TAYLOR ROAD MIXED-USE PROJECT

FINAL INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

Lead Agency:
TOWN OF LOOMIS
6140 Horseshoe Bar Road, Suite K
LOOMIS, CA 93442

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DECEMBER 2005

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ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

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C. BIOLOGICAL RESOURCES
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CHAPTER 1.0
INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

The Town of Loomis (Town) Planning Department, serving as the Lead Agency under the California Environmental Quality Act (CEQA), has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) to assess the impacts that may result from the development of the proposed project. The project involves the subdivision of an 8.9-acre parcel into a mixed-use development comprised of the following:

- 29 Single family residential lots
  - Phase I – 14 Lots with 12 carriage houses, 2 half-plex lots
  - Phase 2 – 25 lots with 6 carriage houses, 2 half-plex lots

  Total Single family residential lots = 29, 18 with carriage units, 4 half-plex lots
- 9 Commercial/retail lots
  - Phase 3 – 3 units (8,477± square-feet)
  - Phase 4 – 6 units (11,768± square-feet)

  Total Commercial lots = 20,240± square-feet floor area)

This IS/MND is intended to inform the public, decision markers and other responsible or interested agencies and organizations of the potential environmental effects of the proposed project. The environmental review process enables public agencies to evaluate a project in terms of its environmental consequences and to consider and implement methods of eliminating or reducing any potentially adverse impacts.

1.2 IS/MND TOPIC AREAS

The IS/MND comprises the substantive portion of the environmental documentation for the project prepared to comply with CEQA requirements. This IS/MND has been prepared in conformance with the CEQA Guidelines for Implementation of the California Environmental Quality Act, California Code of Regulations, Title 14 (hereafter "CEQA Guidelines"). The IS/MND examines the following topic areas:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transporation/Traffic
- Utilities/Services Systems

1.3 CEQA IS/MND REQUIREMENTS

An IS/MND must be prepared in conformance with the CEQA of 1970, as amended. Public Resources Code Section 21064.5 and CEQA Guidelines Section 15070 state that an IS/MND may be prepared if the Initial Study identifies a potentially significant effect for which the project proponent has made or agrees to make project revisions that clearly mitigate the effects. Additionally, an IS/MND may not be used if any substantial evidence indicates that the revised project with mitigation may still have a significant effect on the environment.

1.4 LEAD AGENCY NAME AND ADDRESS

CEQA applies to discretionary government actions that are defined as a project and have the potential to result in either a direct or indirect physical change in the environment. An activity is considered a project if it requires issuance of a lease, permit, license, certificate, or other entitlement by a public agency. The CEQA Lead Agency is the California government agency that has the principal responsibility of approving a project and preparing the appropriate CEQA documentation. CEQA applies to all California government agencies at all levels, including local agencies, regional agencies, and state agencies, boards, commissions, and special districts. The Town is designated as the CEQA Lead Agency for approval of this project by virtue of its discretionary authority as a municipality.

1.5 CONTACT PERSON AND TELEPHONE NUMBER

Ms. Kathy Kerdus, Director
Town of Loomis
Planning Department
6140 Horseshoe Bar Road, Suite K
Loomis, CA 95650
Telephone (916) 652-1840

1.6 PROJECT SPONSOR'S NAME AND ADDRESS

Mr. Pat Cannon
Taylor Road Mixed-Use LLC
4807 El Camino Avenue, Suite A
Carmichael, CA 95608

1.7 PROPERTY OWNERS

Taylor's Investment Company, et. al
2701 Corabel Lane, Suite 1
Sacramento, CA 95821

1.8 RESPONSIBLE AGENCIES/APPROVALS

A responsible agency is an agency other than the lead agency that has a legal responsibility for also carrying out or approving a project. The responsible agency must actively participate in the lead agency's CEQA process by reviewing the document and using it for the approval of the project. The responsible agency may also use this document to achieve CEQA compliance

when issuing permits required for authorization of the project. Responsible agencies/approvals pertaining to this project include:

- Loomis Fire Protection District – Will-serve letter and zone of benefit
- South Placer Municipal Utility District – Sewer Permit
- Placer County Water Agency – Waterline extension agreement
- Regional Water Quality Control Board – General Construction Permit
- Placer County Air Pollution Control District – Dust Control Plan
- United States Army Corps of Engineers – 404 Permit
- California Department of Fish and Game – 1602 Streambed Alteration Agreement

1.9 IS/MND FORMAT AND CONTENTS

In addition to this section, Section 1.0 "Introduction", this Initial Study is organized into the following sections:

- **Section 2.0 - Project Description:** Includes a detailed description of the proposed project.
- **Section 3.0 - Environmental Checklist and Discussion:** Contains the Environmental Checklist Form together with an environmental setting and a discussion of the checklist questions. The Checklist Form is used to determine the following for the proposed project:
  1) "Potentially Significant Impacts" that may not be mitigated with the inclusion of mitigation measures;
  2) "Potentially Significant Impacts Unless Mitigated" which could be mitigated with incorporation of mitigation measures; and,
  3) "Less Than Significant Impacts" which would be less than significant and do not require the implementation of mitigation measures.
- **Section 4.0 - Environmental Factors Potentially Affected:** Identifies which environmental factors were determined to have either a "Potentially Significant Impact" or "Potentially Significant Impact Unless Mitigated", as indicated in the Environmental Checklist.
- **Section 5.0 – Alternative Analysis:** Identifies a project alternative and presents a qualitative comparison this alternative with respect to the proposed project.
- **Section 6.0 - Determination:** Identifies the determination of whether impacts associated with development of the proposed project are significant, and what, if any, additional environmental documentation may be required. A list of mitigation measures required for the proposed project is also included.
- **Section 7.0 - Citations:** Identifies the documents (printed references) and individuals (personal communications) consulted in preparing this initial study.

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CHAPTER 2.0
PROJECT DESCRIPTION

2.1 INTRODUCTION

The Taylor Road Mixed-Use Project has been proposed by ALLIED DEVELOPERS to construct a mixed-use development within the Town of Loomis. The proposed project includes residential and commercial retail on an 8.9-acre area.

2.2 PROJECT LOCATION

The project site is located on Taylor Road approximately 650 feet northwest of Sierra College Boulevard, in the Town of Loomis. See Figure 2-1. It is an 8.9-acre parcel that is bordered on the west by Taylor Road, Union Pacific lands, and railroad tracks; on the south by a KOA campground; on the east by an existing single-family subdivision; and, on the north by Lorenzo's Mexican Restaurant, an office complex, and a commercial/industrial complex. See Figure 2-2. The assessor's parcel numbers of the project site are 044-123-59 and 044-123-68.

2.3 SITE FEATURES

The site is within the Dry Creek Watershed near a tributary to Sucker Ravine. It has been leveled and was used as an orchard during the mid 1900's. The majority of the site currently consists of disturbed grassland. It supports approximately 0.17 acres of jurisdictional Waters of the United States with riparian scrub drainage. It also maintains an artificially-supported swale, blackberry patches, and an excavated channel. The swale exists on the far east side of the project fed by urban runoff from neighboring properties during landscape irrigation. The excavated channel runs in a diagonal northwest and southeast direction along the eastern half of the parcel. A large rock outcropping and several mature oak trees are located on the northern portion of the property. A bank with a row of mature oak trees borders Taylor Road at the site. A paved roadway is located on the southerly portion of the site, from Taylor Road to the 15-foot emergency access road for the subdivision on Tudor Way, which is located directly behind (east) of the site. Several cottonwoods also exist on the site.

The General Plan Designation of the site is "General Commercial" with a 4 on top of it indicating a "Special Land Use Policy Area-See General Plan Text." The zoning for the site is "General Commercial" (CG); the CG zone allows for Multi-Family Housing with a minor use permit.

2.4 PROJECT OBJECTIVES

The purpose of the project is to construct a mixed-use development consisting of a variety of residential and commercial uses:

- **Housing**. The project will provide a variety of housing types, including workforce housing and student housing. A component of affordable housing will also be provided; and,

- **Commercial Space.** The project will help fulfill commercial space demand in the Town as well as generate revenue for the Town through tax dollars by establishing a viable commercial complex along Taylor Road.

2.5 PROJECT DESCRIPTION

The project would result in the development of a mixed-use project on an 8.9-acre area on Taylor Road, approximately 650 feet northeast of Sierra College Boulevard. The project includes two different uses (Residential and Commercial) and would be constructed in three phases. See Figures 2-3 through 2-5

The front portion would be the commercial component, consisting of three separate buildings that face Taylor Road with a total square footage of approximately 20,240 square feet. These buildings would be either owner-occupied, single-storage office buildings or a combination of office and retail. The second portion would consist of residential use and would entail a 29-lot subdivision with owner-occupied homes ranging in size from 1,467 square feet to 1,800 square feet.

