary noise levels that would be audible to nearby residents. This is considered a Class II, *significant but mitigable* impact.

Construction noise represents a temporary impact on ambient noise levels. Construction typically occurs in several distinct phases, each of which has its own unique noise characteristics. Table 4.9-4 shows typical noise levels associated with conventional construction equipment at a distance of 50 feet from the noise source for each of the major phases of construction.

Table 4.9-4 Typical Noise Level Ranges at Construction Sites

Construction Phase	Average Noise Level at 50 Feet	
	Minimum Required Equipment On-Site	All Pertinent Equipment On-Site
Clearing	84 dBA	84 dBA
Excavation	78 dBA	88 dBA
Foundation/Conditioning	88 dBA	88 dBA
Laying Subbase, Paving	78 dBA	79 dBA
Finishing and Cleanup	84 dBA	84 dBA

Source: Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the U.S. Environmental Protection Agency, 1971.

Note: The noise levels presented in this table are based on the use of conventional construction equipment and do not account for noise associated with possible blasting.

The noisiest activities associated with construction typically occur during the site preparation (excavation and foundation development) stage. This phase of project construction tends to create the highest noise levels because of the use of heavy equipment, including trucks, bulldozers, graders, and scrapers. Given the nature of subsurface materials in the project area,

it is possible that site preparation may involve blasting in order to establish final grades. This has the greatest potential to occur in the vicinity of a knoll that is located adjacent to the eastern boundary of Kanan Road approximately 500 feet south of Agoura Road in project Zone A. Blasting would be the preferred method in the event that standard grading methods are inadequate for removal of hard volcanic rock that was determined to underlie the knoll. It should be noted that the current development proposed for this site includes retention of the knoll (See Section 4.1, *Aesthetics*, AES-3).

Existing sensitive receptors most likely to be affected by the project include a single-family residence located within the AVSP boundary at Agoura Road, approximately 400 feet east of Cornell Road a single family living in the storage facility caretaker unit in Zone A North, along Agoura Road; and a single-family residence at Agoura Road aligned adjacent to the eastern edge of the AVSP boundary. Additionally, future residential developments onsite would be subject to construction noise impacts from successive projects. These residences could experience temporary noise levels as high as 79-88 dBA during grading. Throughout the construction period, these residences would be exposed to periodic noise that exceeds ambient levels in the area. Though daytime construction activity is exempt from City Noise Ordinance restrictions, any noise-generating activity occurring during early morning and nighttime hours could violate the Ordinance.

The two primary concerns with respect to blasting are airblast and groundborne vibration. Noise and vibration associated with blasting is a complex function of the size and depth of the charge, hole size, degree of confinement, spatial distribution of charges, and other factors. Although all of these factors cannot be predicted, a general indication of the types of airblast and vibration effects that could occur with blasting is provided. Airblast occurs when energy released in an explosion creates an air overpressure in the form of a propagating wave. This is accompanied by a booming sound that may reach a peak overpressure of about 130 dB at a distance of 250 feet from the blast (Jones & Stokes Associates, 2001). This type of instantaneous sound would be mildly unpleasant to nearby receivers; however, the closest residence is located approximately 1,800 feet from the knoll that is most likely to require blasting. At attenuation rates of 6 dBA per doubling of distance, noise levels at the sensitive receptor would be 93 dBA.

The geologic study that was performed for the project concluded that there are other areas within the proposed AVSP boundary that are underlain by highly indurated soils and volcanic rock (refer to Section 4.4). However, it is not possible at this time to determine precisely where additional blasting may be required, or how far from sensitive receptors the blasting would take place.

Mitigation Measures. The following measure is recommended to ensure compliance with the City's Noise Ordinance.

N-1 **Construction Hours.** On-site construction activity, including blasting, or involving the use of equipment or machinery that generates noise levels in excess of the 55 dBA standard shall be limited to between the hours of 7 AM and 8 PM, Monday through Saturday pursuant to City Ordinance 9656 and City Municipal Code Section 9666.4. No construction activity shall occur

between 8 PM and 7AM that generates noise in excess of the 50 dBA standard. No construction activity shall take place on Sundays or legal holidays.

Significance After Mitigation. With the recommended measures, no violations of the City Noise Ordinance or other Municipal Code sections would be anticipated and impacts associated with construction noise would be considered less than significant.

Impact N-2 **Project-generated traffic would incrementally increase noise levels on roads in the project vicinity. The increase in noise due to project traffic exceeds the significance threshold for Agoura Road between Kanan Road and Cornell Road. Project traffic noise impacts are considered Class II, *significant and mitigable*.**

Table 4.9-5 compares pre- and post-project noise levels along roadways that would receive a relatively high proportion of project traffic and that could expose noise-sensitive residences to traffic noise.

Table 4.9-5 Comparison of Pre-Project and Post-Project Traffic Noise On Study Area Roadways

Roadway	Projected Noise Level[a] (dBA CNEL)			Change In Noise Level (dBA CNEL)	
	Existing (1)	Existing + Project (2)	2010 + Project (3)	Due to Project Traffic (2-1)	Due to Cumulative Traffic Growth (3-1)
U.S. 101 West of Kanan Road	77.7	77.8	78.7	0.1	1.0
U.S. 101 East of Kanan Road	77.8	77.9	78.7	0.1	0.8
Kanan Road North of Agoura Road	66.5	67.9	68.8	1.4	1.2
Kanan Road between Cornell Road and Agoura Road	69.0	69.71	70.6	0.6	1.0
Agoura Road West of Kanan Road to Reyes Adobe Road	67.6	68.3	69.5	0.8	1.4
Agoura Road between Kanan Road and Cornell Road	65.2	66.8	67.1	1.6*	0.5
Agoura Road East of Cornell Road	65.2	65.8	66.2	0.6	0.5
Cornell Road between Agoura Road and Kanan Road	59.2	60.6	60.6	1.5	0.0
Roadside Drive East of Kanan Road	66.0	66.9	66.9	0.9	0.0

Notes: [a]Estimate of noise generated by traffic from roadway centerline at the closest property boundary. Refer to Appendix E for the spread-sheets that generated these estimates. Noise levels presented do not account for attenuation provided by existing barriers or future barriers; therefore, actual noise levels at sensitive receptor locations influenced by study area roadways may in many cases be lower than presented herein.

**Delineates a significant impact.*

Of the nine roadway segments that were studied, all but one (Cornell Road between Agoura Road and Kanan Road) have existing noise levels in excess of 65 dBA (based on traffic volumes reported in the traffic study that was conducted for this project). For these segments, a project generated increase greater than or equal to 1.5 dBA (refer to Table 4.9-3 for thresholds)

indicates a significant impact. Because Cornell Road between Agoura Road and Kanan Road has existing noise levels of 59.2 due to traffic, the significance threshold for that roadway segment is an increase of 3 dBA or greater. The proposed project would incrementally increase noise levels along each of the studied roadways, and a significant increase could occur at Agoura Road between Kanan Road and Cornell Road.

The projections for project area ambient noise levels are based on level topography in relationship to the study area roadways. The northern edge of the project area is approximately level with the U.S. 101 Highway surface (elevation 860); however, the project area slopes gently upward from U.S. 101 towards the knoll near the southern edge of the project area on the eastern side of Agoura Road at elevation 920. Although currently not proposed, potential future developers may propose to grade or develop on or near the knoll, the composition of very hard volcanic rock which underlines the knoll would require that it be graded prior to construction. Thus, this analysis assumes a "worst-case" scenario in which developers may remove or develop around the knoll, resulting in finished grades of buildable areas ranging between 860-feet and 900-feet at the southern edges of the project area. Therefore, no barrier attenuation has been assumed because of the existence of this knoll, nor has any increase in noise level been assumed because of an elevated site that lacks typical ground attenuation.

A source of attenuation within the project area would come from structural barriers that exist, and that would be constructed during buildout of the project. Although there are no existing barriers between U.S. 101 and the first row of development that is located along the southern edge of Roadside Drive, existing structures here would provide attenuation to the south. Based on this scenario, noise levels south of Agoura road due to traffic on U.S. 101 would be substantially lower than are indicated in Table 4.9-5. Additionally, as buildout of the AVSP proceeds and structural density within the project area increases, attenuation would increase (refer to Table 4.9-6).

Table 4.9-6 Projected Noise Attenuation Due to Structural Density and Distance

Roadway Segment	Project Area Condition	CNEL at Closest Property Boundary	CNEL at Agoura Road Less Structural Density Reduction and 500-foot Distance Attenuation
		(dBA)	
U.S. 101 East of Kanan Road	Existing[1,2]	77.7	68.7
	Existing Plus Project[1,2]	77.8	68.8
	2010 Plus Project[2,3]	78.7	64.7
U.S. 101 West of Kanan Road	Existing[1,2]	77.8	68.8
	Existing Plus Project[1,2]	77.9	68.2-9
	2010 Plus Project[2,3]	78.7	64.7

Notes: N/A = not applicable
Assumptions: 1) 4.5 dBA reduction assumes 40% structural coverage adjacent U.S. 101 with density equivalent to 2 rows of structures; 2) distance attenuation includes a 4.3 dBA reduction for 500 foot distance; 3) 9.5 dBA reduction applied to 2010, assumes 70% structural coverage adjacent U.S. 101 with density equivalent to 4 rows of structures.

Existing development between Roadside Drive and Agoura Road is composed primarily of commercial and industrial uses including several small restaurants, a movie theater complex, a

self-storage operation, a gas station, a lumberyard, and several home improvement businesses. For the purposes of estimating attenuation due to existing structural density, it was assumed that there is 40% coverage with two rows of structures. Based on this assumption, a 4.5 dBA reduction can be applied to CNEL levels south of Agoura Road (see Table 4.9-6). The distance between Roadside Drive and Agoura Road ranges from approximately 500 to 875 feet. A conservative estimate of attenuation based on a 500-foot distance would result in 4.5 dB. Therefore, noise levels south of Agoura Road are estimated at 68.7 dBA (east of Kanan Road) and 68.8 dBA (west of Kanan Road).

For the purpose of this analysis, it is assumed that as the AVSP builds out, density within the area between Roadside Drive and Agoura Road will reach 70% with the equivalent of four rows of structures. This scenario would yield attenuation due to structural coverage of 9.5 dBA, resulting in a combined distance plus structural attenuation of 14 dBA. This would result in post project noise levels (due to traffic along U.S. 101) at the southern edge of Agoura Road of 64.7 dBA (see Table 4.9-6). Based on the inclusion of this information, project buildout within the AVSP would serve to lessen ambient noise levels within the project area, and actual noise levels within the project area would be less than those predicted based on traffic volumes of study area road segments (refer to Table 4.9-5).

Based on predicted traffic volumes to the study area roadway segments, it was determined that one segment would receive traffic increases that resulted in significant noise impacts (see Table 4.9-5, significant changes delineated with an asterisk). This segment of Agoura Road is between Kanan Road and Cornell Road (+1.6dBA, 2010 = 67.1. dBA). Within the ambient noise environment, some noise level increases would not be audible above noise generated from U.S.101, or would be at levels low enough that they would not be audible (1-2 dBA). However, as the project builds out, and structural density increases, ambient noise from US 101 is expected to decline to 64.7 dBA (see Table 4.9-6) and roadway noise generated along Agoura Road, Kanan Road, Cornell Road and Roadside Drive will become more perceptible to sensitive receptors adjacent the roadway. Within interior areas between major roadway segments however, it is anticipated that noise would be buffered by structures, similar to the structural attenuation that is anticipated to occur between US 101 and Agoura Road. The following mitigation measures are incorporated to reduce significant impacts to the maximum extent feasible.

Mitigation Measures. The following mitigation measures shall be incorporated to reduce noise generated within the AVSP on roadways.

N-2(a) **Rubberized Asphalt.** In potentially noise impacted areas within the Specific Plan, the City shall consider and, if feasible, use rubberized asphalt paving material for street re-paving projects. Studies have demonstrated that this type of paving materials can substantially reduce roadway noise. A 1992 noise study in the City of Thousand Oaks by Acoustical Analysis Associates, Inc. indicated that the use of an asphalt rubber overlay can achieve a noise reduction of from 2 to 5 dBA as compared to standard asphalt.

N-2(b) **Sound Wall.** If traffic-related noise problems from U.S. 101 arise within the Specific Plan area, the City shall investigate and, if feasible, implement appropriate measures to reduce noise impacts at affected receptor locations.

Such measures may include, but are not limited to, the use of a sound wall along the northern boundary of the Specific Plan area, between Roadside Drive and U.S. 101. It is estimated that a 10-foot high sound wall located adjacent to the southern edge of U.S. 101 would decrease noise levels at the property boundaries on the southern side of Roadside Drive from 78.8 dBA to 69.3 dBA (refer to Appendix E for Sound Barrier Loss Estimation Spread Sheet).

Significance After Mitigation. Project-specific impacts to roadway noise levels would be mitigated to a level of insignificance.