- 29 Single family residential lots
  - Phase I – 14 Lots with 12 carriage houses, 2 half-plex lots
  - Phase 2 – 25 lots with 6 carriage houses, 2 half-plex lots

  Total Single family residential lots = 29, 18 with carriage units, 4 half-plex lots
- 9 Commercial/retail lots
  - Phase 3 – 3 units (8,477± square-feet)
  - Phase 4 – 6 units (11,768± square-feet)

  Total Commercial lots = 20,240± square-feet floor area)

2.5.1 Phasing

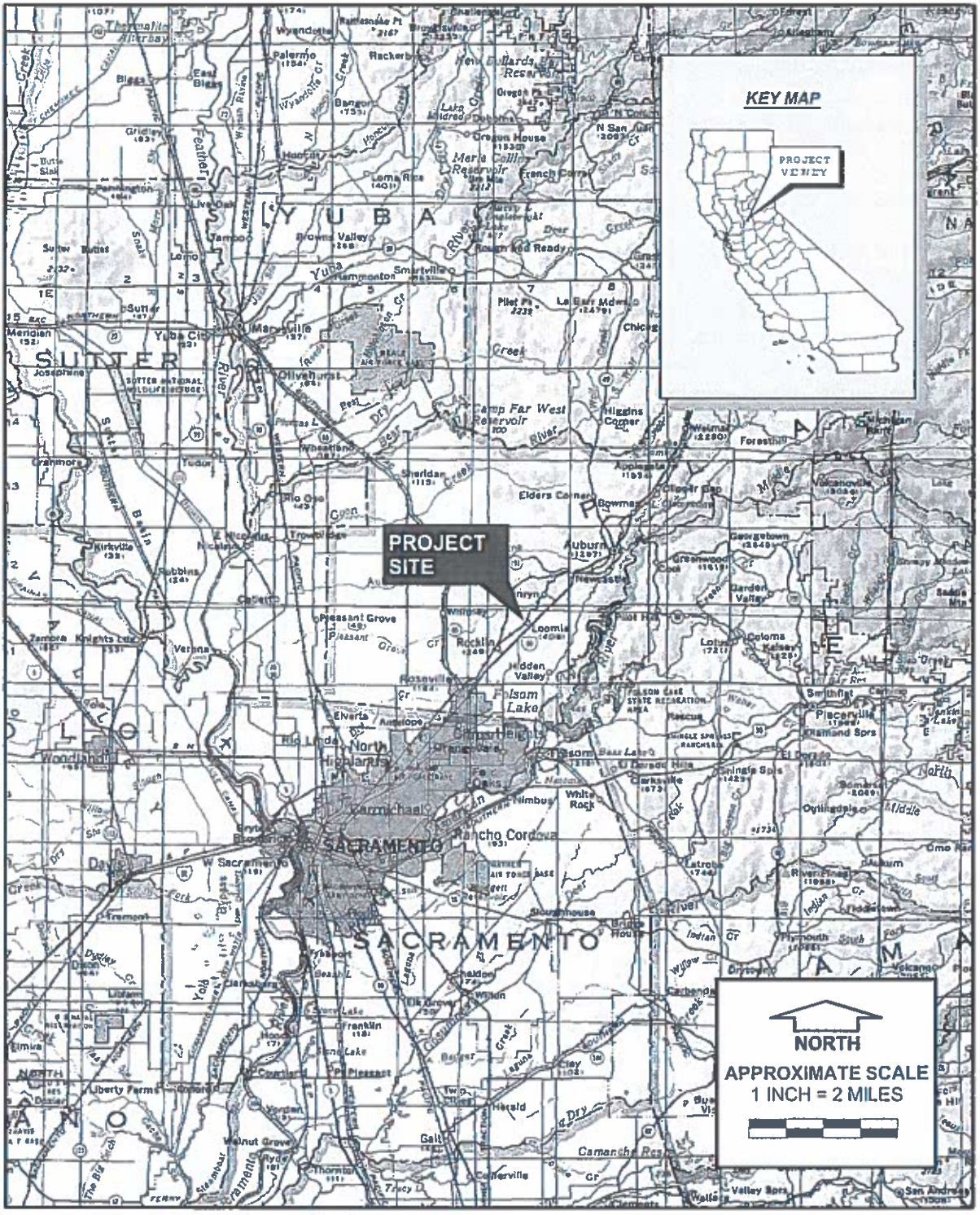
The developer proposes to construct the project in the following four phases:

- Phase I – 14 Lots with 12 carriage houses, 2 half-plex lots
- Phase 2 – 25 lots with 6 carriage houses, 2 half-plex lots
- Phase 3 – 3 units (8,477± square-feet)
- Phase 4 – 6 units (11,768± square-feet)

2.5.2 Affordable and Workforce Housing

Twenty-nine single-family residences are proposed. In addition, eighteen carriage units would be constructed above the garages of eighteen of the single-family homes, and four half-plexes would be constructed for a total of fifty-one units. These units would be 462 square-foot one bedroom/one bath units with a kitchen and an off-street parking space, which would be located adjacent to the garage per carriage unit. The carriage units would be used by either the primary homeowner, a family member, or rented out. The current rent would be in the $500 per month range.

December 2004
Project No. 0402-2861



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SITE VICINITY MAP

Taylor Road Mixed-Use Project

FIGURE 2-1

December 2004
Project No. 0402-2861

Source: TOPO! c 2001 National Geographic Holdings (www.topo.com)

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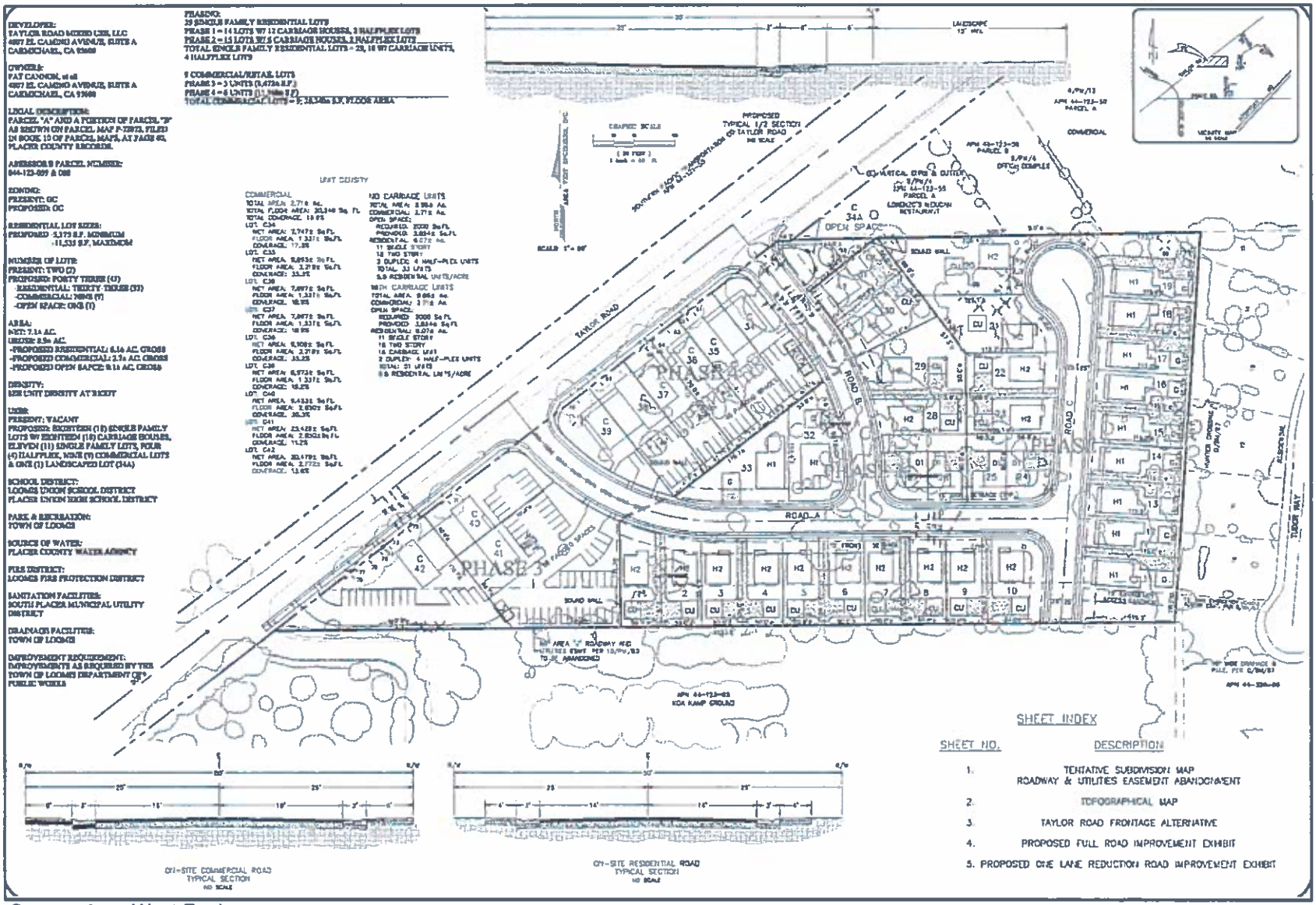
SITE LOCATION MAP

Taylor Road Mixed-Use Project

FIGURE 2-2

Project No. 0402-2861



Source: Area West Engineers

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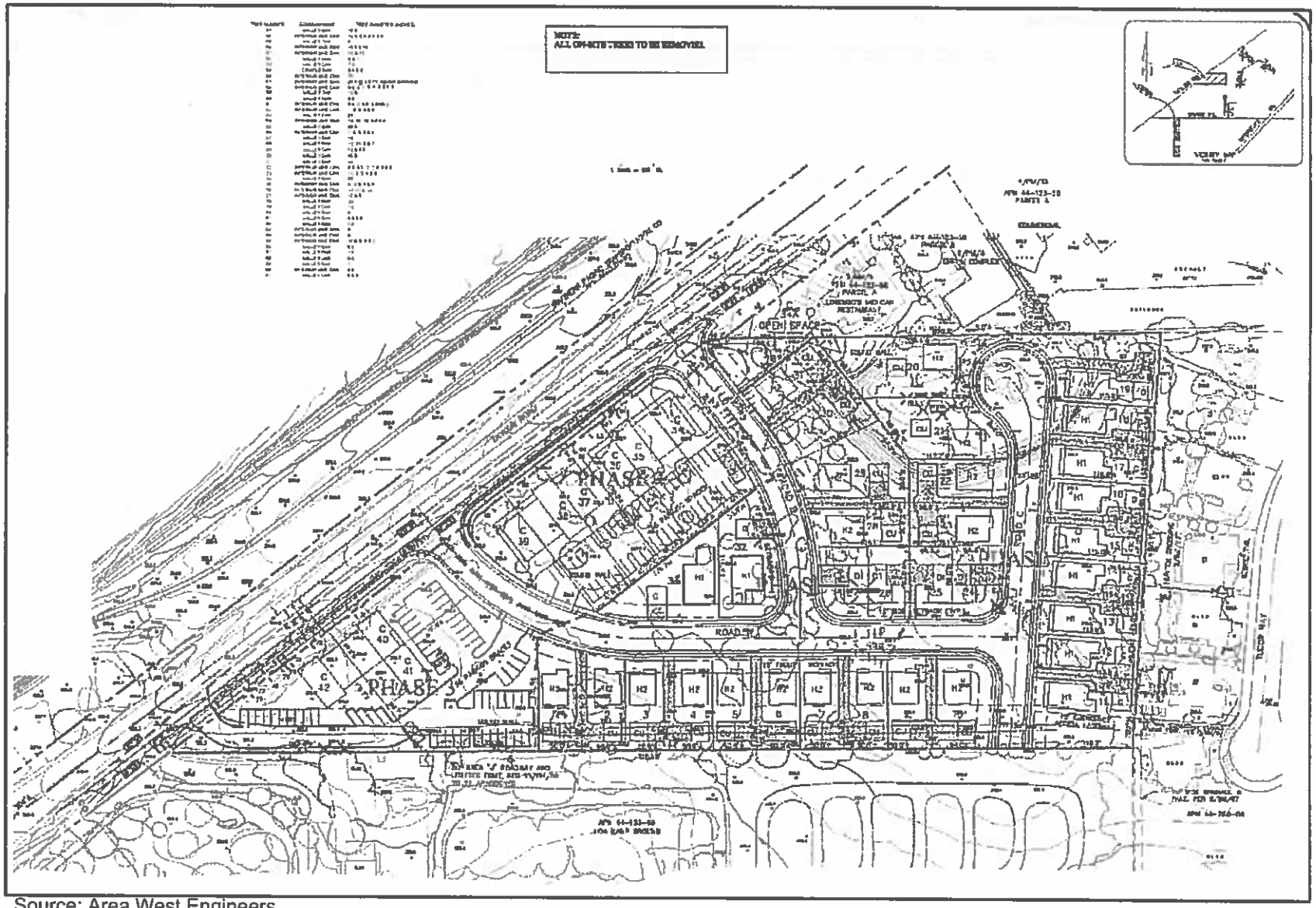
Taylor Road Mixed-Use Project