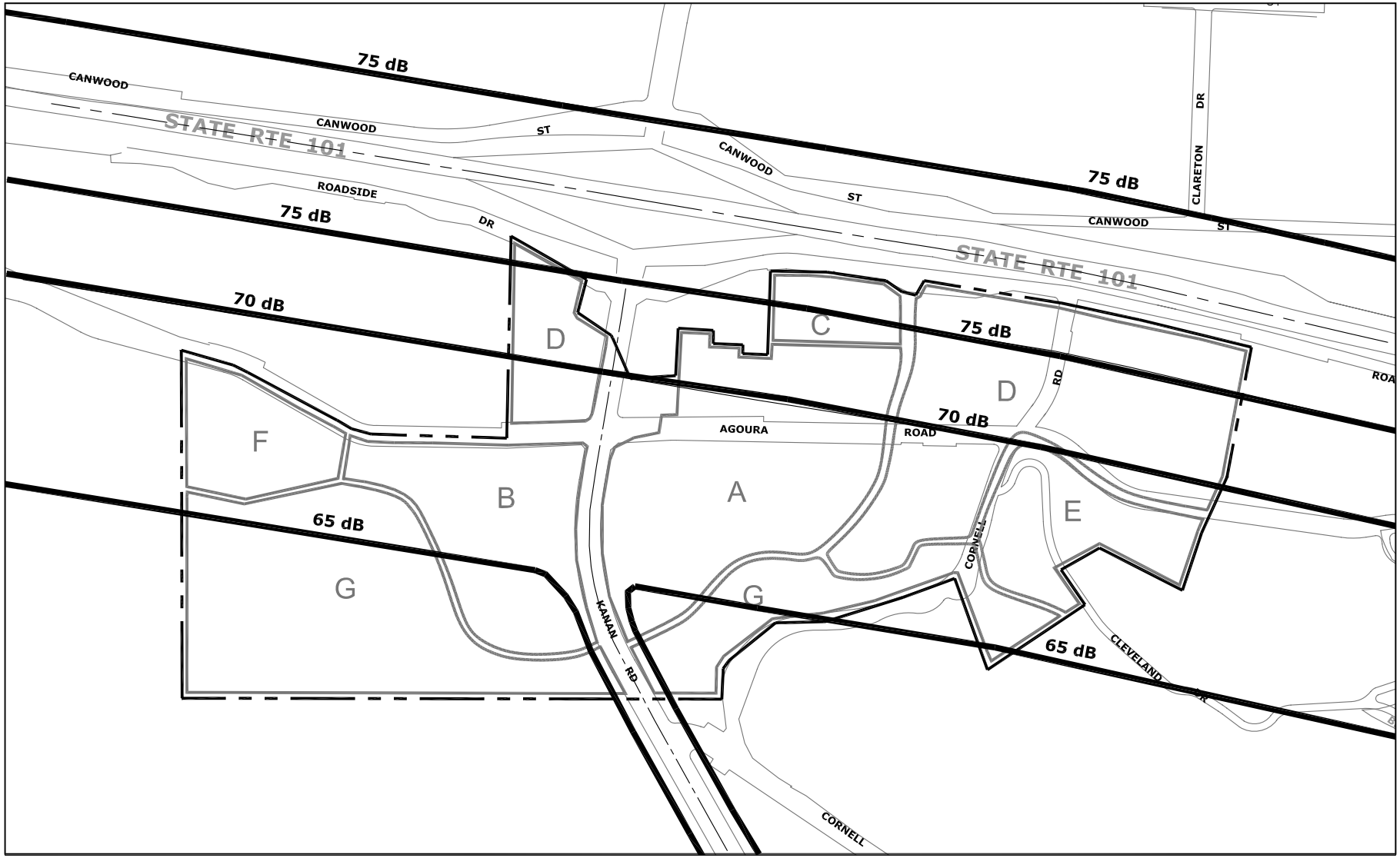
Impact N-3 Some of the new residences planned for the site would be in a noise environment that exceeds the normally acceptable range for interior and exterior noise. This is considered a Class II, *significant but mitigable*, impact.

The entire project area is exposed to noise from U.S. Highway 101. In addition, development within the AVSP boundary of commercial, office and restaurant uses would generate noise that would be audible to some portions of the noise-sensitive residential component of the project. Each of these noise sources and their potential impacts upon the proposed residential component are discussed below.

Noise From Highway 101. The area is exposed to noise from Highway 101. Noise levels opposite the project area on the northern side of U.S. 101 ranged from 49.5 to 68.0 at distances of 150 to 750 feet from the highway when measured in 2001. The City of Agoura Hills includes noise contour projections for the project area to 2010 (refer to Figure 4.9-2); however, these contours were adopted during December of 1992. Noise projections for this area based on existing traffic counts and current growth projections were estimated from average daily trip (ADT) volumes generated for this project during the traffic analysis. The resultant noise contours are presented in Figure 4.9-3, and the spreadsheets used to generate these estimates are included in Appendix E.

Figure 4.9-3 approximates the CNEL as it is projected to change in the AVSP area by 2010. Note that the results shown in Figures 4.9-2 and 4.9-3 are essentially the same. However, the majority of the AVSP area exceeds the normally acceptable range for residential uses (>60 dBA). Under the AVSP, residential uses would be permitted in zones A, B, D, E, and F. By 2020, traffic levels along the Highway 101 corridor are expected to rise by about 7.5% (0.5% per year). This would incrementally increase noise levels on-site, thus exacerbating this condition. Thus, exterior noise exposure levels for the office and residential uses would be considered potentially significant.

Interior noise exposure levels would be somewhat less as the exterior walls and windows would absorb and reflect a certain level of exterior noise. Typical Sound Transmission Class (STC) ratings for an exterior wood wall is in the 30 to 35 range (namely rated at 30-35 dBA transmission loss at 500 Hz), while single-paned glass is in the 25-28 STC range depending on framing (Harris, 1979). Given standard construction practices, a noise reduction of at least 20-25 dBA can be anticipated with the windows closed and 10-15 dBA with the windows open. The maximum noise levels according to the CNEL contours presented in Figure 4.9-3 would be 75 dBA, thereby necessitating a decrease of 30 dBA to achieve an interior noise level of 45 dB.



LEGEND

Project Boundary

Noise Contours

A Zone Areas

N

0 300 600 Feet

Aerial Source: City of Agoura Hills, 2002

Projected Agoura Village 2010 CNEL Noise Contours

Figure 4.9-3

Therefore, standard construction practices would not be anticipated to provide the necessary noise reduction and additional noise insulation features would be required to reduce interior noise levels to within the acceptable range.

Noise from other study area roadway segments. Significant increases in operational noise are projected to occur on one area roadway segment (Agoura Road between Kanan Road and Cornell Road); however, increases in structural density are expected to provide noise attenuation as the project area builds out. Therefore, noise generated adjacent to this roadway is not anticipated to significantly affect sensitive receptors in the project area.

On-Site Activity Noise. Operation of office, shopping and restaurant components of the project is expected to involve noise associated with rooftop ventilation and heating systems, delivery trucks, trash hauling, parking lot noise, and on-site circulation of motor vehicles. The mixed-use village concept that encourages adjacency of residences, entertainment, and office space will expose residences to operational noise from non-residential sources.

Mitigation Measures. The following measures are recommended to reduce the effects of on-site noise on adjacent residences.

N-3(a) **Acoustical Study.** A site-specific acoustical study shall be submitted to the City Planning and Community Development Department as part of the initial application for any residential project located within the project area that is exposed to freeway or arterial traffic noise. This study shall contain specific structural and site design recommendations to be incorporated into the project design to mitigate any noise levels that exceed the City's residential exterior standard of 65 CNEL and interior standard of 45 dBA.

N-3(b) **Operating Hours.** Loading dock and delivery truck (i.e. refrigerator trucks, trash and recycling pick-ups) and parking lot sweeping hours shall be restricted to daytime operating hours (7:00 AM to 7:00 PM). Delivery trucks entering and leaving the site shall not block driveways and shall be allowed to idle no more than 15 minutes in any half hour period.

N-3(c) **Loading Dock Location.** To the degree feasible, loading docks and delivery areas shall be located out of line of sight and/or oriented away from nearby residences.

N-3(d) **Ventilation Noise.** Parapets that reduce noise from rooftop ventilation systems shall be installed on all project structures.

N-3(e) **Parking Lot Noise.** Surface-texturing materials and landscaping shrubs and trees shall be used in the parking areas to reduce parking lot related noise.

N-3(f) **Mechanical Equipment.** All exterior mechanical equipment shall be oriented away from adjacent residential uses and shall be fitted with sound-rated parapets.

N-3(g) **Interior Noise.** At a minimum, all on-site structures shall include the following or equivalent to achieve an acceptable interior noise level of 45 CNEL:

- Air conditioning or a mechanical ventilation system so that windows and doors may remain closed
- Double-paned windows and sliding glass doors mounted in low air infiltration rate frames (0.5 cubic feet per minute, per ANSI specifications)
- Solid core exterior doors with perimeter weather stripping and threshold seals
- Roof and attic vents facing away from Highway 101

Incorporation of these design requirements would be expected to achieve an interior noise level reduction of 25 dB or greater.

Significance After Mitigation. With the recommended mitigation measures, noise impacts associated with on-site activity could be reduced to a less than significant level.

Impact VIB-1 **Potential blasting in areas underlain by Conejo Volcanics may cause vibrations at existing commercial and residential uses within the AVSP area. This is considered a Class II, *significant, but mitigable* impact.**

Blasting creates seismic waves that radiate along the surface of the earth and downward into the earth. These can be felt as ground vibration. At a distance of 250 feet, the peak particle velocity under average normal confinement is estimated at 1.4 inches per second (Jones & Stokes Associates, 2001). The Agoura Hills Municipal Code (Article IX, Chapter 3, Part 1, Section 9305.E) prohibits operations or activities in commercial districts that will cause vibration noticeable without instruments at the perimeter of the subject property. Although the Code does not specify a particular particle velocity that would be noticeable, the City of Glendale Municipal Code (Section 8.36.210) states that the presumed noticeable motion velocity is 0.01 inches per second over a range of 1 to 100 Hertz (Hz). Based on this standard, blasting onsite would create noticeable ground vibration at the perimeter of the project site and at nearby receiver locations. Vibration associated with blasting therefore represents a potentially significant impact.

Mitigation Measures. The following measure is included in the Geology section and will reduce blasting induced vibration impacts to a less than significant level:

GEO-4(a) **Test Blast/Vibration Study & Blasting Plan**. Blasting shall be discouraged. However, if a site-specific geologic, geotechnical, or structural design study deems blasting necessary for grading and excavation onsite, the applicant must perform a test blast/vibration study to evaluate the variation in vibratory ground motion intensity with respect to distance from the blast site. It must be shown that the blasting can be done safely with respect to existing improvements.

A blasting plan shall be provided as part of the vibration study, and submitted as part of the initial application submittal to the City Planning and Community Development Department, City Council and Fire Marshall for approval. Blasting permit approval would be subject to the City's discretion and may be denied. If the City were to approve the blasting plan, at a minimum it should be designed to minimize ground shaking away from the blast area. Any areas having unstable slopes or rockfall hazards shall be secured to prevent injury or property damage. If approved, the permittee shall provide sufficient supervisory control as determined by the building official during the grading operation to ensure compliance with approved plans and with the municipal code. When found necessary by the City Building Official, the permittee shall employ a qualified geologist and foundation engineer to assist in supervising the grading operation. If a blasting permit is denied by the City, the applicant shall prepare an alternative application for development which excludes the need for blasting.

Significance after Mitigation. With the recommended mitigation measures, noise impacts associated with on-site activity could be reduced to a less than significant level.

c. Cumulative Impacts. Planned and pending development in the Agoura Hills vicinity would cumulatively add a total of 772 residences and about 2.0 million square feet of non-residential development. Cumulative development in the City will continue to increase traffic and traffic-related noise along area roadways. Cumulative traffic increases may create significant impacts to noise-sensitive land uses adjacent to major roadways. The proposed project would incrementally contribute to such cumulative traffic noise increases in the area. Thus, the addition of such cumulative development would incrementally increase general ambient noise levels in the area. Therefore, the overall increase in noise due to project and cumulative traffic is considered potentially significant.

Although, such impacts can generally be mitigated on a case-by-case basis through the use of appropriate techniques, including building setbacks, appropriate building siting, sound barriers, and sound attenuating building techniques, existing ambient noise levels in the area currently exceed allowable standards. Therefore, the use of such techniques on all new development in the area would be expected to maintain an acceptable noise environment, impacts would still be considered potentially significant.

4.10 PUBLIC SERVICES AND UTILITIES

Las Virgenes Municipal Water District provides potable, recycled, and wastewater services to the Specific Plan area. Currently there is sufficient wastewater capacity and potable water supply to service the Specific Plan area. The City of Agoura Hills contracts fire and police protection services from the Los Angeles County Fire Department and Los Angeles County Sheriff's Department. Los Angeles County fire station # 65 is located approximately one mile south of the project area and Los Angeles County Sheriff's Lost Hills station is located approximately three miles east of the area. Buildout of the Specific Plan would not require expansion of these facilities; however, development of a roundabout proposed as part of the Specific Plan could inhibit access for safety personnel utilizing Kanan and Agoura Roads. Additionally, the Specific Plan would introduce new commercial uses and residential dwellings to a fire hazard area (Refer to Section 4.5 Hazards and Hazardous Materials).

The residential component of the Specific Plan would also introduce about 181 new students to the local school systems. This may exacerbate current over capacity conditions at several schools. Payment of in lieu fees for schools would mitigate the adverse effects associated with new development within the Specific Plan area. Generation of new residents within the area would also contribute to a deficiency in recreational facilities. Currently the City has a shortage in parklands per capita, according to its own standards. The Specific Plan would introduce new residents; however, the Plan preserves a larger area for recreational use and preservation than is required by the City.

Build out of new development within the Specific Plan area would generate an estimated 1,058 tons of additional solid waste annually, or about 2.87 tons per day. This waste would be reduced by 50% and would be disposed of at the Calabasas landfill.

4.10.1 Setting

Several previous studies, planning documents, and environmental documents have been prepared which address the public services and facilities within the Specific Plan boundaries and general vicinity. These include an EIR completed for the Creekside Center Project, the City's General Plan EIR, exhibits from the City of Agoura Hills Master Plan of Drainage, Los Angeles County Maintenance District sewer line maps, and Las Virgenes Municipal Water District sewer line maps. These reports and maps are all incorporated by reference and are available for review at Agoura Hills City Hall.

a. Wastewater. The major sewer trunk lines in the City of Agoura Hills are owned and operated by Las Virgenes Municipal Water District (LVMWD). Wastewater generated in the Agoura Hills area is transported to the Tapia Water Reclamation Facility for treatment. This facility is located 5 to 6 miles south of the Specific Plan area, and is adjacent to Malibu Creek at the point where the creek crosses Malibu Canyon Road. Existing intake capacity at the facility is 16 million gallons per day (mgd). However, future regulations may downgrade the facility to 12 mgd. Currently, the facility receives between 8 and 9 mgd of wastewater and has additional 7 to 8 mgd of capacity available (Talmadge, 2005). This available capacity may be reduced to between 3-4 mgd of unused capacity if future regulations restrict its capacity. The Tapia Water Reclamation Facility is a tertiary treatment plant. Reclaimed water from the plant is used for irrigation of landscaped areas.

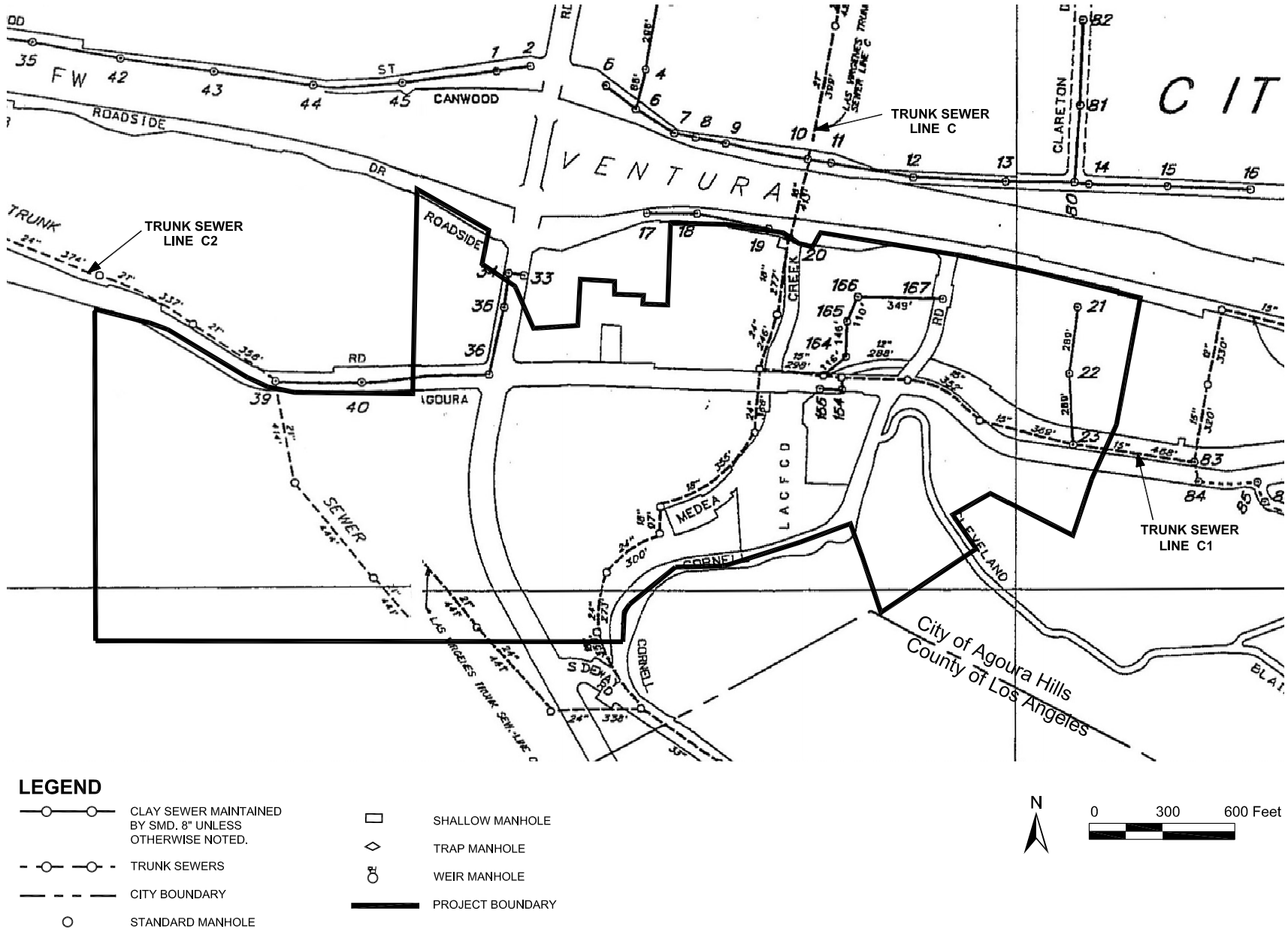
Three Las Virgenes Municipal Water District Trunk Sewer lines, C, C1, and C2 are located within the Specific Plan area. Trunk sewer line C is located parallel and west of Medea Creek. This facility is marked by elevated manholes that run alongside the creek. A second trunk sewer line, line C2, extends from the west beneath Agoura Road and branches off to a connector line at the western edge of the Specific Plan area (Refer to Figure 4.10-1). The connector line services the existing commercial uses located in the northwestern corner of the project area. The trunk sewer line extends south from its joint with the connector line, and parallels the western boundary of the Specific Plan area between Agoura Road and Kanan Road. A third line, C1, extends from the east between Agoura Road and Cheseboro Creek onto the project area, where it connects with line C immediately west of Medea Creek. Two smaller connector lines branch off of line C1 within the project area. These connector lines run beneath the existing development between Medea Creek and Cornell Road, on both the north and south sides of Agoura Road. Potential future development within the Specific Plan area would potentially tie into these facilities.

b. Water Supply. The LVMWD supplies potable water in the City of Agoura Hills. The LVMWD has no local sources of water and obtains all of its potable water supply from the Metropolitan Water District of Southern California (MWD), which in turn receives water from the State Water Project. The LVMWD does not have a set water allocation from the MWD. Instead, the amount of water allotted to the LVMWD from the MWD is based on long-term (usually 3 to 5 year) demand projections from the LVMWD. These projections are based on buildout projections in the LVMWD's Water Master Plan, which in turn are based on cumulative buildout of the jurisdictions served by the LVMWD. The LVMWD's potable water system currently operates with no significant deficiencies (Tallmadge, 2005).

c. Fire Protection/Emergency Medical Services. The Los Angeles County Fire Department (LACFD) Station #65 would provide fire protection and emergency medical services for the project area. This station is located at 4206 Cornell Road, less than one mile south of the Specific Plan area. The station is staffed with 8 people per day, with 2 fire engines and 1 paramedic squad stationed at the facility. The average response time to the project area is expected to be approximately 1.5 minutes (Fina, 2005). A second station, #89, is currently being developed north of the project area. Station #89 will be located north of U.S. 101, west of Kanan Road, on Canwood Street. Upon completion of Station #89, up to 5 staff, 1 squad, and 1 engine will be transferred from station #65 to the new station. This station is expected to be completed by the end of 2005 and would cover the area north of U.S. 101; however, it could serve as a second engine for the Specific Plan area if necessary.

The County of Los Angeles previously has classified the Specific Plan area and its general vicinity as a very high fire severity zone (Zone 4). This designation indicates the highest danger for wildfires, and additional clearance and building requirements for new developments.

d. Police Protection. The City of Agoura Hills contracts for law enforcement service with the Los Angeles County Sheriff's Department (LACSD). The LACSD Lost Hills Substation provides police protection service for the immediate project area as well as the greater Agoura Hills area. The station is located at 27050 Agoura Road, approximately 3 miles east of the Specific Plan area. Estimated response times for this station are approximately 6 minutes for emergency calls and about 20 minutes for routine calls. Police patrol staffing currently ranges from a single two-



Existing Sewer Lines/Facilities

Figure 4.10-1

man car in the early morning hours to three one-man cars patrolling during the day. The resources available to the station at the present time are sufficient to service all calls that are received. In addition, the station participates in a reciprocal agreement with stations in the nearby communities of Westlake and Calabasas, which enables these stations to be called upon for assistance, if necessary.

e. Schools. The Las Virgenes Unified School District (LVUSD) provides educational services within the Specific Plan area. There are 15 schools, including one pre-school, within the District. Of these, three schools are located within the attendance area of the Specific Plan area: Agoura High School, A. E. Wright Middle School, and Sumac Elementary School. Table 4.10-1 shows the enrollment and capacity of these schools as of April 2005.

Table 4.10-1 Enrollments and Capacities of Schools Serving the Site Vicinity

School	Enrollment*	Capacity	Percent of Capacity
Agoura High School	2,159	1,900	114%
A.E. Wright Middle School	910	1,620	56%
Sumac Elementary	593	698	85%

Source: Las Virgenes Unified School District, April 2005
**Enrollment figures as of March 2005.*

Currently, three schools within the LVUSD are operating over-capacity: Agoura High School, Calabasas High School, and Lupin Hill Elementary School. One of those schools, Agoura High School, is within the Agoura Village Specific Plan attendance area.

Like many school districts throughout the State of California, the LVUSD has difficulty meeting present educational demands because sufficient sources of revenue are not available to fund important educational programs. Operating revenue provided to school districts is funded by local property tax revenue accrued at the state level and then allocated to each school district based on the average daily student attendance. Because state funding for capital improvements has lagged behind enrollment, physical improvements to accommodate new students come primarily from assessed fees on development projects. In 1990, school facilities legislation (California Government Code § 65995) was enacted to generate revenue for school districts for capital acquisitions and improvements. This legislation allows a maximum one-time fee of $1.93 per square foot of residential floor area and $0.31 per square foot of commercial and industrial space for development projects. This fee is divided between the primary and secondary schools and is termed a "Level One Fee." The most recent adjustment to Level One fees occurred in January 2004, which brought the rates to $2.24 per square foot of residential development and $0.36 per square foot of commercial/industrial development (California Department of General Services, January 2004).

In the past, statutory limitations regarding the payment of development fees to school districts were placed on projects that did not require quasi-legislative approvals, such as zoning amendments, rezoning, plan amendments, specific plans, and development agreements, as decided in the Mira, Hart, and Murietta State Supreme Court cases. In cases where projects

required quasi-legislative approvals, the Courts allowed local agencies to collect additional fees as mitigation measures under CEQA. However, the November 1998 passage of Proposition 1A, and the funding made available through its passage, requires the implementation of Senate Bill 50 (SB 50), and eliminates the additional funding allowed per the Mira, Hart, and Murietta cases. Instead, SB 50 provides for Level Two and Level Three fees in residential development; these fees are allowed to be in excess of the previous limitation of $2.24 per square foot. Level Two fees require the developer to provide one-half of the costs of housing students in new schools, while the state would provide the other half. Level Three fees would require the developer to pay the full cost of housing the students in new schools and would be implemented at the time the funds available from Proposition 1A are expended. School districts must demonstrate to the state their long-term facilities needs and costs based on long-term population growth in order to qualify for this source of funding. Once qualified, the districts may impose fees as calculated per SB 50. The LVUSD has been determined eligible for Proposition 1A funding under the provisions of SB 50.

f. Solid Waste. Private contractors provide collection and hauling of solid waste services to commercial customers in Agoura Hills. Waste is transported mainly to the Calabasas Landfill for disposal. The landfill is owned and operated by the Los Angeles County Sanitation District. The Calabasas landfill is permitted to receive 3,500 tons of solid waste per day. The current wastestream at the landfill is about 1,900 tons per day. The life of the landfill is estimated to be approximately 15-20 years if the amount of solid waste brought in per day remains consistent with current levels (Wippert, 2005).

d. Recreation. The City of Agoura Hills provides recreational opportunities through the Agoura Hills/Calabasas Community Center, the Agoura Hills Recreation Center, and six local parks (Refer to Figure 4.10-2). The Agoura Hills/Calabasas Community Center is a state-of-the-art recreational facility that offers a variety of recreational, social, cultural, and educational programs and activities for community members of Agoura Hills and Calabasas. The facility is 30,000 square feet and includes tournament level basketball courts, a full service fitness studio, a 35-foot realistic rock climbing wall, a multi-purpose room with patio, a dance/exercise studio, and a large banquet hall for special events and rentals (Agoura Hills/Calabasas Community Center, 2005). The Agoura Hills Recreation Center is an 1,800 sq. ft. multi-purpose facility, which can hold up to 120 people. The Center is equipped with a kitchenette, handicapped accessible restroom facilities, a foyer and shaded patio area. The Center hosts a wide variety of activities throughout the year for youth, teens, adults, and seniors, and can be rented for private functions (City of Agoura Hills Website, 2005).

Chumash Park is located at 5550 Medea Valley Drive and provide a ballfield, children's play area, picnic area, and restroom facilities. Forest Cove Park is located 5451 Forest Cove Lane and provide a ballfield, children's play area, outdoor basketball, picnic shelter, and restroom facilities. Morrison Park is located at the juncture of Thousand Oaks Blvd. and Forest Cove Lane and provides children's play area, picnic shelter, and portable restroom facilities. Old Agoura Park is known for its equestrian trail, warm-up arena, and western style equestrian arena, as well as a baseball field and children's play area facilities. Old Agoura Park is located in east Agoura Hills, at 5301 Cheseboro Road. Reyes Adobe Park is located at 31400 Rainbow Crest Drive and provides barbecue, children's play area, picnic, and restroom facilities. In addition, the Reyes Adobe Park is noted for its historical context and the preservation of the

Reyes Adobe Historical Site, a significant cultural landmark adobe home located in the foothills beneath Ladyface Mountain. Additionally, Sumac Park is located at 6000 Calmfield Avenue and provides barbecue, children's play area, picnic, and restroom facilities.

The City of Agoura Hill's public parks total about 40 acres. Chumash Park is the largest at 12 acres. Forest Cove is the second largest park at about 10 acres. Old Agoura Park is approximately six acres, and the remaining parks are each 4 acres or less. Table 4.10-2 shows the acreages of the individual parks within the City.