SITE PLAN

FIGURE 2-3



Source: Area West Engineers

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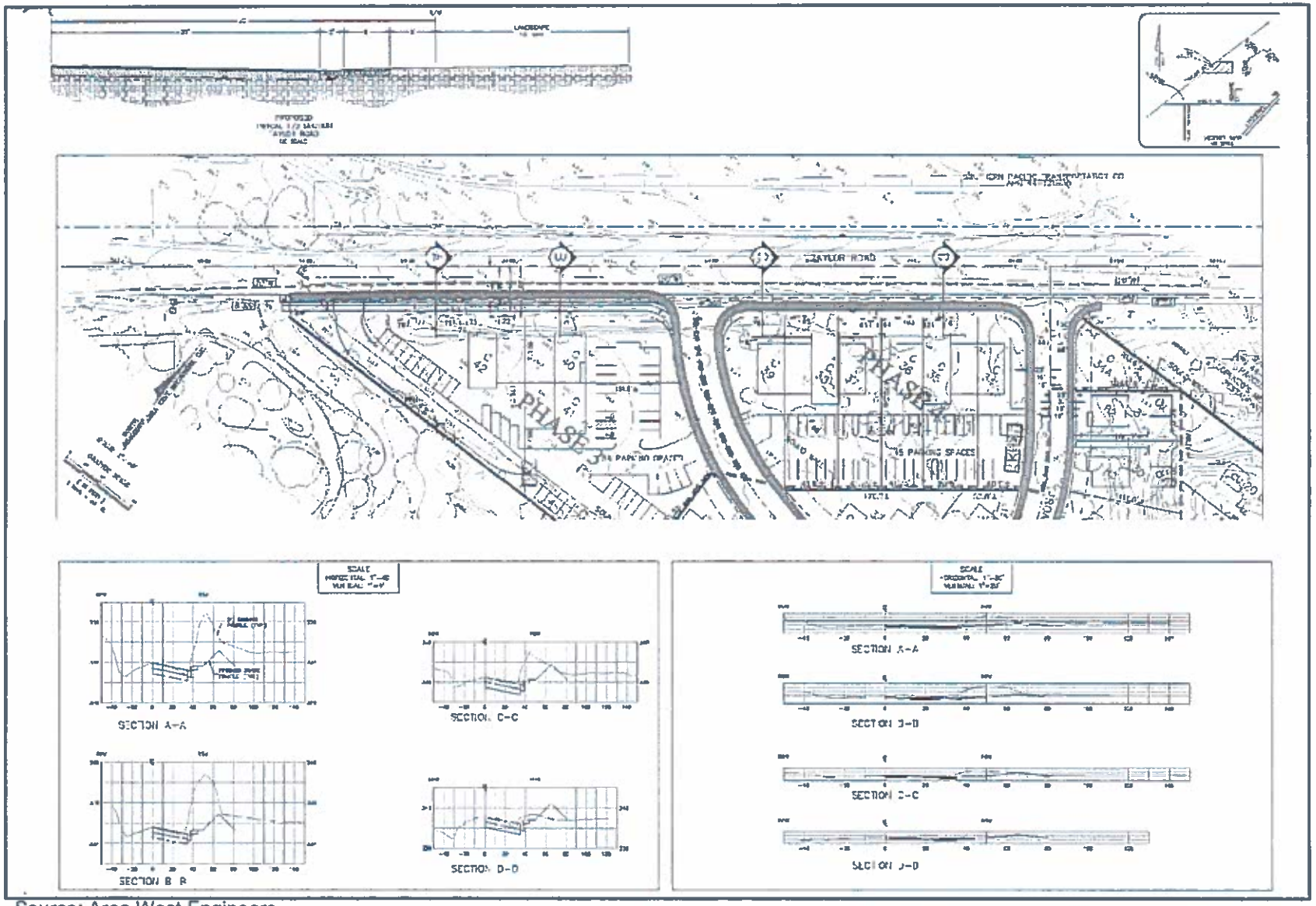
EXISTING TOPOGRAPHIC

FIGURE 2-4

Taylor Road Mixed-Use Project



Source: Area West Engineers

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Taylor Road Mixed-Use Project

ROAD IMPROVEMENTS

FIGURE 2-5

2.5.2 Project Entitlements

Several entitlements from the Town are necessary to implement the project. These are identified in Table 2-1.

Table 2-1. Summary of Entitlements

Entitlement	Entity	Description
• Conditional Use Permit (CUP) • Subdivision Map • Design Review	Tow of Loomis Planning Commission	A CUP, Subdivision Map, and Design Review are requested for the mixed-use project consisting of construction of the following: • 29 single-family homes • 18 carriage units • 20,240 square feet of commercial/retail space
• Grading Permit • Encroachment Permit • Final Map Approval • Improvement Plan • Stormwater Drainage Plan	Town of Loomis Engineer	A Grading Permit, Encroachment Permit, Final Map Approval, Improvement Plan, and Stormwater Drainage Plan are requested for the mixed-use project consisting of construction of the following: • 29 single-family homes • 19 carriage units • 20,240 square feet of commercial/retail space

2.5.3 Project Components

The project will include:

- 14 Single-family residential lots with 12 carriage houses, 2 half-plexes;
- 15 Single-family residential lots with 6 carriage houses, 2 half-plexes;
- 9 Commercial units/retail with a total area of approximately 20,240 square-feet; and,
- Open Space Lot

Lighting

Low impact, parking lot lighting will be provided in the commercial site using shielded, "shoe box" style lighting a maximum of 20' in height. Lighting within the residential area will be provided via lights on the individual homes and a standard streetlight at the intersection of Taylor Road. Such lighting would follow the Town's design guidelines.

Sound Wall/Berm

A sound wall with a berm in front would be constructed along the northwest corner of the project site to attenuate sound from trains traveling along the adjacent railroad tracks. This sound wall would range in height from 7 feet 4 inches to 8 feet 8 inches. A berm would be placed in front of the wall and landscaped with a variety of shrubs and climbing vines. The wall would also be used as a sign with "Taylor Road Estates" inscribed on it. See Figure 2-6.

Public Services

Prior to the recording of final maps and detailed improvement plans, funding mechanisms would be prepared and approved by the Town. The following is a summary of utility services for the project:

Water System. Treated water service would be provided by the Placer County Water Agency's pipeline located on Taylor Road. The applicant would be required to enter into a pipeline extension or service order agreement with the Agency to provide any on-site or off-site pipelines or other facilities needed to supply water for domestic or fire protection purposes and pay all fees and charges required by the Agency, including Water Connection Charges.

Wastewater. The project site is within the service area of the South Placer Municipal Utility District (SPMUD). The applicant would be required to design and construct all on-site and off-site facilities, which may be required as a result of the project. All work would need to conform to the Standard Specifications of SPMUD. The applicant would be required to pay all fees and charges required by the SPMUD.

Storm Drainage System. The applicant would design and install all on-site storm drainage facilities. These facilities would need to meet the requirements of the Placer County Flood Control and Water Conservation District.

Solid Waste Disposal. Solid Waste disposal service would be provided by the Auburn Placer Disposal Service.

Utilities. Electrical service and natural gas service would be provided by Pacific Gas and Electric.

2.5.4 Construction

Construction would occur for approximately 7 months and would involve grading with excavated material balanced onsite. Other site improvements would include access driveways and streets, parking areas, and landscaping.