In addition to the City-owned parks, local schools serve as joint recreational facilities. LVUSD includes five school sites that are available for recreational use after school hours and on weekends (City of Agoura Hills General Plan Update, 1993). Each offers the use of open playfields, and Agoura High School has specialized facilities, including a pool, tennis courts, and a gymnasium. Most of the schools in the City have outdoor basketball courts and playing fields.

Table 4.10-2 Recreational Facilities in the City of Agoura Hills

Parks	Acres
Chumash Park	12
Forest CovePark	10
Morrison Park	4
Old Agoura Park	6
Reyes Adobe Park	4
Sumac	4
Total	**40**

Other recreational facilities located within close proximity to the City include public parkland in the Santa Monica Mountains National Recreation Area; National Park Service-owned Paramount Ranch, Peter Strauss Ranch, Cheseboro Canyon; and state-owned Malibu Creek State Park; parks within the Conejo Valley Recreation and Park District; and parks within the Oak Park area including Chapparal, China Flat Trail head, Eagle View, Mae Boyer, Oak Canyon Community, and Valley View Neighborhood Park.

Extensive bike routes and trail systems link open space and recreational resources in surrounding communities, including Thousand Oaks and Oak Park. Agoura Hills connects into the Westlake Village and Oak Park bike lane/trail network, further linking the City with a wider regional open space and trail network. Additionally, the City currently provides an equestrian trail leading from Old Agoura Park to the intersection of Agoura Road and Cornell Road. This equestrian trail is utilized as an access point to the Santa Monica Mountains. The City's General Plan outlines policies to further connect recreation and open space resources with local and regional trail routes.

The City of Agoura Hills has adopted standards which define acceptable ratios of park space per capita based on a 1988 Park Master Plan prepared by Recreation Systems, Inc. The City's Park Master Plan recommends a standard of eight acres of park and open space land per 1,000

City residents. Of this, three acres per 1,000 persons includes local park and recreation space, and the remaining 5 acres per 1,000 is designated as open space.

Using a ratio of 3 acres of parkland per 1,000 capita, the City of Agoura Hills should provide about 65 acres of developed parks for its population of approximately 21,800 (U.S. Census Bureau, 2000). As shown in Table 4.10-2, the City currently provides approximately 40 acres, or about two acres of parks per 1,000 residents. This is a shortfall of 25 acres. The effect of this shortfall is lessened somewhat by the fact that there are several regional parks adjacent to Agoura Hills that are available for resident use, and many school sites provide joint-use recreational opportunities and open space. Additionally, despite an overall acreage shortfall, almost all of Agoura Hills' residential neighborhoods are well served by park land. Also, the presence of the Santa Monica Mountains National Recreation Area just south and east of the City provides year-round park resource-based recreation and education opportunities. Nonetheless, there is a current deficiency in parkland in the City of Agoura Hills.

The City requires that all private developers proposing residential projects within the City either dedicate land for park facilities or pay a fee in lieu of providing parkland. The current land dedication fee requirement equals the required acreage of local park space multiplied by the fair market value of the land, as determined by the last tax bill. These fees are collected by the City in association with the development application approval process and shall be used only for the purpose of developing new, or rehabilitating existing, recreational facilities to serve the development for which the fees were paid.

4.10.2 Impact Analysis

a. Methodology and Significance Thresholds.

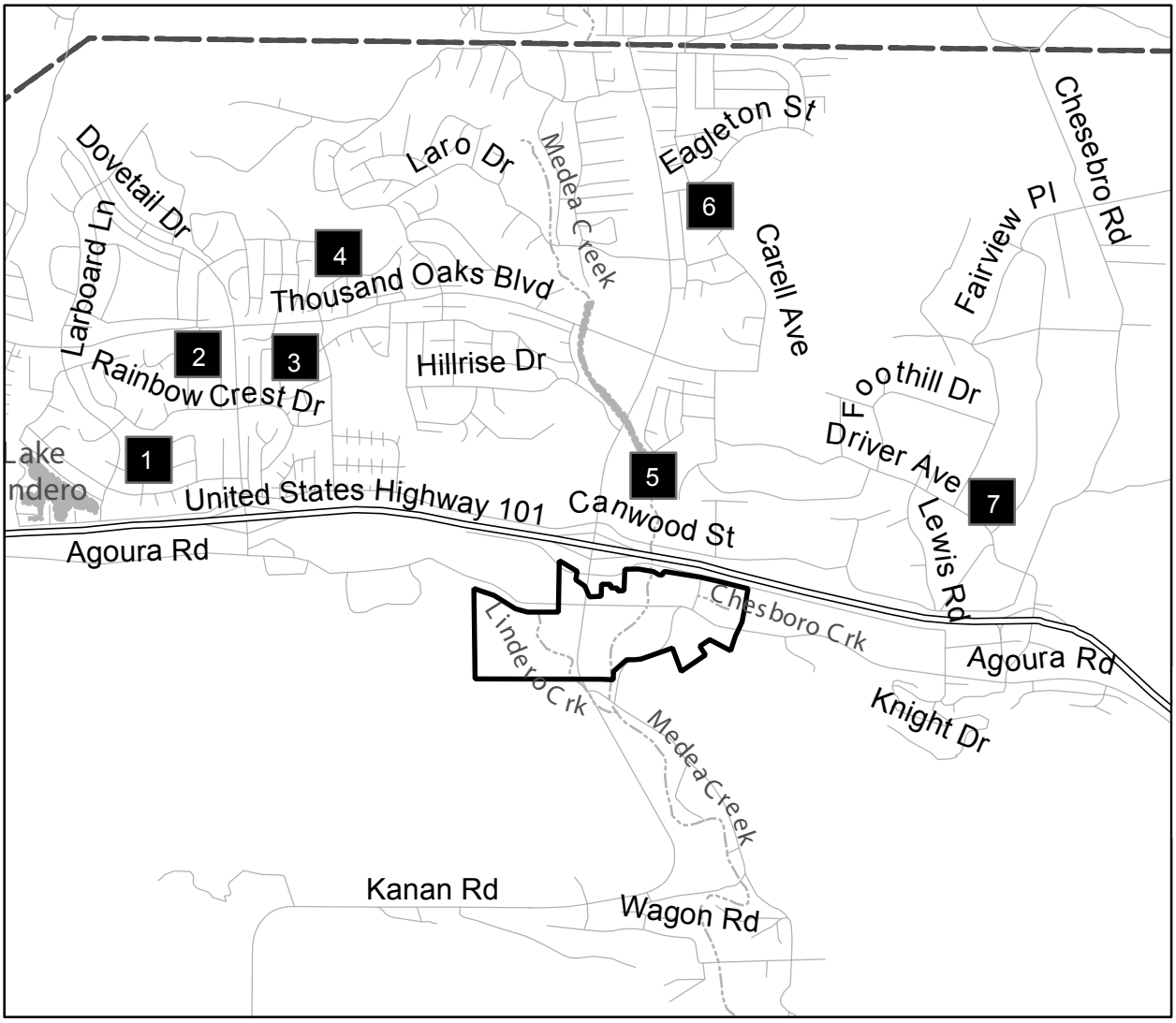
Wastewater. The increase in wastewater flow associated with future build out within the Specific Plan area was estimated from generation factors provided by the LVMWD (2005) and the City of Agoura Hills General Plan (1992). Impacts to wastewater infrastructure are considered significant if the proposed buildout would result in sewer line or treatment plant system deficiencies.

Water Supply. The increase in water demand expected to occur with implementation of the proposed Specific Plan has been estimated using water demand rates provided by the LVMWD (2005). Impacts to water supplies are considered significant if Specific Plan-generated demand exceeds capacity of existing or future supplies, facilities, or service lines.

Fire Protection Services. Information on current response times and service demands was collected through the Los Angeles County Fire Department and provided by personnel at

the Los Angeles County Fire Department Station #65. The future development within the Specific Plan area would have a significant impact on police protection services in the City of Agoura Hills if it results in:

- A potential for inadequate fire department staffing;



Source: California Department of Forestry and Fire Protection and USFS, 2003, and U.S. Bureau of the Census TIGER 2000 data.

Project Location

N

0 0.25 0.5 Miles

Park Location Key:

1 Reyes Adobe Park
2 Agoura Hills Recreation Center
3 Forest Cove Park
4 Morrison Peak
5 Chumash Park
6 Sumac Park
7 Agoura Park and Equestrian Center

Recreational Facilities

Figure 4.10-2

- Special fire department protection problems associated with the project area or general vicinity; or
- Substantial interference with an evacuation/access route.

If the future development results in additional demand that could not be met without a substantial increase in personnel, equipment, or infrastructure, impacts are considered significant.

Police Protection. Information on current response times and service demands was collected through the Los Angeles County Sheriff's Department and provided by personnel at the Lost Hills Substation. The future development within the Specific Plan area would have a significant impact on police protection services in the City of Agoura Hills, if it results in:

- A potential for inadequate police staffing;
- Special police protection problems associated with the project area or general vicinity; or
- Substantial interference with an evacuation/access route.

If the future development results in additional demand that could not be met without a substantial increase in personnel, equipment, or infrastructure, impacts are considered significant.

Schools. Current (2005) enrollment and capacity information was gathered from the LVUSD. Capacity and enrollment of the district was evaluated to determine if buildout of the Specific Plan area would result in an increase in enrollment, thereby exacerbating current over-capacity conditions. Any increase in enrollment not accompanied by a corresponding increase in capacity, or funding for needed capacity increases, is considered a potentially significant impact.

Solid Waste. Solid waste generation was estimated using factors from the California Integrated Waste Management Board's Estimated Solid Waste Generation Rates for Residential and Commercial Developments (2004). Solid waste collection service and landfill capacity already exists in the project area; therefore, for the purpose of this EIR, future build out within the Specific Plan area would cause a significant impact if it does not implement measures to reduce the amount of solid waste entering landfills in accordance with State standards and/or if solid waste generated by future development exceeds the capacity of landfills where such waste would be disposed.

Recreation. Impacts are considered potentially significant if build out of the Specific Plan would result in a deficiency of recreational facilities or the need for new or physically altered recreational facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios.

b. Project Impacts and Mitigation Measures.

Impact PS-1 **Build out of the proposed Specific Plan would generate an estimated 144,031 gallons per day (gpd) of wastewater. The Tapia Water Reclamation Facility has sufficient capacity to accommodate this level of new development; therefore, this impact is considered Class III, *less than significant*.**

Table 4.10-3 illustrates the anticipated increases in wastewater generation associated with the potential future development within the Specific Plan area, by land use. Residential development that would be allowed under the Specific Plan would generate an estimated 86,435 gpd of wastewater and commercial/retail development would generate an estimated 57,596 gpd. The wastewater generated from build out under the Specific Plan site represents about 2.4% of the currently unused 6 million gallons per day (6.0 mgd) of excess capacity at the Tapia Water Reclamation Facility. Therefore, the Tapia Water Reclamation Facility is anticipated to have adequate capacity (even after the possible reductions to capacity at the plant) to serve future development that would be allowed under the Specific Plan.

Wastewater would be conveyed via new connections to Los Angeles County collector lines, which would in turn connect with the existing trunk sewer located in the project area. Individual project applicants would be responsible for the installation of new collector lines, which after completion, would be dedicated to Los Angeles County. The trunk sewer lines onsite are anticipated be able to accommodate the increase in wastewater generated by new development within the Specific Plan area and are not anticipated to require an expansion of wastewater conveyance facilities (Talmadge, 2005). Build out under the Specific Plan would not result in sewer line or treatment plant system deficiencies, and is therefore considered less than significant.

Table 4.10-3 Estimated Waste Water Generation for Future Land Uses within the Specific Plan Area

Land Use	Proposed Development	Waste Water Generation Rate	Waste Water Flow (gallons per day)
Residential	293 dwelling units (DU)	295 gal/DU/day*	86,435
Commercial / Retail	575,958 sq. ft.	100 gal/1,000 sf/day**	57,596
TOTAL			**144,031**

** Las Virgenes Municipal Water District, 2005.*
*** Agoura Hills General Plan Update EIR, 1992.*

Mitigation Measures. None required.

Significance After Mitigation. Build out of the Specific Plan would have a less than significant impact with respect to waste water demand.

Impact PS-2 **Build out of the Specific Plan would generate demand for an estimated 165,994 gallons of water per day (gpd). The LVMWD would be able to supply the projected volume of water. With implementation of mandated water conservation methods**

throughout the project area, impacts would be considered Class III, *less than significant*.

Full buildout of the Specific Plan would add up to 293 residential dwellings and up to 575,958 square feet of commercial and retail development to the existing 372,042 square feet of commercial and retail uses that already exist in the project area. The potable water supply for the proposed development would be delivered by the LVMWD water system, which currently services existing development within the Specific Plan area. The net increase in water demand, which is the demand for all land uses within the Specific Plan area, minus the existing water use in the project area, is estimated at 165,994 gpd. Table 4.10-4 outlines the increase in demand generated by the proposed commercial/retail and residential development components of the Specific Plan.

Additionally, the Specific Plan includes an option for a 70,000 sq. ft. hotel in Zone B, the area south and east of the intersection of Kanan and Agoura Road, in place of 50 stand alone residential units. The calculations in Table 4.10-4 assume build out of the option with the more water intensive land use, 50 residential dwellings (26,600 gpd) rather than the hotel (1,400 gpd). The existing water supply is anticipated to adequately service the existing and proposed additional water demand for the Specific Plan area. LVMWD does not anticipate any deficiencies in service or flow due to build out of the proposed Specific Plan (Talmadge, 2005).