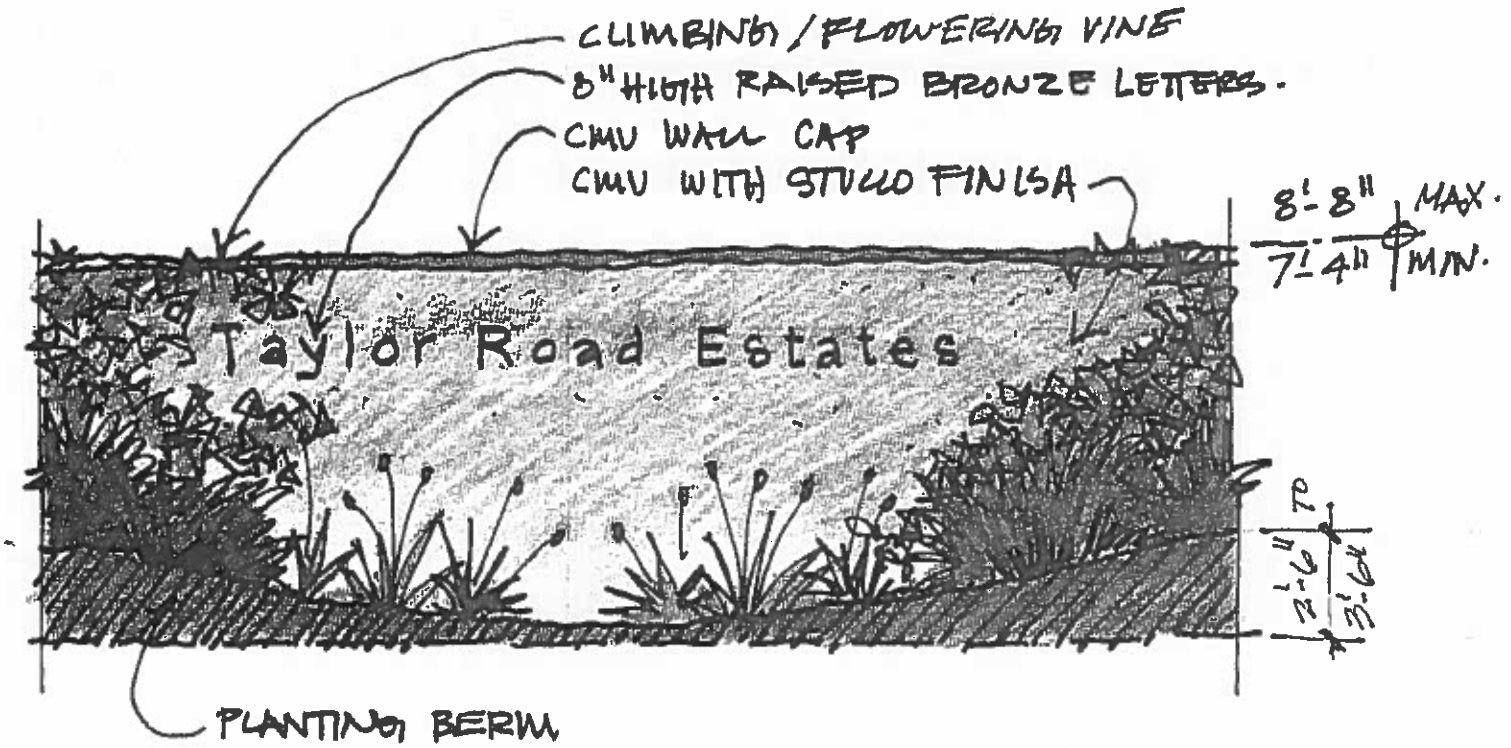
A total of about 29,000 cubic yards of material would be excavated at the site, with this material balanced onsite (i.e., excavated topsoil would be utilized onsite for landscaping purposes). An additional 5,800± cubic yards of topsoil may be added to the site from an offsite source. Approximately 4,400 tons of base material and asphalt would be added to the project site.

Equipment

Table 2-2 summarizes the equipment that would be used for the project. Approximately 4,864 heavy equipment hours would be required for the construction of the project.

Site Access and Staging Areas

The primary staging area would be in front of the project where the commercial/retail centers are proposed. All construction and staging would be done on site. Seed would be broadcast over the graded areas before the onset of rain to minimize erosion and sedimentation.



PROJECT SIGN / SOUND WALL

SOURCE: Patterson & Neff

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SOUND WALL/PROJECT SIGN
FIGURE 2-6

2.5.5 Operations

Twenty-nine single-family residences with eighteen carriage units, four half-plexes, and approximately 20,240 square feet of commercial/retail space will be constructed.

Trip Generation. Development of the project will result in new automobile trips in the study area. Table 2-3 presents published Institute of Transportation Engineers (ITE) trip generation rates for single-family residences. The number of trips generated by the project is presented in Table 2-4. As shown, the residential areas in the project may generate about 631 daily trips with 50 and 67 trips during the a.m. and p.m. peak hour, respectively.

Table 2-2. List of Equipment

Equipment	Hours
Cat D8 Dozer	400
Cat 623 Scraper	400
4000 gal. water truck	824
Cat 825 Compacter	480
Cat D6H Dozer	200
Cat 140G Grader	520
Cat 416 Backhoe	400
Roller TIR SD100	328
Cat 245 Excavator	400
Cat 960 Loader	200
John Deere 966G Loader	248
Case 570LXT Skip & Drag	400
Cedar Rapids CR551 Paver	32
Gomaco T3600 Curb and Gutter Machine	32
Total	**4,864**

The trip generation rates for planned commercial development were based on ITE rates for shopping centers. Because it is possible that one or more of the buildings could be developed with a convenience oriented retail use, the overall rate applicable to a 22,500 s.f. retail center was used. Use of this rate is relatively conservative but would account for the effects of high generating uses such as restaurants or convenience stores in some of the space. As shown in Table 2-4, the commercial space could generate 1,803 new daily trips, with 45 trips occurring in the a.m. peak hour and 164 trips occurring during the p.m. peak hour. If other uses, such as offices, utilize the space, the trips generated would be reduced.

Table 2-3. Trip Generation Rates

Description	Unit	Trips per Unit	AM Peak Hour			PM Peak Hour		
			Trips per Unit	% In	% Out	Trips per Unit	% In	% Out
Single Family Residences	Dwelling	9.57	0.75	25%	75%	1.01	65%	35%
Highway Service Commercial	ksf	114.5	2.84	60%	40%	10.40	48%	52

Table 2-4. Trip Generation Estimates

Description	Quantity	Daily	AM Peak Hour (7:00 to 9:00 a.m.)			PM Peak Hour (4:00 to 6:00 p.m.)		
		Trips	Trips	In	Out	Trips	In	Out
Residential	66 du's	631	50	12	38	67	45	22
Commercial	22.5 ksf	2,576	64	38	26	234	112	122
<Pass-By Trips @ 30%>		<773>	<19>	<11>	<8>	<70>	<34>	<36>
Net New Commercial Trips		1,803	45	27	18	164	78	86
Total New Traffic		**2,434**	**95**	**39**	**56**	**231**	**123**	**108**

3.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

3.1 AESTHETICS, LIGHT AND GLARE

Would the proposal:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state or county designated scenic highway or county designated scenic road?	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings which are open to public view?	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐

3.1.1 Environmental Setting

The Town of Loomis includes a variety of visually pleasing landscapes. Despite continuing growth, the wooded hills, grasslands, and agricultural areas surrounding the more urbanized core still retain a predominantly open, rural feeling. Loomis is still viewed as a small, pleasant town, with commercial areas of pedestrian scale, and an historic heritage.

The Town's visual character is widely appreciated by residents and visitors. However, recent growth and development has raised more community design issues than in the past, in part because of the significant growth pressures facing the region and the type of development projects that have been proposed in the Town.

Even though court decisions on the rights of communities to manage the planning and appearance of development have found that aesthetic regulation is appropriate, the adoption of design standards may be controversial. The Town is beginning to consider a new set of design guidelines based on the previously adopted Town Center Master Plan and the Design Guidebook from the Downtown Loomis Economic Implementation Program.

Sensitive Viewing Corridors

Several major roadways also function as sensitive viewing corridors. Although not particularly scenic, the view from Interstate 80 is the primary impression that travelers receive while passing through the Town. Other important viewing corridors include Taylor Road, Sierra College Boulevard, and Horseshoe Bar Road. Horseshoe Bar Road and portions of Sierra College

Boulevard traverse areas that still maintain a highly rural character. The two rail corridors also may be considered view corridors for passengers passing through on AMTRAK trains.

Light and Glare

Typical sources of light and glare include street lights, lighted parking lots, and lighted signs next to commercial structures. The football stadium at Del Oro High School is another primary source of light while games are in progress. At this time, no existing sources within the Town are perceived as a substantial nuisance or safety hazard to nearby residents or motorists.

3.1.2 Thresholds of Significance

An impact is considered significant if the assessment of aesthetic impacts involves qualitative analysis that is inherently subjective in nature. Different viewers react to viewsheds and aesthetic conditions differently. An impact is considered significant if the project were to result in one or more of the following conditions:

- Proposed development would adversely affect a viewshed from a sensitive public viewing area (roadways and public parks);
- New light and glare sources are introduced that substantially alter the nighttime lighting of the planning area;
- An existing identified visual resource is adversely altered or obstructed by potential development; or
- Development conflicts with visual resource guidelines in adopted Town and County documents.

3.1.3 Answers to Checklist Questions

Question A:

The site is within the Dry Creek Watershed near a tributary to Sucker Ravine. It has been leveled and was used as an orchard during the mid 1900's. The majority of the site is currently disturbed grassland, and it supports approximately 0.17 acres of jurisdictional Waters of the United States with riparian scrub drainage. It also maintains an artificially-supported swale, blackberry patches, and an excavated channel. The swale exists on the far east side of the project fed by urban runoff from neighboring properties during landscape irrigation. The excavated channel runs in a diagonal northwest and southeast direction along the eastern half of the parcel. A large rock outcropping and several significant oak trees are located on the northern portion of the property. A bank with a row of significant oak trees borders Taylor Road at the site. A paved roadway is located on the southerly portion of the site, from Taylor Road to the former 15-foot emergency access road for the subdivision on Tudor Way, which is located directly behind (east) of the site. Several cottonwoods also exist on the site.

Construction of the proposed residential and commercial buildings and related improvements would remove existing vegetation (including mature trees) and result in exposed soils during grading. Grading and removal of existing vegetation will represent a short-term change. Removal of vegetation, exposed soils, and the presence of construction equipment would result in short-term aesthetic impacts. Although there would be short-term impacts, the site is not considered a scenic vista; thus, impacts are considered less than significant.

Question B:

Several large mature oaks that are present along Taylor Road and in the northern portion of the property would be removed as part of the project. Also, there is a rock outcropping located in the northern portion of the site that would be impacted by the project. The removal of the trees and impacts to the rock outcropping are not considered significant impacts to aesthetics because Taylor Road is not a state scenic highway, but may be locally significant.