Table 4.10-4 Estimated Water Demand Generated by Land Uses Within the Specific Plan Area

Water Demand Factors Land Use Description	Land Use Abbreviation	Proposed Development Acres / # DU	Water Demand Factor (Future) (gpd/acre) & (gpd/capita[2])	Gallons per Day
Shopping Center Commercial/Retail Service	CS/RM	11.63	870	10,118
Residential	RM	293[1]	190	155,876
Total				**165,994**

[1] Calculations assume option with highest water demand, build out of 50 stand alone residential units rather than 70,000 sq. ft. hotel for zone B
[2]Assumes 2.80 residents per dwelling and medium and single family density residential water demand factor land use category

Source: Potable Water System Master Plan for Las Virgenes Municipal Water District, December 1999

Although there is adequate water supply for Specific Plan build out, individual projects would still be required to comply with all water system and conservation requirements of the LVMWD and the California Plumbing Code, as adopted by the City of Agoura Hills. Future land uses within the Specific Plan area would be required to utilize interior water conserving fixtures, including low flow faucets and ultra low flow toilets, consistent with the Las Virgenes Municipal Water District standards. Additionally, new development within the Specific Plan area would be required to comply with The Water Conservation in Landscaping Ordinance (AB 325), which requires the most efficient use of water in the landscape, including the use of recycled water for landscaping and planting with drought tolerant vegetation (Government

Code Section 65591-65600). The LVMWD encourages extensions of the reclaimed water system to provide landscape irrigation as part of its potable water conservation efforts.

Development on undeveloped parcels may require the extension of waterlines and hydrants. The precise water system requirements will be determined by engineering design studies prepared at the project level. Any proposed water distribution system improvements would be subject to approval by the City of Agoura Hills and the LVMWD. Applicants at the project level must also demonstrate that adequate fireflows can be maintained throughout the project area as required by the Los Angeles County Fire Department.

Mitigation Measures. None required.

Significance After Mitigation. Build out of the Specific Plan would have a less than significant impact with respect to water demand.

Impact PS-3 Build out of new development within the Specific Plan area would incrementally increase demands on the LACFD, but is not anticipated to require new Fire Department personnel or equipment. However, because the project area is in a high severity wildfire zone and would potentially interfere with an emergency access route, impacts to fire protection are considered Class II, *significant but mitigable*.

The proposed commercial and residential development would increase the demand for local fire protection services, but is not expected to require the addition of personnel, equipment, or stations. New build out under the Specific Plan would be required to comply with Fire Code and LACFD standards, including specific construction specifications, access design, location of fire hydrants, and other design requirements.

However, the project area is situated in Fire Zone 4, a high severity wildland fire hazard zone. Lots and structures that are adjacent to open space would be exposed to a potentially significant fire hazard. Graded and re-landscaped areas would be less of a fire hazard depending on the plants used for landscaping graded slopes and the maintenance of these landscapes. County Code can require brush to be cleared down to mineral soil and to different heights for grass and brush up to a maximum of 200 feet from structures. The risk and brush clearance requirements for individual developments would be determined on an individual basis by the Los Angeles County Fire Department and would be developed as part of a Fuel Modification Plan that would be required for each project.

Additionally, the proposed roundabout at the intersection of Kanan and Agoura Road has the potential to restrict access to fire safety personnel and emergency vehicles. During peak hours, traffic currently backs up from this intersection in several directions. Fire safety personnel are able to maneuver around standing traffic, utilizing emergency access lanes and the road shoulder to reach the intersection. Upon reaching the signalized intersection, emergency vehicles may stop traffic and proceed through the center of the intersection. As roundabouts are generally constructed around a stationary structure (e.g. fountain, art work, etc…) the roundabout proposed as part of the Specific Plan would inhibit emergency access through the

center of the intersection and would potentially thwart access to emergency vehicles. As a result, impacts to fire safety are considered potentially significant.

Mitigation Measures. The following measures are required to mitigate possible hazards relating to fire safety, in addition to the City's required Fire Protection Development Fee as outlined in the City's Municipal Code (Ch. 6. Section 8600).

PS-3(a) **Fuel Modification Plan (FMP).** Individual project applicants shall develop a Fuel Modification Plan for all development areas within or adjacent to wildland fire hazard areas. These plans shall be subject to review and approval by the Los Angeles County Fire Department Fuel Modification Unit. The FMP shall be submitted to the City Planning and Community Development Department for approval prior to issuance of a grading or building permit.

Funding and execution of all measures required in the FMP shall be the responsibility of individual developers or land owners. Prior to approval of the FMP the City shall confirm that appropriate easements have been secured and that long-term funding mechanisms area in place to ensure successful implementation of the FMP.

PS-3(b) **Landscape Palette.** The landscape palette for the project shall prohibit the use of highly flammable species near areas of open space.

PS-3(c) **Roundabout Engineering.** Further detailed engineering design shall be performed for the proposed roundabout at the intersection of Agoura Road and Kanan Road. The study shall incorporate the applicable geometric features required to accommodate the forecast vehicular, bicycle and pedestrian movements, and safety personnel/emergency access. The study should determine the sufficient capacity and safety at the roundabout for both pedestrians and motorists.

PS-3(d) **Emergency Access.** The proposed roundabout at the intersection of Kanan and Agoura Road has the potential to restrict access to safety personnel and emergency vehicles. Public education should include information on driver behavior in the event of an emergency vehicle, which is similar to the driver behavior required at conventional intersections. All approaches to the roundabout shall contain two lanes. Vehicles in queue in front of an emergency vehicle would either move to another lane or move through the roundabout to facilitate passage of the emergency vehicle. The design of the roundabout shall include a mountable apron on the island and mountable splitter islands. In the event of blockage of the circulatory roadway, these elements would provide for sufficient width within the roundabout for passage of emergency vehicles.

Significance After Mitigation. Impacts to fire protection service would be less than significant with the above mitigation.

Impact PS-4 Build out of the proposed Specific Plan would incrementally increase demand upon the Los Angeles County Sheriff's Department Lost Hills Substation and would potentially interfere with an emergency access route. This is considered a Class II, *significant but mitigable,* impact.

Build out of the proposed Specific Plan would increase the number of people utilizing the project area by adding 293 residences and 575,958 square feet of commercial and retail development to the existing 372,042 square feet within the project boundaries. The presence of development in the area would be expected to incrementally increase the number of calls to the local Sheriff's Substation. The increase in the number of calls to the site would likely be due to traffic accidents or for such offenses as theft. The need to respond to these calls and the subsequent administrative costs required would create demand for additional personnel time to serve the site and could lead to increased response times to the area and throughout the City. Therefore, this is considered a significant but mitigable impact.

Additionally, the proposed roundabout at the intersection of Kanan and Agoura Road has the potential to inhibit access to Sheriff's Department personnel and emergency vehicles. During peak hours, traffic currently backs up from this intersection in several directions. Public safety personnel are able to maneuver around standing traffic, utilizing emergency access lanes and the road shoulder to reach the intersection. Upon reaching the signalized intersection, emergency vehicles may stop traffic and proceed through the center of the intersection. As roundabouts are generally constructed around a stationary structure (e.g. fountain, art work, etc…) the roundabout proposed as part of the Specific Plan would prevent emergency access through the center of the intersection and would potentially thwart access to emergency vehicles. Similar to that discussed for fire protection services, project impacts to emergency law enforcement services are considered potentially significant.

Mitigation Measures. Build out of the proposed Specific Plan would have the potential to adversely affect response times and the need for additional staffing at the LACSD Lost Hills Substation. Therefore, the following mitigation measure is recommended:

PS-4(a) **Design Approval.** Project plans shall be submitted to the Los Angeles County Sheriff's Department Lost Hills Substation for review and comment. All recommendations made by the Department, including, but not limited to, those pertaining to site access, site security, lighting, and requirements for onsite security, shall be incorporated into the design of the project, prior to approval of final building permits.

PS-4(b) **Roundabout Engineering.** Refer to Mitigation Measure PS-3(c). This measure shall also be subject to review and approval by the Los Angeles County Sheriff's Department.

Significance After Mitigation. The above mitigation measures would reduce any impacts to police protection services caused by future build out of the Specific Plan area to less than significant.

Impact PS-5 Build out of the proposed Specific Plan would be expected to generate about 181 students at the Las Virgenes Unified School District. This would contribute to the current over-capacity condition at local schools. This is considered a Class II, *significant but mitigable* impact.

As indicated in Table 4.10-5, the 293 residences associated with new residential development within the proposed Specific Plan area would directly generate up to 181 new students within the LVUSD. In addition, the introduction of additional residential uses south of US 101, as proposed in the Specific Plan, would increase demand in this area.

Table 4.10-5 Generation Factors and Student Generation

	Residential over Retail[1]		Senior Apartments[2]	Total Student Generation[3]
Grade Levels	Generation Rates by Home Type	Students generated from [1] (262 du)	Students generated from (31 du)	
Pre	0.15	39	0	39
K-5	0.31	81	0	81
6 - 8	0.19	50	0	50
9 - 12	0.04	10	0	10
Totals	0.69	181	0	181

[1]Rates based on average student per townhome
[2]Assumes no student generation from senior apartments
[3]Based on average student per household as surveyed in Las Virgenes School District
Source: Las Virgenes Unified School District (April 2005)

Table 4.10-6 shows how additional students would exacerbate existing overcrowding conditions at Agoura High School and would result in near capacity conditions at the Sumac Elementary School.

Table 4.10-6 Post Project Enrollments and Capacities of Schools Serving the Site Vicinity

School	Current Enrollment*	Capacity	Percent Capacity	Project-Generated Students	Post-Project Total Student Enrollment	Existing Capacity Available for Additional Students	Post Project Percent Capacity
Agoura High School	2,159	1,900	114%	10	2,169	-259	114%
A.E. Wright Middle School	910	1,620	56%	50	960	710	59%
Sumac Elementary	593	698	85%	81	674	105	97%

**Enrollment figures as of March 2005.*

Source: Las Virgenes Unified School District, April 2005

New students generated as part of Specific Plan build out would generate new demands for student transportation, and may contribute to overcrowded student transportation conditions. School bus usage data was not available at the time of this analysis; however, given the current overcrowding and near capacity conditions at Agoura High School and Sumac Elementary School, it can be presumed that there may be near capacity conditions on associated busing routes. While the project build out would introduce new residential uses in the area, existing school bus routes currently pass through the Specific Plan area and there are service bus stops less than one mile away. One bus stop is located approximately 0.75 miles to the east and accommodates A.E. Wright Middle School and Sumac Elementary School students. A second stop, approximately one mile south of the project area, services students attending Agoura High School and Sumac Elementary School. Therefore, the generation of additional students is considered a potentially significant impact to local student transportation services.

Mitigation Measures. Due to provisions of State law, the City is strictly limited in the mitigation measures it may impose against developers of residential projects to address school overcrowding issues. The presumption of State law is that the developer's payment of school impact fees to the local school district, in an amount established by the school district, would address school capacity impacts. The following mitigation measures are intended to reduce the adverse effects of the Specific Plan build out to less than significant.

PS-5(a) **In Lieu Fees.** Individual project applicants shall pay the statutory school fees in effect at the time of issuance of building permits to the appropriate school districts. If permissible, at the time the application is processed, these fees shall include additional District costs associated with impacts to student transportation or other measures to alleviate student transportation overcrowding (e.g. pro-rata contribution to new school transportation systems, student carpooling bulletin boards, etc.)

PS-5(b) **School District Noticing.** The applicant shall notify the Las Virgenes Unified School District of the expected buildout date of the project as soon as possible to allow the District to plan in advance for new students.

Significance After Mitigation. Increased student enrollment associated with full build out of the Specific Plan could exacerbate existing capacity exceedances at local public schools and busing routes. However, implementation of the above measures would be considered full mitigation for the proposed Specific Plans impacts under CEQA, as the in-lieu fees will help pay for the improvements needed to accommodate the additional number of students generated by the project.

Impact PS-6 **Build out under the proposed Specific Plan would generate an estimated 2.87 tons of solid waste per day. Because the Calabasas Landfill has adequate capacity to accommodate such an increase, impacts related to solid waste are considered Class III, *less than significant*.**

Table 4.10-7 shows solid waste generation estimates for proposed development that would be allowed under the Specific Plan. Build out of the proposed Specific Plan would generate an estimated 1,058 tons of additional solid waste annually, or about 2.87 tons per day.

Table 4.10-7 Projected Solid Waste Generation at Full Specific Plan Buildout

Land Use	Proposed Development	Generation Factor	Solid Waste (tons/year)	Solid Waste (tons/day)
Residential	293 dwelling units (DU)	8 lbs/DU/day [a]	427	1.17
Retail/ Office/ Restaurant	575,958 sq. ft.	6.0 lbs/1,000 sq. ft./day [b]	631	1.70
TOTAL			**1,058**	**2.87**

[a] *City of Agoura Hills, 2005*
[b] *Ultrasystems, Stevenson Ranch DEIR Phase IV Specific Plan, April 1992 (Does not differentiate between office, retail, and restaurant, but assumes highest generation rate of the three)*

The quantities shown in Table 4.10-7 represent projected solid waste generation under worst-case conditions without any recycling activities in place. Successful implementation of the California Integrated Waste Management Act (AB 939) within the City would result in a minimum of 50% reduction or diversion of solid waste from the Specific Plan area. Additionally, the City requires all waste haulers operating in the City to pick up and properly dispose of recycled materials from commercial businesses and residences. Monthly diversion rate reports are submitted to the City for review. All commercial businesses are required to have a commercial recycling program in place as well. Residences and commercial businesses in the Specific Plan area would also be subject to these requirements. The City currently conducts media/outreach efforts (local T.V. and pamphlets) outlining these programs and encouraging public involvement.

In addition, individual developments within the Specific Plan area would be required to provide adequate areas for collecting and loading recyclable materials in concert with county-wide efforts and programs to reduce the volume of solid waste entering landfills. Although the projected build out within the Specific Plan area would generate approximately 2.87 tons per day, it can also be assumed that the future projects within the Plan area would meet the current recycling goals of the community, as required as a condition of individual project approval. Assuming that measures are required and implemented for each new project, build out of the project area would generate an estimated 1.44 tons per day that would be sent to the Calabasas Landfill. The average daily intake at the landfill is 1,900 tons/day and the maximum permitted daily intake is 3,500 tons/day (Wippert, 2005). Thus, the landfill is permitted to take an additional 1,600 tons/day. The 1.44 tons generated by anticipated development within the Specific Plan area would constitute less than 1% of this remaining capacity. Therefore, the landfill has adequate capacity to accommodate project-generated solid waste. As such, build out of the proposed SP would not have a significant impact upon solid waste facilities.

In addition to long-term impacts associated with solid waste generation, project construction would result in short term impacts associated with solid waste generation. However, the City has an approved Construction and Demolition Debris Program that would be required for all new construction and additions, alterations, and demolitions over 1,000 s.f. With this Program, applicants need to show that 50% of construction debris would be recycled. As discussed in Section 4.4, *Geology*, project construction may require the excavation and disposal of up to

667,000 cubic yards of cut materials from the project area. According to discussions with development representatives associated with the pending applications within the project area, cut materials will likely be processed and crushed onsite to less than 3 inches in diameter. Processed materials will either be delivered to local landfills for use as cover, or will be pre-sold to developers to use as fill. Due to the volume and nature of cut materials from the area, these materials may not be accepted at the nearby Calabasas landfill. It is assumed that export of the soil will be to destinations no more than 12.5[1] miles from the project area. Disposal of excavated materials is considered potentially significant, and would be mitigated with implementation of mitigation measures GEO- 6(a) and GEO- 6(b), as outlined in Section 4.4, *Geology*.

Mitigation Measures. Compliance with the City's Source Reduction and Recycling Element (SRRE) and Construction and Demolition Debris Program would reduce the amount of waste disposed of in landfills to the degree feasible. Compliance with the City's SRRE would ensure that adequate areas are provided for collecting and loading recyclable materials within the project area. Compliance with the City's Construction and Demolition Debris Program would ensure that construction waste diverted to local landfills is reduced to the degree feasible. No further mitigation is necessary.

Significance After Mitigation. Impacts related to solid waste would be less than significant. Compliance with existing local policy (SRRE and Construction and Demolition Debris Program) would reduce landfilling of solid waste generated in the project area to the degree feasible.

Impact PS-7 The City currently has a shortage of parks and recreational facilities to meet the needs of its population. The population increase associated with build out of the Specific Plan area would exacerbate this shortage and increase demand for recreational facilities. However, because the Specific Plan would dedicate more land than is required by the City and individual development would be required to dedicate and/or pay an in-lieu fee, recreational impacts are considered Class III, *less than significant*.

Full buildout of the Specific Plan would involve the development of up to 293 residential units, which could generate a population of about 879[2]. This increase in residents would increase the demand for recreational facilities and opportunities within the City of Agoura Hills, which, as discussed above, are currently deficient in parkland and overburdened.

The proposed Specific Plan incorporates a large area of open spaces (Zone G), totaling about 32 acres at the base of Ladyface Mountain and south of Medea Creek. The open space west of Kanan Road will be preserved as such, but offers little recreational utility for the community due to its steep slopes. The open space area east of Kanan Road is recommended for

[1] Travel distance for soil export was based on an applicant's proposal to sell cut and fill to a developer in Las Virgennes Canyon. The proposed location for fill delivery is approximately six miles from the Specific Plan area. However, given the uncertainty of the viability of use for this location, this distance was effectively doubled to provide a worst case scenario in case the preferred location is unavailable.

[2] *Based on an average of 3 persons per household, the average for the City of Agoura Hills according to the 2000 U.S. Census.*

development of an equestrian facility. However, this would likely utilize only a portion of the open space south of Medea Creek, due to the steep slopes and proximity to the drainage. The City currently provides an equestrian trail leading from Old Agoura Park to the intersection of Agoura Road and Cornell Road. This equestrian trail is utilized as an access point to the Santa Monica Mountains and would be improved by the proposed Specific Plan. Additionally, a public trail and restoration landscaping shall be designed and installed along Cheseboro, Medea, and Lindero Canyon Creeks.

Based on the standard of 3 acres of parkland per 1,000 capita, development within the Specific Plan area would be required to provide about 2.64 acres for its expected population of 879 or pay an in-lieu fee. Additionally, Zone G which is 32 acres and would be preserved as is. Due to the existing shortfall within the City currently, even with the provision for this additional acreage and in-lieu fees, there would continue to be an overall shortfall in the amount of parkland in the City compared to adopted standards. However, buildout of the Specific Plan would not result in substantial adverse physical impacts related to recreational facilities and the necessary land and/or payment of in-lieu fees would be provided, and thus, impacts would be considered less than significant.

Mitigation Measures. Based on the City's land dedication requirements, described above in the *Setting*, developers within the Specific Plan area would be required to provide a minimum of 2.64 acres of land for parks or in lieu fees. The Specific Plan would dedicate about 32 acres of open space lands. As part of the development review process for individual projects, developers would either be required to dedicate open space areas in fee title or a conservation easement to an appropriate entity (as determined by the City) capable of managing open space for resource protection and recreational use in perpetuity. Therefore, the Specific Plan would provide more than the required open space dedication and no further mitigation is necessary.

Significance After Mitigation. The Specific Plan dedication of 32 acres of open space lands, in addition to individual projects providing land or in-lieu fees, would mitigate projected park and recreational impacts of the Specific Plan to less than significant.

c. Cumulative Impacts.

Wastewater. The Tapia Reclamation Plant currently has an excess capacity of about 7 to 8 mgd. Build out of the proposed Specific Plan, together with other development within the Treatment Plant service area, would cumulatively increase wastewater flow to the Plant by about 398,200 gallons per day.[3] This increase in wastewater represents approximately 5%-6% of the remaining capacity of the existing plant facilities. If the plant were to be downsized to 12 mgd capacity, the increase in wastewater associated with all pending projects would represent approximately 13% of the available remaining capacity. Wastewater associated with currently planned and pending projects is therefore within the current capacity of the Plant with and without any potential plant downsizing. Implementation of required water conservation measures on all future development would minimize wastewater generation to the degree feasible. Therefore, significant impacts to wastewater treatment capacity are not anticipated.

[3] *Estimate based on 90% of water demand*

Water. Cumulative development in the City of Agoura Hills would continue to increase citywide water demand. Currently planned and pending development, in combination with the proposed Specific Plan, would add a total of 772 residences and about 2.0 million square feet of non-residential development. This would increase local demand for water by an estimated 442,400 gallons per day [4]. The projected demand for water contained within the LVMWD's Water Master Plan is based partially on buildout of the City's General Plan and indicates that sufficient water is available (Talmadge, 2005). This demand projection assumes implementation of water conservation measures required by the LVWMD. Assuming that future projects implement these measures, water demand would be reduced to the degree feasible. Supplies are considered adequate to serve future demand. Therefore, significant cumulative impacts to water supply are not anticipated.

Schools. Cumulative development within the LVUSD will continue to increase enrollment in local public schools. Including build out of the proposed Specific Plan, planned and pending development in the area will generate an estimated 654 new students. Since local schools are currently at or over capacity, cumulative impacts to schools are considered potentially significant. It should be noted that among the current list of projects proposed within the City, one is a school that would accommodate 750 students and, thus, help to alleviate some overcrowding in City schools. However, payment of statutory school impact fees would be required to mitigate the proposed Specific Plan's incremental contribution to a cumulative impact. Assuming that other area developers are required to pay the statutory fees and that local school districts reach agreements with residential developers to fund needed school facilities, cumulative impacts to schools would be mitigated to a less than significant level.

Fire Protection Service. Cumulative development projects in the Agoura Hills area, in combination with the build out of the proposed Specific Plan, would add 772 residences and about 2.0 million square feet of non-residential development. Such development will continue to increase the City's population and could potentially place development within fire severity zones. Cumulative impacts relating to Fire Department staffing and equipment are considered potentially significant. However, it is assumed that Fire Department staffing and equipment increases will keep pace with residential growth, thereby mitigating such impacts.

Police Protection Service. Cumulative buildout of Agoura Hills and surrounding areas will increase demands on police protection services by adding residents and non-residential development. Currently planned and pending development, in combination with the build out of the proposed Specific Plan, would add 772 residences and about 2.0 million square feet of non-residential development in the area. Without increases in staffing and facilities correlating to these population increases, potentially significant impacts could occur. However, it is anticipated that increased public revenues generated from property and sales taxes as the City builds out will fund Sheriff's Department staff and equipment. Therefore, significant cumulative impacts to police protection service are not anticipated.

[4] *Based on water demand factors in Potable Water System Master Plan for Las Virgenes Municipal Water District, December 1999. Commercial Development estimated at 870 gpd/acre and residential development at 190 gpd/capita with 2.8 residents per dwelling, and public schools estimated at 250 gpd/acre..*

Solid Waste. In combination with the build out of the proposed Specific Plan, approved and pending development in the City (see Table 3-1 in Section 3.0, *Environmental Setting*) would cumulatively increase solid waste generation by an estimated 10.4 tons per day.[5] However, the Calabasas landfill is permitted to take 1,600 tons/day more than its current volume. This is more than adequate capacity to accommodate waste generated by currently planned and pending development and should be adequate to accommodate development associated with General Plan buildout. Therefore, significant cumulative impacts to area landfills are not anticipated.

Recreation. Cumulative development throughout the City of Agoura Hills in accordance would continue to increase demand for recreational facilities in the City by adding about 772 additional residential units and 2,856 new residents. Based on the City's standard of 3 acres of parkland per 1,000 residents, this number of new residents would create a demand for about 8.6 additional acres of parks. This would exacerbate the existing deficiency in parkland available to serve current residents. Nevertheless, all development in the City, including the proposed projects, would either provide additional land for parks or pay the required in-lieu fees to be used by the City toward development of additional park facilities in the City. Therefore, although a citywide shortfall in the amount of park space may remain, implementation of standard City policies on all new development would reduce the cumulative impact of planning and pending projects to a less than significant level.

[5] *Based on 692 residences and 1.83 million square feet of non-residential development, and solid waste generation factors of 12.23 pounds per day per residence, 6 pounds per day per 1,000 square feet of non-residential development, and 0.5 lbs per student per day for institutional uses. The factor for residences is from the City of Los Angeles CEQA Thresholds Guide and is for single family residences. The single family factor was applied to all residences (both single family and multi-family) in order to provide a worst-case estimate. The factor for institutional uses is from Stevenson Ranch Draft Environmental Impact Report (EIR) (Phase IV), LA County.*

4.11 TRAFFIC AND CIRCULATION

The following section presents the traffic, circulation and parking analysis prepared by Associated Transportation Engineers (ATE) for the Agoura Village Specific Plan. The study provides information relative to existing, cumulative, and cumulative + Agoura Village Specific Plan conditions based on project traffic volumes developed by ATE and existing and cumulative traffic volumes derived from the Agoura Hills Traffic Model[1]. The study identifies potential roadway and intersection impacts and provides mitigation measures for impacted facilities. Based on the analysis, full buildout of the Specific Plan would be expected to result in a Class I, significant and unavoidable impact on the segment of Agoura Road east of Kanan Road. This segment would operate at a LOS that is lower than the City standard (LOS C) and measures (such as road widening) that would be needed to mitigate this impact are not feasible given the objectives of the Specific Plan. All other traffic, circulation, and parking impacts can be reduced to a level that is less than significant.