Question C:

The project site is primarily disturbed grassland with several oak trees located in the northern portion of the site and along Taylor Road. The site does not have any unique features or scenic qualities other than the rock outcroppings and oak trees. The site's surroundings are comprised of Taylor Road, Union Pacific lands and railroad tracks to the west, a KOA campground to the south, an existing subdivision to the east, and a restaurant, office complex, and commercial/industrial complex to the north. Construction of the proposed project would affect the visual character of the site due to the removal of the trees and rock outcropping; however, this would not result in a significant visual impact. The sound wall (see Figure 2-6) would be visible to motorists traveling on Taylor Road; however, considering the relatively small size of the sound wall, it would not significantly degrade the existing visual character of quality of the site and its surroundings.

Question D:

The project also includes limited lighting of streets and pedestrian ways. Such lighting could introduce new sources of light or glare.

3.1.4 Mitigation

Mitigation Measure AES-1. To reduce the impacts of on-site lighting, all new on-site security lighting shall be hooded and adjusted to reduce or eliminate illumination of surrounding properties and roadways. Such lighting shall be designed to fit with the Town's evolving design guidelines.

Mitigation Measure AES-2. The proposed homes and commercial buildings shall include the use of earth-tone paint and roof colors designed to blend with the surrounding semi-rural environment and reduce the potential for reflected light and glare.

Mitigation Measure AES-3. To mitigate the visual impact associated with the sound wall (see Figure 2-6) that would be constructed along Taylor Road, landscaping, including construction of berms and planting of shrubs, shall be performed. Trees shall also be planted along Taylor Road to mitigate the loss of large mature oaks, which would be removed as part of the project.

3.1.5 Finding

With the incorporation of mitigation, the proposed project would result in less than significant impacts to aesthetics, light, and glare.

3.2 AGRICULTURAL RESOURCES

Would the proposal result in impacts to: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the Rural Valley Lands Plan point evaluation system prepared by the County of Tulare as an optional model to use in assessing impacts on agriculture and farmland. Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigated**	**Less than Significant Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use or if the area is not designated on the Important Farmland Series Maps, would it convert prime agricultural land as defined in Section 51201(C) of the Govt. Code to non-agricultural use?	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or otherwise adversely affect agricultural resources or operations?	☐	☐	☒

3.2.1 Environmental Setting

Agricultural activities in and around Loomis began as early as the turn of the 19th century. Early pioneers, prior to the Donner party and the gold rush, planted fruit trees and eventually vineyards in the area now known as Loomis. The Loomis area was soon known as an excellent location to grow fruit. With the construction of the Central Pacific Railroad through the town in 1864, and a local train station, Loomis soon became a focal point as a fruit shed and shipping depot.

The Town is no longer a significant commercial agricultural area. Farming occurs on the southeast side of town, on rural residential parcels and in adjacent areas. Residents and visitors value the open views of farming activities in the surrounding landscape. There are no prime or important soils in Loomis that require significant conservation efforts (Town of Loomis 2000). The U.S. Conservation Service has characterized soil in the Loomis area in the general association of the Ahwahnee-Auberry-Sierra (AS) series. With slow infiltration rates and moderate erosion hazards, it is not considered a high quality agricultural soil. Nine parcels under three ownerships along Del Mar Road are currently under Williamson Act contracts, but would not be affected by the proposed land use designation changes.

3.2.2 Regulatory Setting

The Town of Loomis General Plan includes several policies regarding agricultural resources:

- The Town shall develop policies to protect agricultural operations on Williamson Act properties;
- Loomis shall allow property owners the "right-to-farm" their parcels through the protection and operation of agricultural land uses;
- Equestrian activities shall be protected by considering the effect that future density and design of residential development has in enhancing or inhibiting these activities; and,
- Loomis shall use zoning designations to protect properties used for agricultural operations from encroachment by urban development.

3.2.3 Answers to Checklist Questions

Questions A through C:

The project site is not shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Department of Conservation as prime farmland, nor is it under a Williamson Act contract, nor is the site in agricultural production. Therefore, the project will not result in the conversion of farmland to non-agricultural uses.

3.2.4 Finding

The project will not result in impacts to agricultural resources.

3.3 AIR QUALITY

Would the proposal:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐
d) Substantially alter air movement, moisture, or temperature, or cause any substantial change in climate?	☐	☐	☒
e) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒
f) Create objectionable odors affecting a substantial number of people?	☐	☐	☒

3.3.1 Environmental Setting

Climate and Meteorology

The Loomis planning area is located in the Sacramento Valley Air Basin, which is characterized by cool winters and hot, dry summers tempered by occasional westerly breezes from the Sacramento/San Joaquin Delta. Weather in the summer, spring, and fall is generally a result of the movement and intensity of the semi-permanent high pressure area located over the Pacific Ocean several hundred miles to the west. Winter weather is generally a function of the size and location of low pressure weather systems originating over the north Pacific Ocean.

The nearest climatic data station to the project area is the Auburn weather station. The average daily maximum temperature recorded at this station is 72.6 degrees for the period of 1951 to 1980 (NOAA, 1982). The hottest months are July and August, with average maximum daily temperatures of 93.4 and 92.0 respectively. The coolest month is January, with an average daily minimum temperature of 35.9 degrees. The average annual precipitation recorded at the Auburn station for the same period is 34.46 inches. Approximately 88 percent of this precipitation occurs between November and April.

Air pollution problems often develop when calm winds combine with a strong inversion layer (that is, relatively warm air overlying cooler air). Calm conditions are experienced about 9% of the time within the air basin, most often in the wintertime. On the other hand, spring and especially summer are marked by strong sea breezes. High temperatures in the valley often

create localized low pressure, which induces the "Delta" breezes through the gap at the Carquinez Strait, a natural cooling phenomenon. These sea breezes tend to disperse air pollutants and may prevent high ozone concentrations during the summer when high temperatures are likely to accelerate ozone formation. Table 3.3-1 presents the percentage occurrence of these airflow patterns.

Table 3.3-1. Sacramento Valley Airflow Patterns (%)

Pattern	Winter	Spring	Summer	Fall	Year
Full Sea Breeze	9	29	55	22	29
Calm	18	5	3	12	9
Other	73	66	42	56	62

Source: Town of Loomis, Sherwood Park Draft EIR, 1998

The topography of the Town is such that frequent inversions are not expected. However, meteorological conditions may occur such that the entire Sacramento Valley experiences a temperature inversion, facilitating the accumulation of ozone precursors and ozone formation.

Pollutants of Concern

There are many pollutants present in the atmosphere; however most are not a significant public health concern. In the Sacramento region, carbon monoxide and ozone are of particular concern. Pollutants of concern in the planning area are summarized below:

Ozone. O_3 is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections, and can cause substantial damage to vegetation and other materials. O_3 is a severe eye, nose, and throat irritant. It also attacks synthetic rubber, textiles, plants, and other materials. O_3 causes extensive damage to plants by leaf discoloration and cell damage.

O_3 is not emitted directly into the air, but is formed by a photochemical reaction in the atmosphere. O_3 precursors—reactive organic gases (ROG) and oxides of nitrogen (NO_x)—react in the atmosphere in the presence of sunlight to form O_3. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, O_3 is primarily a summer air pollution problem. The O_3 precursors ROG and NO_x are emitted by mobile sources and by stationary combustion equipment.

State standards for O_3 have been set for a 1-hour averaging time, whereas federal standards have been set for both a 1-hour averaging time and an 8-hour averaging time. The state 1-hour O_3 standard is 0.09 parts per million (ppm) (180 micrograms per cubic meter ($\mu g/m^3$)), not to be exceeded. The federal 1-hour O_3 standard is 0.12 ppm (235 $\mu g/m^3$), and the 8-hour O_3 standard is 0.08 ppm (157 $\mu g/m^3$), not to be exceeded more than three times in any 3-year period (California Air Resources Board, 2003).

Carbon Monoxide. CO is essentially inert to plants and materials but can have significant effects on human health. CO is a public health concern because it combines readily with

hemoglobin and thus reduces the amount of oxygen transported in the bloodstream. Effects on humans range from slight headaches to nausea to death.

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

State and federal CO standards have been set for both 1- and 8-hour averaging times. The state 1-hour standard is 20 ppm (23 mg/m^3), and the federal 1-hour standard is 35 ppm (40 mg/m^3). Both state and federal standards are 9.0 ppm (10 mg/m^3) for the 8-hour averaging period (California Air Resources Board, 2003).

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

The federal and state ambient air quality standard for particulate matter applies to two classes of particulates: $PM_{2.5}$ and PM_{10}.

The state PM_{10} standards are 50 $\mu g/m^3$ as a 24-hour average and 20 $\mu g/m^3$ as an annual arithmetic mean. The state $PM_{2.5}$ standards are 50 $\mu g/m^3$ as a 24-hour average and 12 $\mu g/m^3$ as an annual arithmetic mean. The federal PM_{10} standards are 150 $\mu g/m^3$ as a 24-hour average and 50 $\mu g/m^3$ as an annual arithmetic mean. The federal $PM_{2.5}$ standards are 15 $\mu g/m^3$ for the annual arithmetic mean and 65 $\mu g/m^3$ for the 24-hour average (California Air Resources Board, 2003).

Nitrogen Oxide (NO_X). Oxides of nitrogen (NO and NO_2) and reactive organic gases (ROG) participate in photochemical reactions that produce smog. These chemicals are considered to be precursors of ozone, as their reaction leads to its formation. High temperatures associated with internal combustion engines and industrial operations cause the formation of NO_X by combining atmospheric nitrogen and oxygen.

Existing Conditions

Both the U.S. Environmental Protection Agency (EPA) and the California Environmental Protection Agency, Air Resources Board (ARB) have established air quality standards based on consideration of the health and welfare of the general public. The project area is located in the Sacramento Air Basin. Table 3.3-2 provides the attainment status for each pollutant in the Sacramento Valley Air Basin. The basin is in nonattainment for ozone based on both state and federal standards. For PM_{10}, it is in nonattainment for the state standard only. The basin is in attainment for all other pollutants.

Table 3.3-2. Attainment Status

Pollutant	Federal Status	State Status
Ozone	Nonattainment	Nonattainment
CO	Nonattainment (Sacramento Urbanized Area only)	Unclassified
PM_{10}	Attainment	Nonattainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment

Source: Loomis General Plan Update EIR 2001.