4.11.1 Setting

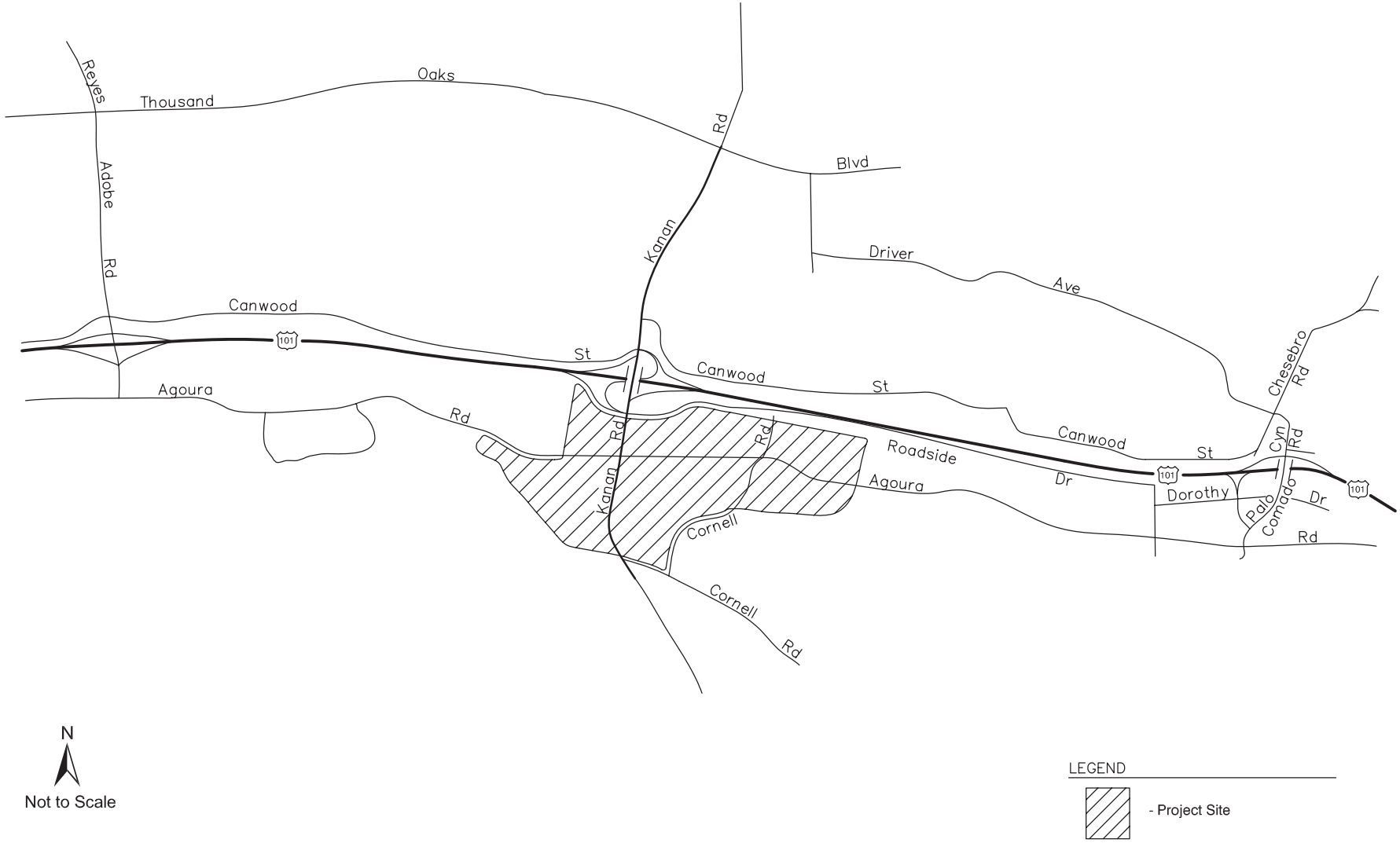
a. Project and Roadway Characteristics. The project area is located east and west of the intersection of Agoura Road and Kanan Road. The project area involves property on both the north and south side of Agoura Road, from about 1,400 feet (ft) west of Kanan Road to about 750 ft east of Cornell Road. Roadside Drive and U.S. Highway 101 border much of the project to the north. Figure 4.11-1 shows the location of the project within the City of Agoura.

The project area currently contains about 32 developed acres, including approximately 284,610 square-feet (sf) of various commercial uses including retail, restaurant, office, theaters, and services. About 103 acres of the total planning area is vacant and currently undeveloped (Refer to Figure 2-3 in the *Project Description*). The proposed project involves adoption of the Agoura Village Specific Plan that would guide future development within the 135-acre Specific Plan area. Under the proposed Specific Plan, the northern developed 32 acres of the project area would be revitalized. This area includes the Whizin's Shopping Center, Mann Theater complex, self-storage facilities, and building supply facilities. The undeveloped parcels, mostly located in the southern portion of the Specific Plan area, would be subject to new development (approximately 103 acres).

Full buildout of the proposed Specific Plan would involve a mixed-use village development comprised of residential, office, retail, entertainment and restaurant uses within the project area. Based on land use designations and development standards within the Specific Plan, full buildout under the Specific Plan would involve an estimated 948,500 sf of commercial development and up to 293 residential units. New development would account for 575,958 sf of commercial development and 293 residential units.

Several roadway and intersection modifications are associated with the Specific Plan. The plan proposes to reduce the segment of Agoura Road between Kanan Road and Cornell Road from four lanes to two lanes with a landscaped median and the potential for angled parking on both sides. The Kanan Road/Agoura Road intersection would be changed from a signalized intersection into a two-lane roundabout, and a new traffic circle would be introduced along

[1] Agoura Hills Traffic Model, Austin-Foust Associates, Inc, April 2005.



N

Not to Scale

LEGEND

- Project Site

Source: Associated Transportation Engineers, October 2005

Street Network/Project Site Location

Figure 4.11-1

City or County

Agoura Road roughly mid-block between Cornell Road and Kanan Road. This traffic circle will include stop signs at the north and south approaches.

b. Existing Study-Area Roadways and Intersections. The following roadways and intersections were identified by the City for inclusion in the traffic analysis.

Table 4.11-1 Study-Area Roadways & Intersections

Roadway Segments	Intersection
U.S. Highway 101	Reyes Adobe Road/Thousand Oaks Boulevard
Reyes Adobe Road	Reyes Adobe Road/Canwood Street
Kanan Road	Reyes Adobe Road/U.S. 101 NB Ramps
Agoura Road	Reyes Adobe Road/U.S. 101 SB Ramps
Cornell Road	Reyes Adobe Road/Agoura Road
Roadside Drive	Kanan Road/Thousand Oaks Boulevard
	Kanan Road/Canwood Street (East)
	Kanan Road/Canwood Street - U.S. 101 NB Ramps
	Kanan Road/Roadside Drive - U.S. 101 SB Ramps
	Kanan Road/Agoura Road
	Kanan Road/Cornell Way
	Cornell Road/Agoura Road
	Chesebro Rd/Driver Avenue
	Palo Comado Canyon Road/U.S. 101 NB Ramps
	Dorothy Drive/U.S. 101 SB Ramps
	Palo Comado Canyon Road/Chesebro Road
	Palo Comado Canyon Road/Agoura Road

Figure 4.11-1 shows the existing study-area street network and the following text provides a brief description of the roadways that were identified by City staff for analysis in the traffic study.

U.S. Highway 101 (Ventura) Freeway: The Ventura Freeway is a major north-south freeway connecting Agoura Hills with Southern California and Coastal, Central and Northern California. In the study area, the Ventura Freeway heads east-west between and parallel to Agoura Road and Canwood Street. In the project vicinity, the Ventura Freeway includes four mainline freeway lanes in each direction and auxiliary lanes between interchanges. The Ventura Freeway ramps at Kanan Road and Reyes Adobe Road currently form standard diamond interchanges.

Agoura Road: The Circulation Element of the City of Agoura Hills General Plan classifies Agoura Road as a Secondary Arterial. The roadway extends in an east-west direction parallel to the Ventura Freeway. The road is designated as a future Primary Arterial in the study area. Agoura Road currently provides one travel lane in each direction and Class II bike lanes in the project vicinity. West of Ladyface Court, it contains four travel lanes and Class II bike lanes. The roadway widens to 56 ft on the east side of the Kanan Road intersection to provide an exclusive westbound right-turn lane. Parking is generally prohibited along Agoura Road, except for the section between Lewis Road and Palo Comado Canyon. The speed limit is 40

miles per hour west of Kanan Road and 45 miles per hour east of Reyes Adobe Road.

Canwood Street is an east-west local street, which serves as a frontage road on the north side of the Ventura Freeway. Canwood Street is designated in the Circulation Element as a Local Arterial (2 lanes undivided) between Reyes Adobe Road and Kanan Road, a Secondary Arterial between Kanan Road and the future ramp terminal, and a Local Arterial east of the ramp terminal. It serves local businesses east of Kanan Road and residential neighborhoods west of Kanan Road. One travel lane is provided in each direction. Curb and sidewalk are provided along the north side of the street for approximately 300 ft from the Kanan Road intersection. Scattered improvements are provided near Clareton Drive. Canwood Street originates at Lake Crest Drive, at the west City limits, and extends to Chesebro/Driver/Palo Comado Canyon Road on the east.

Kanan Road is a Secondary Arterial (4 lanes undivided) south of Agoura Road, a Major Arterial (6 lanes divided) between Agoura Road and Thousand Oaks Boulevard and an Augmented Primary Arterial (6 lanes divided) north of Thousand Oaks Boulevard. Kanan Road is presently 84 ft in width north of Agoura Road, 54 ft in width immediately south of Agoura Road, and 30 ft in width south of Cornell Way. North of Agoura Road, two travel lanes are provided in each direction with left-turn storage at intersections. At the approaches to the U.S. 101 interchange, three lanes are provided in each direction. South of Agoura Road, the roadway contains one southbound lane and two northbound through lanes with a left-turn lane. The roadway transitions to one lane in each direction south of Cornell Way, with a southbound left-turn lane at the Cornell Way intersection. While parking is prohibited along most sections of Kanan Road, on-street parking is allowed on the east side of the street between and Ventura Freeway and Agoura Road. The speed limit is 35 miles per hour north of Agoura Road and 45 miles per hour south of Agoura Road.

Reyes Adobe Road is designated as a Major Arterial from Agoura Road to the Ventura Freeway ramps, as a Secondary Arterial from the freeway ramps to Thousand Oaks Boulevard, and as a local roadway north of Thousand Oaks Boulevard. Reyes Adobe Road runs north and south, connecting to Agoura Road on the south and terminating just north of Lake Lindero Drive on the northwest. The roadway primarily serves the residential communities north of the Ventura Freeway. At present, the roadway is one lane in each direction between Canwood Street and the eastbound U.S. 101 ramps, and two lanes in each direction south of the ramps to Agoura Road.

Roadside Drive is an east-west local street that serves as a frontage road on the south side of the Ventura Freeway. One travel lane is provided in each direction. It provides access to businesses located along its length. West of Kanan Road, the street width varies from 30 ft to 44 ft; east of Kanan Road the street varies from 30 ft to 45 ft in width. The westbound leg of Roadside Drive is restricted to right turns only onto Kanan Road.

c. Programmed Roadway Network Improvements. This section discusses roadway and intersection improvements that are either currently being constructed, funded and designed or in planning stage.

U.S.101/Kanan Road interchange. Improvements at this interchange are currently underway as part of the *U.S. 101/Kanan Road Interchange Project*, which is funded jointly by the City of Agoura Hills, Metropolitan Transit Authority (MTA), Caltrans, and federal money. The project consists of three phases:

- Phase One of the project includes the relocation of Canwood Street east of Kanan Road approximately 800 ft north of its current connection to Kanan Road. This phase is completed.
- Phase Two, the relocation of utilities has been completed
- Phase Three includes reconstruction of existing freeway ramps and signals, and construction of new on/off ramps. This phase is scheduled to start and finish in 2006.

The interchange improvements are included in the cumulative roadway network. Copies of the preliminary pavement and delineation drawings showing the ultimate lane geometries are included in the Traffic Study Technical Appendix (Appendix F).

U.S. 101/Reyes Adobe Road interchange. The City has programmed several improvements at this interchange, including the widening of Reyes Adobe Road to six lanes from a point south of the U.S. 101 Southbound Ramps to a point north of Canwood Street, and addition of lanes at the approaches of the interchange and the Reyes Adobe Road/Canwood Street intersection. A graphic showing the proposed improvements is included in Appendix F. Funding would be realized via federal, MTA and local funds. Construction is not expected to start until the end of 2007. As funding and the construction schedule are not yet finalized, these improvements are not included in the cumulative roadway network.

d. Roadway Operations. "Level of Service" (LOS) A through F are used to rate roadway operations, with LOS A indicating very good operating conditions and LOS F indicating poor conditions (more complete definitions of level of service are contained in Appendix F for reference). LOS A through LOS C are generally considered acceptable, while LOS D through LOS F indicate poor conditions. The City of Agoura Hills considers LOS C or better acceptable for roadway operations. For freeway operations, the County of Los Angeles' LOS E standard was applied.

The existing "average daily traffic" (ADT) volumes on the study area street network and the existing roadway levels of service are summarized in Table 4.11-2. The existing ADT volumes for the street network were obtained from the Agoura Hills Traffic Model (see Appendix F for ADT graphics) and Caltrans[2]. Level of service for the City of Agoura roadways were determined using standard roadway design capacities outlined in the Engineering Roadway Design Capacities table included in Appendix F. Levels of service for the freeway segments were based on freeway lane capacities contained in the Los Angeles County's Congestion Management Program (CMP)[3].

[2] 2003 Traffic Volumes on California State Highways, Caltrans, 2004.
[3] 2002 Congestion Management Program for the Los Angeles County, Metropolitan Transportation Authority, 2002

Table 4.11-2 Existing Roadway Volumes and Levels of Service

Roadway Segment	Roadway Class	Number of Lanes	ADT	LOS
U.S. Highway 101 west of Kanan Road[a]	Freeway	10 Lanes	175,000	LOS C/D
U.S. Highway 101 east of Kanan Road[a]	Freeway	10 Lanes	181,000	LOS C/D
Kanan Road north of Cornell Way	Secondary Arterial	2 Lanes[b]	14,000	LOS A
Kanan Road north of Agoura Road	Major Arterial	6 Lanes	20,000	LOS A
Agoura Road east of Reyes Adobe Road	Secondary Arterial	4 Lanes	10,000	LOS A
Agoura Road east of Kanan Road	Secondary Arterial	2 Lanes	8,000	LOS A
Agoura Road east of Cornell Road	Secondary Arterial	2 Lanes	8,000	LOS A
Cornell Road south of Agoura Road	Local	2 Lanes	2,000	LOS A
Roadside Drive east of Kanan Road	Local	2 Lanes	7,000	LOS B

[a] *Level of service based on peak hour volumes and capacity contained in the L.A. County CMP.*

[b] *Capacity adjusted; Roadway segment contains two travel lane and two-way left-turn lane.*

e. Intersection Operations. Since traffic flows in the study area are most constrained at the intersections, the traffic analysis focuses on the operating conditions at key intersections during peak travel periods. The peak travel periods occur during the A.M. commute hour and the P.M. commute hour. The A.M. peak hour period is defined as the highest 1-hour period between the hours of 7:00 to 9:00 A.M.; and the P.M. peak hour period is defined as the highest 1-hour period between the hours of 4:00 to 6:00 P.M. The existing peak hour traffic volumes for the key intersections were obtained from the Agoura Hills Traffic Model, and are shown in the *Peak Hour Turning Movement* tables that are included in Appendix F for reference.