3.3.2 Regulatory Setting

Federal

The Federal Clean Air Act (CAA), published in 1970 and amended twice thereafter (including the 1990 amendments), establishes the framework for modern air pollution control. The act directs the EPA to establish ambient air quality standards for six pollutants: O_3, CO, Pb, NO_2, PM, and SO_2. The standards are divided into primary and secondary standards: the former to protect human health within an adequate margin of safety, and the latter to protect environmental values, such as plant and animal life.

The primary legislation that governs federal air quality regulations is the CAA Amendments of 1990, which delegates primary responsibility for clean air to the EPA. The EPA develops rules and regulations to preserve and improve air quality, as well as delegating specific responsibilities to state and local agencies.

The EPA has established National Ambient Air Quality Standards (NAAQS) for criteria pollutants, which include CO, NO_2, SO_2, O_3, PM, and Pb.

State

Responsibility for achieving California's standards, which are more stringent than federal standards, is placed on the California Air Resources Board (CARB) and local air pollution control districts. These standards are to be achieved through district-level air quality management plans that will be incorporated into the State Implementation Plan (SIP). In California, the EPA has delegated authority to prepare SIPs to CARB, which, in turn, has delegated that authority to individual air districts.

CARB has traditionally established state air quality standards, maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emission inventories, collecting air quality and meteorological data, and approving SIPs.

Responsibilities of air districts include overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing

agricultural burning permits, and reviewing air quality-related sections of environmental documents required by CEQA.

The California Clean Air Act of 1988 (CCAA) substantially added to the authority and responsibilities of air districts. The CCAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts authority to implement traffic control measures (TCMs). The CCAA focuses on attainment of the California Ambient Air Quality Standards (CAAQS), which, for certain pollutants and averaging periods, are more stringent than the comparable federal standards.

The CCAA requires designation of attainment and nonattainment areas with respect to state ambient air quality standards. The CCAA also requires that local and regional air districts expeditiously adopt and prepare an air quality attainment plan if the district violates state air quality standards for CO, SO_2, NO_2, or O_3. These clean air plans are specifically designed to attain these standards and must be designed to achieve an annual 5% reduction in district-wide emissions of each nonattainment pollutant or its precursors. No locally prepared attainment plans are required for areas that violate the state PM_{10} standards.

The CCAA requires that the CAAQS be met as expeditiously as practicable but, unlike the federal CAA, does not set precise attainment deadlines. Instead, the act established increasingly stringent requirements for areas that will require more time to achieve the standards.

The CCAA emphasizes the control of "indirect and area-wide sources" of air pollutant emissions. It gives local air pollution control districts explicit authority to regulate indirect sources of air pollution and to establish TCMs. The CCAA does not define indirect and area-wide sources. However, Section 110 of the federal CAA defines an indirect source as;

> A facility, building, structure, installation, real property, road, or highway which attracts, or may attract, mobile sources of pollution. Such terms include parking lots, parking garages, and other facilities subject to any measure for management of parking supply.

TCMs are defined in the CCAA as "any strategy to reduce trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing vehicle emissions."

Recently enacted amendments to the CCAA impose additional requirements designed to ensure an improvement in air quality within the next 5 years. More specifically, local districts with moderate air pollution that did not achieve "transitional nonattainment" status by December 31, 1997, must implement the more stringent measures applicable to districts with serious air pollution.

Local

At the local level, air quality is managed through land use and development planning practices. These practices are implemented in Placer County through the general planning process. The Placer County Air Pollution Control District (PCAPCD) is responsible for establishing and

enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws.

The PCAPCD developed the Placer County 1991 Air Quality Attainment Plan, which addresses attainment of the California air quality standards for ozone. The purpose of this plan is to "provide a cost effective strategy for bringing Placer County's air quality into compliance with federal and state ambient air quality standards. The plan emphasizes a strategy for stationary source controls, measures for transportation control, programs for indirect source controls, and public education.

In 1994, to address attainment of the federal ozone standard, the Placer County APCD and other Sacramento-area districts adopted the Sacramento Area Ozone Attainment Plan.

3.3.3 Air Quality Assessment

To determine potential air quality impacts, estimates of future emission rates were determined through computer modeling using the URBEMIS2002 (version 7.5.0) model. Peak daily trip generation (summertime) were based on those contained in Table 2-4, which were developed by the Traffic Study prepared by KD ANDERSON Transporation Engineers. Construction was assumed to begin in summer 2005, with operation beginning in 2006.

3.3.4 Standards of Significance

Consistent with the methodology used in the Placer County, an impact to air quality would be considered significant if any of the following were to occur:

- Violate an air quality standard or contribute to an existing or projected air quality violation;
- Contribute substantially to an existing or projected air quality violation;
- Expose the public (especially schools, day care centers, hospitals, retirement homes, convalescent facilities and residences) to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people;
- Result in population growth that exceeds the growth estimates incorporated in the PCAPCD's Air Quality Attainment Plan (AQAP); or
- Generate emissions of 82 pounds per day for nitrogen oxide, reactive organic gas or particulate matter emissions and 550 pounds per day for carbon monoxide emissions.

3.3.5 Answers to Checklist Questions

Questions A:

Consistency with the Placer County 1991 Air Quality Attainment Plan is based on:

- Consistency of the project-related population increase with the projections of the Clean Air Plan;
- Rate of vehicle miles traveled as compared to the rate of population increase must be less than or equal to the assumptions of the Clean Air Plan; and,
- All land use and transportation control measures have been included in the project to the extent feasible.

Buildout under the Town of Loomis' General Plan Update is less than anticipated by regional growth forecasts, which form the basis for regional air quality planning efforts. The General Plan Designation of the site is "General Commercial" with a 4 on top of it indicating a "Special Land Use Policy Area-See General Plan Text." The zoning for the site is "General Commercial" (CG); the CG zone allows for Multi-Family Housing with a conditional use permit. Therefore, the housing and resulting population growth is consistent with the Town's General Plan, which was adopted in 2001. Furthermore, the mixed-use nature of the project and the may result in a reduction in vehicle trips by on-site residents, and a reduction in trip length by local residents.

Questions B and C:

The emissions of construction equipment and vehicles would be short-term and consist of fugitive dust and exhaust emissions. Construction would generally consist of grading, building construction, painting, paving, and landscaping. Construction equipment emissions were estimated using the construction emissions module of the California Air Resources Board URBEMIS2002 model (see Appendix B for documentation. Ton per year emissions values were converted to ton per quarter values based on the estimated length of the construction period (7 months). The emissions estimates assume implementation of standard dust control measures, including soil stabilizers, replacing ground cover, watering of exposed soil and reduced speed on unpaved roads. Estimates of emissions associated with the construction of the project are presented in Table 3.3-3.

Table 3.3-3. Construction Emissions Estimates

Parameter	ROG		NOx		CO		SO_2		PM_{10}	
Units	Pounds per Peak Day	Tons per Quarter	Pounds per Peak Day	Tons per Quarter	Pounds per Peak Day	Tons per Quarter	Pounds per Peak Day	Tons per Quarter	Pounds per Peak Day	Tons per Quarter
Emissions	132.61	5.97	83.88	3.77	94.82	4.27	0.019	0.00086	3.62	0.16
Thresholds	82		82		550		--	--	82	

Construction emissions would exceed the PCAPCD's daily threshold for ROG and NOx. ROG emissions are primarily a result of evaporation of solvents during painting. Calculations are based on default values of the URBEMIS2002 model, including the use of water-based low-VOC (250 grams per liter) coatings and application using an air sprayer (25 percent transfer efficiency).

Placer County is in non-attainment for ozone, therefore, project emissions would exacerbate the exceedance of the State 1-hour ozone standard.

The project would generate long-term emissions from motor vehicles, natural gas combustion (space and water heating, cooking), landscaping maintenance fuel combustion, and consumer productions (solvents, aerosol cans, etc.)

Emissions were calculated using the URBEMIS2002 model, assuming 2006 as the analysis year. Model output is documented in Appendix B. Trip reduction credit was included based on the mixed land use plan and land uses located within walking distance. Long-term emissions estimates are provided in Table 3.3-4. Long-term emissions estimates would exceed the 82 pounds per day ROG, and are considered significant.

Table 3.3-4. Estimated Long-term Emissions

Parameter	ROG		NOx		CO		SO_2		PM_{10}	
Units	Pounds per Peak Day	Tons per Quarter	Pounds per Peak Day	Tons per Quarter	Pounds per Peak Day	Tons per Quarter	Pounds per Peak Day	Tons per Quarter	Pounds per Peak Day	Tons per Quarter
Emissions	100.22	4.50	4.70	0.21	233.64	10.51	0.62	0.028	35.79	1.61
Thresholds	82		82		550		--	--	82	2.5

Question D:

None of the proposed project components would result in a substantial alteration of air movement, moisture, or temperature, or cause any change in local or regional climate conditions.

Question E:

Project-related emissions would increase pollutant concentrations at sensitive receptors in the project vicinity. Due to relatively good wind-induced dispersion, project-related emissions are not expected to expose sensitive receptors to substantial pollutant concentrations.

Question F:

Diesel exhaust odors may be considered objectionable to adjacent residents. Odor generation would be limited to diesel exhaust associated with construction equipment, primarily during a few weeks of site grading. These odors are not new to the project area, as these odors are generated by truck traffic on the adjacent Taylor Road. However, the project would result in a short-term increase in these odors. Due to the short duration of construction, diesel exhaust odors are not expected to result in a nuisance, or otherwise affect a substantial number of people.

3.3.6 Mitigation

Mitigation Measure AQ-1. The following Regulation VII Control Measures shall be fully implemented during the construction period to reduce PM_{10} impacts to a level of less than significant.

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover;

- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant;

- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking;

- When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained;

- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. *(The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.) (Use of blower devices is expressly forbidden.);*

- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant;

- Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday; and,

- Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.

Mitigation Measure AQ-2. This measure focuses on reducing ozone formation from project-related ozone precursors, NOx and ROG. The primary source of these emissions would be ROG released during application of paint to the proposed residential and commercial structures. The rate of ozone formation is greatest during periods of clear weather, low winds and high temperatures. One of the following measures shall be implemented to prevent exceedances of the State 1-hour ozone standard:

- Paint shall not be applied from May through September; OR

- Paint emissions shall not exceed the 185 pound per day significance threshold (88 gallons per day based on 2.08 pounds VOC per gallon); AND

- Paint emissions shall not exceed the 2.5 ton per quarter significance threshold (2,403 gallons per quarter based on 2.08 pounds VOC per gallon).

The use of pre-coated materials, or naturally colored materials and high transfer efficiency painting methods (e.g., HVLP, brush/roller, etc.) to the maximum extent feasible would reduce the amount of paint used and facilitate compliance with the thresholds.

3.3.7 Finding

With the incorporation of mitigation, impacts to air quality would be considered less than significant.

3.4 BIOLOGICAL RESOURCES

Would the project:

Issues, Discussion and Supporting Information Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or indirectly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect, on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect 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 filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially 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 wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

3.4.1 Setting

The proposed project site is located within the Town of Loomis and is contiguous with urban development to the north, south, and east. Significant features on the project site include several scattered mature oak and other native tree species (i.e., Fremont cottonwood, foothill pine); a patch of riparian scrub habitat within the northern part of the site; a swale on the eastern edge of the property and on the eastern half of the proposed development area; and an excavated ditch that transects the property in a northwest to southeast direction.

This section describes the botanical and wildlife resources that are known to occur or likely to occur within the project site. Biological resources discussed in this section include plants, wildlife and special-status species. Information is based on:

- Area West Engineers, 1997. Oak Tree Plaza Wetland Delineation. Prepared for Taylor's Investment Company;
- Area West Environmental, 2004. Biological Resources Report for the Oak Tree Plaza Project. Prepared for John Deterding Company;
- Kemper Tree Care, 2004. Arborist Report for Taylor Road Project. Prepared for Patrick Cannon Investments, Inc; and,
- United States Army Corps of Engineers. Letter dated January 6, 2005. Verification of Wetland Delineation.
- A reconnaissance-level field survey conducted by Padre biologists on December 2, 2004

3.4.2 Field Surveys

Reconnaissance-level field surveys were conducted to assess biological resources and to determine the likelihood of occurrence for special-status species or sensitive/regulated habitats on the project site. Prior to conducting the field survey, a list of special-status species with the potential to occur on-site was compiled using the California Department of Fish and Game (CDFG) and the California Natural Diversity Data Base (CNDDB). During the reconnaissance-level survey, Padre biologists focused on those species that had the greatest potential to occur within the project site, however low, based on the habitat requirements of the species and existing habitat conditions within the property.

Plant Communities and Wildlife Habitats

The following is a brief description of those vegetative habitats present within the proposed project area, and wildlife observed or typically associated with those habitats. Figure 3.4-1 provides a map of the plant communities on the project site.

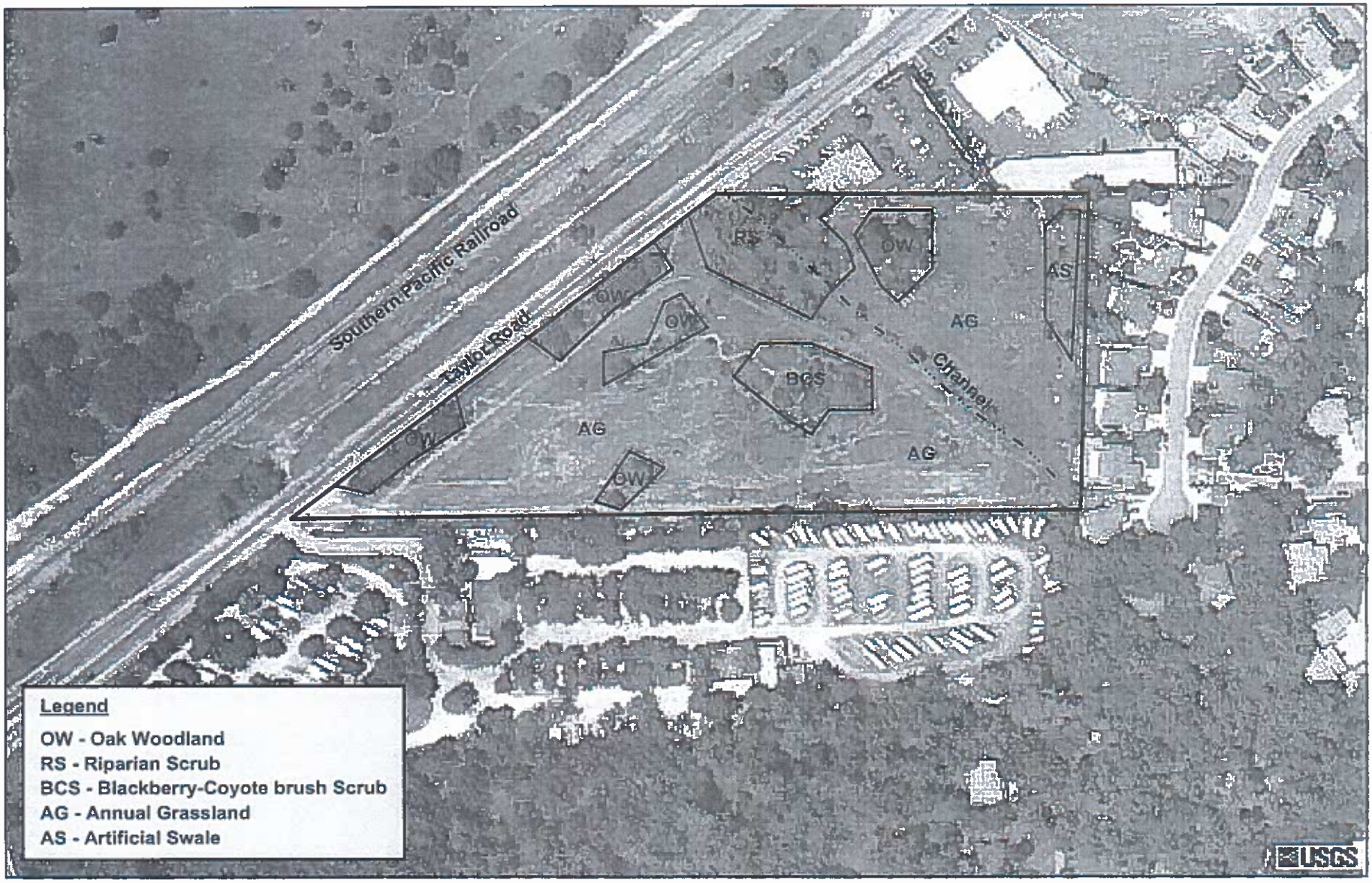
Non-native Annual Grassland. Non-native annual grassland covers the majority of the project area. This habitat is primarily comprised of non-native species and is not a sensitive community. This habitat type is variable in species composition depending upon soils, aspect, slope, hydrology, disturbance regime, prior uses, and species recruitment opportunity. The site is heavily dominated by non-native species, including annual grasses such as ripgut brome (*Bromus diandrus*), Italian ryegrass (*Lolium multiflorum*), wild oats (*Avena fatua*), and forbs such as yellow star-thistle (*Centaurea solstitialis*), spring vetch (*Vicia sativa*), and long-beaked filaree (*Erodium botrys*). Native forbs, such as California poppy (*Eschscholzia californica*) are also common, and there are several patches of iris-leaved rush (*Juncus oxymerus*) scattered throughout the site. Table 3.4-1 is a list of vascular plants observed on the project site.

Grasslands often provide important habitat features for a variety of wildlife species. Raptors, such as red-tailed hawk (*Buteo jamaicensis*), white-tailed kite (*Elanus leucurus*), common barn owl (*Tyto alba*), and American kestrel (*Falco sparverius*), commonly use open grassland areas for foraging purposes, while species such as western meadowlark (*Sturnella neglecta*) use open grassland areas for nesting. Other species that utilize grassland habitats include western fence lizard (*Sceloporus occidentalis*), Pacific gopher snake (*Pituophis melanoleucus catenifer*), black-tailed hare (*Lepus californicus*), and Botta's pocket gopher (*Thomomys bottae*). Table 3.4-2 is a list of wildlife species observed on the project site.

During recent surveys, Padre biologists observed that the non-native annual grassland habitat within the proposed development area had been disturbed by disking, which was conducted for fire prevention purposes. It was also observed that the habitat has been historically impacted by human (e.g., bicycles, foot traffic, and motor vehicles) and pet intrusion. The only species other than birds observed within this habitat during the survey period included domestic dog (*Canis familiaris*) and evidence of Botta's pocket gopher, California vole (*Microtus californicus*), raccoon (*Procyon lotor*), and fox squirrel (*Sciurus niger.*).

Valley Oak – Interior Live Oak Woodland. A mixed oak woodland remnant occurs within the northern portion of the property and adjacent to Taylor Road, and consists primarily of interior live oak (*Quercus wislizenii*) and valley oak (*Quercus lobata*) (Figure 3.4-1). See Figure 3.4-2, Photograph C for a view of typical oak woodland on the project site. In addition, several scattered oaks are located within the property boundaries. This habitat typically supports a wide diversity of wildlife due to the availability of important habitat features, such as nesting sites, escape and thermal cover, food, and dispersal corridors. Common species of wildlife expected to occur within the vicinity of the habitat include, but are not limited to, western gray squirrel, acorn woodpecker (*Melanerpes formicivorous*), California towhee (*Pipilo crissalis*), western scrub-jay (*Aphelocoma californica*), red-shouldered hawk (*Buteo lineatus*), white-breasted nuthatch (*Sitta carolinensis*), and yellow-billed magpie (*Pica nuttallii*). Common wildlife species observed within the vicinity of this habitat included American crow (*Corvus brachyrhynchos*), golden-crowned sparrow (*Zonotrichia atricapilla*), mourning dove (*Zenaida macroura*), bushtit (*Psaltriparus minimus*), oak titmouse (*Baeolophus inornatus*), and house finch (*Carpodacus mexicanus*).