Existing levels of service for the study-area intersections are shown in Table 4.11-3. The "Level of Service" (LOS) designations discussed previously were also used to rate intersection operations. The City of Agoura Hills considers LOS C or better acceptable for intersection operations. Levels of service for the signalized study-area intersections were calculated by ATE using the Intersection Capacity Utilization (ICU) methodology used by the City of Agoura Hills. Levels of service for the unsignalized intersections were calculated by ATE using the Highway Capacity Manual (HCM) methodology[4]. Worksheets showing the level of service calculations are included in Appendix F.

[4] Highway Capacity Manual, Highway Research Board Special Report 209, Transportation Research Board, National Research Council, 2000.

Table 4.11-3 Existing A.M. and P.M. Peak Hour Intersection Levels of Service

Intersection	Control	A.M. Peak Hour	P.M. Peak Hour
Reyes Adobe Rd/Thousand Oak Blvd	Signal	0.49/LOS A	0.55/LOS A
Reyes Adobe Rd/Canwood St	Signal	0.46/LOS A	0.67/LOS B
Reyes Adobe Rd/U.S. 101 NB Ramps	Signal	0.68/LOS B	0.64/LOS B
Reyes Adobe Rd/U.S. 101 SB Ramps	Signal	0.62/LOS B	0.74/LOS C
Reyes Adobe Rd/Agoura Rd	Signal	0.48/LOS A	0.61/LOS B
Kanan Rd/Thousand Oak Blvd	Signal	0.67/LOS B	0.71/LOS C
Kanan Rd/Canwood St (E)[(a)]	Signal	0.50/LOS A	0.69/LOS B
Kanan Rd/U.S. 101 NB	Signal	**0.82/LOS D**	0.71/LOS C
Kanan Rd/U.S. 101 SB	Signal	0.80/LOS C	0.73/LOS C
Kanan Rd/Agoura Rd	Signal	0.66/LOS B	0.57/LOS A
Kanan Rd/Cornell Way	One-Way Stop	10.7 sec/LOS A	11.7 sec/LOS B
Cornell Rd/Agoura Rd	All-Way Stop	8.5 sec/LOS A	10.0 sec/LOS A
Chesebro Rd/Driver Ave	All-Way Stop	12.5 sec/LOS B	18.6 sec/LOS C
Palo Comado Cyn Rd/U.S. 101 NB Ramps	One-Way Stop	12.2 sec/LOS B	22.4 sec/LOS C
Dorothy Dr/U.S. 101 SB Ramps	All-Way Stop	14.0 sec/LOS B	13.9 sec/LOS B
Palo Comado Canyon Rd/Chesebro Rd	One-Way Stop	10.8 sec/LOS B	14.2 sec/LOS B
Chesebro Rd/Agoura Rd	All-Way Stop	8.7 sec/LOS A	10.8 sec/LOS B

[(a)] Recently constructed intersection

Bolded values exceed City LOS C standard.

Table 4.11-3 indicates that most of the study-area intersections currently operate at LOS C or better during the peak hours. The Kanan Road/U.S. 101 Northbound Ramps intersection operates at LOS D during the A.M. peak hour, which exceeds the City's LOS C standard.

f. Cumulative Traffic Volumes. Buildout of the Agoura Village Specific Plan would occur in the future and is therefore analyzed using a baseline setting that reflects future traffic conditions. The baseline for the cumulative setting (cumulative) was developed by adding the traffic generated by developments within the City that are either under construction, approved or under review to the existing traffic volumes. A list summarizing these developments is included in Appendix F. The traffic model used to estimate future traffic scenarios also included a 30% background growth factor. This background growth factor accounts for those projects not specified in Appendix F (i.e. Heschel School and Triangle Ranch Developments). The cumulative scenario also includes background traffic volume increases within the study-area resulting from regional growth.

Trip generation estimates for the cumulative projects were derived from the Agoura Hills Traffic Model. The trip generation was developed based on rates contained in the Institute of Transportation Engineers (ITE) trip generation manual[5] for the respective land uses, and use of rates developed for comparable land uses. A table containing the trip generation rates per land use and a table showing the cumulative trip generation estimates are included in Appendix F.

The cumulative-added traffic volumes were then distributed onto the study-area street network using the Agoura Hills Traffic Model. The cumulative roadway network was adjusted to account for the geometry changes associated with the U.S. 101/Kanan Road interchange improvements. A graphic illustrating the cumulative (existing + cumulative-added) roadway volumes is included in Appendix F. The cumulative intersection volumes are shown in the *Peak Hour Turning Movement* tables also contained in Appendix F.

4.11.2 Impact Analysis

a. Methodology and Thresholds of Significance. Project impacts were assessed by comparing future traffic conditions with and without project generated traffic. Included in this comparison is the cumulative impact of other development in the City. It is important to note that buildout under the current General Plan would result in significant impacts along street segments and at intersections within the Specific Plan area (Agoura Hills General Plan Update EIR, 1992). Mitigation measures provided within the 1992 General Plan Update EIR have not all been implemented, yet.

Operational Thresholds. The City of Agoura Hills considers LOS C or better acceptable for intersection and roadway operations. A significant impact would occur when a proposed project increases traffic demand on a facility by 2% of capacity (V/C increase $\geq$ 0.02) at a facility that would operate at LOS D or worse with project-added traffic volumes. For unsignalized intersections, a threshold of 2% increase in entering volumes is applied.

Freeway segments. LOS E is acceptable to the Metropolitan Transit Authority (MTA), with mitigation required if a project increases traffic demand on a facility by 2% of capacity (V/C 0.02), causing or worsening LOS F (V/C 1.00).

Alternative Transportation. Goal 3 of the City of Agoura Hill Circulation Element encourages use of alternative transportation modes within the City (1992, pp. 3-9 to 3-10), as outlined in policies 3.1-3.4. This includes the following:

- Promote use of alternative forms of transportation to single passenger cars;
- Promote use of carpools;
- Provide pollution-free and congestion-reducing bike, pedestrian, and handicapped-accessible paths which link major destination centers within the City; and
- Promote bicycle use by providing adequate storage, showers, lockers, and related facilities.

[5] Trip Generation, Institute of Transportation Engineers, 7th Edition, 2003.

Failure to comply with these City of Agoura Hills policies is also considered a significant impact.

Parking. Impacts to on-site parking availability are considered significant if the proposed supply of parking does not meet the standards of the City Parking Code or parking requirements as outlined in the Specific Plan, or if an individual project does not provide adequate parking for the specific use that is proposed.

Traffic Impact Assessment Scenarios. The traffic impact analysis was prepared pursuant to the City of Agoura Hills traffic study guidelines. The following scenarios were identified for analyses by the City.

- Existing Conditions
- Cumulative Conditions
- Cumulative Conditions + Proposed Agoura Village Specific Plan
- Cumulative Conditions + Agoura Village General Plan Buildout

The *existing conditions* described above is based on the existing transportation system, which includes the relocation of the Kanan Road/Canwood Street intersection north of its current location, and existing traffic flows throughout an average day, as well as during the A.M. and P.M. peak hour periods. The existing conditions scenario provides information regarding current roadway and intersection levels of service based on the existing intersection geometries, controls and peak hour turning volumes.

The *cumulative conditions* scenario includes the existing traffic volumes plus traffic generated by developments within the City that are either under construction, approved or under review. The cumulative scenario also includes background traffic volume increases resulting from regional growth. This scenario serves as a baseline on which the traffic from the proposed Agoura Village Specific Plan is layered to identify the project's potential roadway and intersection impacts.

The *cumulative conditions* + *proposed Agoura Village Specific Plan* scenario includes the cumulative traffic volumes and the traffic volumes generated by the proposed Agoura Village Specific Plan. The roadway and intersection operations resulting from this scenario are compared to the cumulative baseline setting and potential Specific Plan related impacts are identified. Roadway and intersection improvements required to mitigate identified impacts are summarized following the impact discussions. This scenario includes an analysis of the proposed circulation, access and parking plan developed for the Specific Plan, and potential impacts and mitigations are also provided.

The *cumulative* + *Agoura Village General Plan Buildout* scenario includes the cumulative traffic volumes and the traffic volumes generated by buildout of the existing General Plan and Zoning for the Agoura Village Specific Plan project area. This scenario allows for the examination of the effects of the proposed Specific Plan compared to the anticipated development that could otherwise occur under the current General Plan and Zoning designations for the project area. This scenario is considered an alternative to the proposed project and is discussed further in Section 6.0, *Alternatives.*

Project Trip Generation. Full buildout of the Agoura Village Specific Plan would result in a total 948,500 sf of commercial development and up to 293 residential units, of which about 576,458 sf would be new commercial space. A table showing the size of the existing and proposed developments per Project Zone (Zones A through F are used) is included in Appendix F. Trip generation estimates for the project were developed based on rates presented in ITE's *Trip Generation Handbook* for the respective new land uses included in the Specific Plan. For the retail uses within the Specific Plan, a 25% pass-by rate was applied. This rate was developed based on pass-by rates contained in ITE's *Trip Generation Handbook* and the forecast traffic volumes on Kanan Road and Agoura Road adjacent the project site. In addition, a 10% mixed-use rate was applied to the trip estimates to account for interactions between the residential, office, restaurant and commercial uses within the project area. The trip generation estimates for each individual project component within the respective analysis zone within the Agoura Village Specific Plan area are outlined in Table 4.11-4.

The Agoura Village Specific Plan would generate 21,928 ADT, with 914 trips in the A.M. peak hour and 2,004 trips in the P.M. peak hour. Of these trips, 17,593 ADT, 804 A.M. PHT and 1,633 P.M. PHT would be primary trips.

Table 4.11-4 Agoura Village Trip Generation

Land Use	Size	Mixed-Use Factor	ADT		A.M. Peak Hour		P.M. Peak Hour	
			Rate	Trips	Rate	Trips	Rate	Trips
Zone A North								
Specialty Retail	29,308 S.F	0.9	44.06	1,162	1.32	35	3.13	83
Primary Trips				(871)		(26)		(62)
Pass-By Trips				(291)		(9)		(21)
Apartment	19 D.U.	0.9	6.72	115	0.51	9	0.62	11
Subtotal				**1,277**		**46**		**94**
Zone A South								
Specialty Retail	49,000 S.F	0.9	43.55	1,921	1.31	58	2.84	125
Primary Trips				(1,441)		(43)		(94)
Pass-By Trips				(480)		(15)		(31)
Hotel	120 Rms	0.9	8.17	882	0.56	60	0.59	64
Condominium	62 D.U.	0.9	5.86	327	0.44	25	0.52	30
Apartment	25 D.U.	0.9	6.72	151	0.51	12	0.62	14
Senior Housing	31 D.U.	0.9	3.48	97	0.08	2	0.11	3
Subtotal				**3,378**		**157**		**236**
Zone B								
Shopping Center	122,000 S.F	0.9	63.34	6,955	1.45	159	5.85	642
Primary Trips				(5,216)		(120)		(482)
Pass-By Trips				(1,739)		(39)		(160)
Condominium	93 D.U.	0.9	5.86	491	0.44	37	0.52	43
Apartment	19 D.U.	0.9	6.72	115	0.51	9	0.62	11
Subtotal				**7,561**		**205**		**696**
Zone C								
Specialty Retail	3,500 S.F	0.9	46.55	147	1.40	4	4.55	14
Primary Trips				(110)		(3)		(11)
Pass-By Trips				(37)		(1)		(3)
Zone D West								
Specialty Retail	36,600 S.F	0.9	43.81	1,443	1.31	43	2.99	98
Primary Trips				(1,082)		(32)		(73)
Pass-By Trips				(361)		(11)		(25)

Land Use	Size	Mixed-Use Factor	ADT		A.M. Peak Hour		P.M. Peak Hour	
			Rate	Trips	Rate	Trips	Rate	Trips
Zone E								
Specialty Retail	12,000 S.F	0.9	45.92	496	1.38	15	4.19	45
Primary Trips				(372)		(11)		(34)
Pass-By Trips				(124)		(4)		(12)
General Office	100,000	0.9	13.34	1,201	1.88	169	1.91	172
Condominium	S.F.	0.9	5.86	132	0.44	10	0.52	12
Apartment	25 D.U.	0.9	6.72	115	0.51	9	0.62	11
Subtotal	19 D.U.			**1,944**		**203**		**240**
Zone F General Office	75,250 S.F.	0.9	14.24	965	1.99	134	2.17	147
TOTAL				**21,928**		**914**		**2,004**
Primary Trips				(17,593)		(804)		(1,633)
Pass-By Trips				(4,335)		(110)		(371)

Trip Distribution and Assignment. The traffic generated by Agoura Village Specific Plan buildout was distributed and assigned to the study-area street network according to the percentages shown in Table 4.11-5 and Figure 4.11-2. The trip distribution pattern was developed based on the existing traffic patterns, distribution percentages derived from the Agoura Hills Traffic Model and consideration of the most logical travel routes for drivers accessing each of the proposed developments. The project-added traffic volumes are illustrated in Figures 4.11-3 and 4.11-4.

Table 4.11-5 Project Trip Distribution Percentages

Route	Origin/Destination	Percent
U.S. Highway 101	East West	35% 37%
Kanan Road	North South	5% 5%
Agoura Road	East West	2% 4%
Thousand Oaks Boulevard	Northwest	3%
Reyes Adobe Road	Northwest	2%
Local n/o U.S. Highway 101	North	7%
Total		**100%**

Roadway Operations. Levels of service for the study-area roadway segments were determined assuming the cumulative roadway volumes included in the Technical Appendix F and the cumulative + Agoura Village Specific Plan roadway volumes shown in Figure 4.11-5.

Intersection Operations. Levels of service for the study-area intersections were calculated assuming the cumulative traffic volumes contained in the Agoura Hills traffic model and the cumulative + project intersection volumes developed by ATE. The cumulative + project traffic volumes are illustrated in Figures 4.11-5 and 4.11-6. The U.S. 101/Kanan Road interchange was