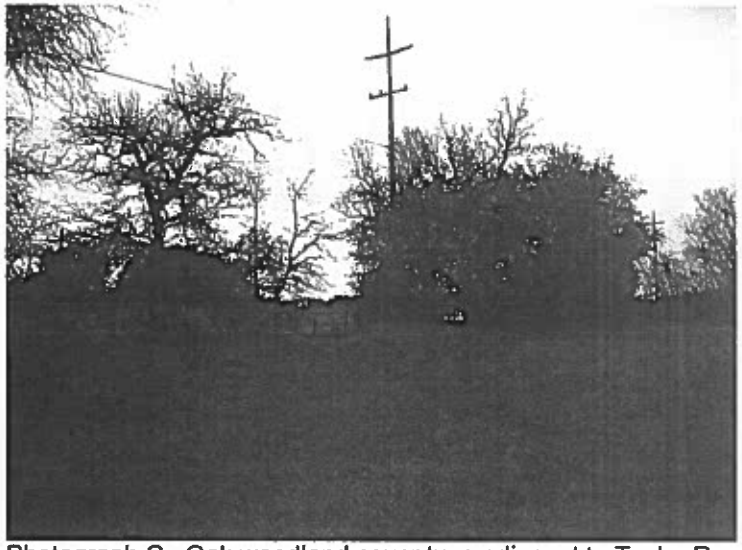
Riparian Scrub. Remnant stands of riparian scrub habitat occurs within the northwest portion of the property along a drainage that receives runoff from the adjacent road (Figure 3.4-1). See Figure 3.4-2, Photograph D for a view of typical riparian scrub habitat on the project site. Vegetation consists of Himalayan blackberry *(Rubus discolor*), a few scattered sandbar willows (*Salix sessilifolia*), and Fremont cottonwood (*Populus fremontii*). Valley oaks also occur along the drainage. Wildlife expected to occur within the riparian scrub habitat includes several of the species identified within the valley oak – coast live oak/grassland habitat due to the relatively small area of willow scrub and close proximity to adjacent oak habitat.



VEGETATIVE COVER TYPES
FIGURE 3.4-1

Photograph A. Coyote brush and Himalayan blackberry scrub cover type occurs in the center of the property.

Photograph B. Small channel through the center of the property. The channel supports wetland vegetation and riparian corridor.



Photograph C. Oak woodland cover type adjacent to Taylor Road.

Photograph D. Riparian scrub cover type occurs on the northwestern portion of the channel.

Table 3.4-1. Vascular Plant Species Observed at the Project Site

FAMILY Common Name	Scientific Name	Growth Form[1]	Hydrophtyic Status[2]
PINACEAE (Pine Family)			
Gray pine	*Pinus sabiniana*	T	NI
ANACARDIACEAE (Sumac or Cashew Family)			
Poison oak	*Toxicodendron diversilobum*	S	NI
ASTERACEAE (Sunflower Family)			
Yarrow	*Achillea millefolium*	H	
Mayweed	*Anthemis cotula*	H	FACU
Coyote brush	*Baccharis pilularis*	S	NI
Mule fat	*Baccharis salicifolius*	S	FACW
Yellow star-thistle	*Centaurea solstitialis*	H	NI
Chicory	*Cichorium intybus*	H	NI
Bull thistle	*Cirsium vulgare*	H	FACU
Weedy cudweed	*Gnaphalium luteo-album*	H	FACW
Bigelow's sneezeweed	*Helenium bigelovii*	H	OBL
Telegraph weed	*Heterotheca grandiflora*	H	UPL
Cat's-ear	*Hypochaeris glabra*	H	NI
Prickly lettuce	*Lactuca serriola*	H	FAC
Hairy Hawkbit	*Leontodon taraxacoides ssp.taraxacoides*	H	FACU
Tarplant	*Madia sp*	H	
Bristly ox-tongue	*Picris echioides*	H	FAC
Common groundsel	*Senecio vulgaris*	H	NI
Field sow-thistle	*Sonchus arvensis*	H	FACU
BIGNONIACEAE (Bignonia Family)			
Common catalpa	*Catalpa bignonioides*	T	NL
BRASSICACEAE (Mustard Family)			
Mediterranean mustard	*Hirschfeldia incana*	H	NI
Wild radish	*Raphanus sativus*	H	UPL
CARYOPHYLLACEAE (Pink Family)			
Mouse-ear chickweed	*Cerastium glomeratum*	H	FACU
Sand spurry	*Spergularia rubra*	H	FAC-
Common chickweed	*Stellaria media*	H	FACU
CONVOLVULACEAE (Morning-Glory Family)			
Bindweed	*Convolvulus arvensis*	H	NI
FABACEAE (Legume Family)			
White sweetclover	*Melilotus alba*	H	FACU+
Dwarf sack clover	*Trifolium depauperatum*	H	FAC-
Shamrock	*Trifolium dubium*	H	FACU
Rose clover	*Trifolium hirtum*	H	UPL
White clover	*Trifolium repens*	H	FACU+
Spring vetch	*Vicia sativa*	H	FACU
FAGACEAE (Oak Family)			
Interior live oak	*Quercus wislizenii*	T	NI
Valley oak	*Quercus lobata*	T	FAC

Table 3.4-1. Vascular Plant Species Observed at the Project Site

FAMILY Common Name	Scientific Name	Growth Form[1]	Hydrophtyic Status[2]
GERANIACEAE (Geranium Family)			
Long-beaked storksbill	*Erodium botrys*	H	UPL
Cut-leaf geranium	*Geranium dissectum*	H	UPL
LAMIACEAE (Mint Family)			
Pennyroyal	*Mentha pulegium*	H	OBL
Vinegar weed	*Trichostema lanceolatum*	H	NI
ONAGRACEAE (Evening Primrose Family)			
Dense-flowered spike-primrose	*Epilobium densiflorum*	H	OBL
Brook spike-primrose	*Epilobium torreyi*	H	FACW
Fireweed	*Epilobium sp.*	H	
PAPAVERACEAE (Poppy Family)			
California poppy	*Eschscholzia californica*	H	UPL
PLANTAGINACEAE (Plantain Family)			
English plantain	*Plantago lanceolata*	H	FAC
POLYGONACEAE (Buckwheat Family)			
Common knotweed	*Polygonum arenastrum (P. aviculare)*	H	FAC
Sheep sorrel	*Rumex acetocella*	H	FAC-
Curly dock	*Rumex crispus*	H	FACW-
PRIMULACEAE (Primrose Family)			
Scarlet pimpernel	*Anagallis arvensis*	H	FAC
RHAMNACEAE (Buckthorn Family)			
California coffeeberry	*Rhamnus californica ssp. californica*	S	NI
ROSACEAE (Rose Family)			
Lady's mantle	*Alchemilla arvensis*	H	NL
Plum	*Prunus domestica*	T	NL
Almond	*Prunus dulcis*	T	UPL
Floribunda rose	*Rosa floribunda hybrid*	S	NL
Himalayan blackberry	*Rubus discolor*	V	FACW
SALICACEAE (Willow Family)			
Fremont's cottonwood	*Populus fremontii*	T	FACW
Yellow willow	*Salix lutea*	T	OBL
Sandbar willow	*Salix sessilifolia*	S	FACW
SCROPHULARIACEAE (Figwort Family)			
Woolly mullein	*Verbascum thapsus*	H	NI
ZYGOPHYLLACEAE (Caltrop Family)			
Puncture weed	*Tribulus terrestris*	H	NL
CYPERACEAE (Sedge Family)			
Tall cyperus	*Cyperus eragrostis*	H	FACW
JUNCACEAE (Rush Family)			
Iris-leaved rush	*Juncus* oxymeris	H	FACW
POACEAE (Grass Family)			
Silver hairgrass	*Aira carypohylla*	G	NL
Slender wild oat	*Avena barbata*	G	NL
Wild oat	*Avena fatua*	G	NI
Little quaking grass	*Briza minor*	G	FACW

Table 3.4-1. Vascular Plant Species Observed at the Project Site

FAMILY Common Name	Scientific Name	Growth Form[1]	Hydrophtyic Status[2]
Ripgut grass	*Bromus diandrus*	G	NI
Soft cheat	*Bromus hordeaceus*	G	FACU
Hairy chess	*Bromus japonicus*	G	FACU
Bermuda grass	*Cynodon dactylon*	G	FAC
Dogtail grass	*Cynosurus echinatus*	G	
Common velvet grass	*Holcus lanatus*	G	FAC
Farmer's foxtail	*Hordeum murinum ssp. leporinum*	G	UPL
Foxtail barley	*Hordeum murinum ssp. Murinum*	G	UPL
Italian ryegrass	*Lolium multiflorum*	G	FAC
Perennial ryegrass	*Lolium perenne*	G	FAC
Dallis grass	*Paspalum dilatatum*	G	FAC
Annual bluegrass	*Poa annua*	G	FACW-
Rabbitsfoot grass	*Polypogon monspeliensis*	G	FACW+
Medusa-head	*Taeniatherum caput-medusae*	G	NL
Small fescue	*Vulpia microstachys ssp. microstachys*	G	NL
Rattail fescue	*Vulpia myuros*	G	FACU

Growth Form Codes[1]		Hydrophytic Status[2]	
T	Tree	OBL	Obligate wetland plant
S	Shrub	FACW	Facultative wet plant
H	Herbaceous	FAC	Facultative plant
G	Grass	UPL	Upland plant
V	Vine	NI	Not indicated
		NL	Not listed

Table 3.4-2. Wildlife Species Observed at the Project Site

FAMILY Common Name	Scientific Name	Protected Status[1]
BIRDS		
Phasianidae		
Ring-necked pheasant	*Phasianus colchicus*	
Columbidae		
Mourning dove	*Zenaida macroura*	M
Tyrannidae		
Black phoebe	*Sayornis nigricans*	M
Corvidae		
Western scrub-jay	*Aphelocoma californica*	M
Yellow-billed magpie	*Pica nuttalli*	M
American crow	*Corvus brachyrhynchos*	M
Aegithalidae		
Bushtit	*Psaltriparus minimus*	M
Mimidae		

Table 3.4-2. Wildlife Species Observed at the Project Site

FAMILY Common Name	Scientific Name	Protected Status[1]
Northern mockingbird	*Mimus polyglottos*	M
Emberizidae		
California towhee	*Pipilo crissalis*	M
Golden-crowned sparrow	*Zonotrichia atricapilla*	M
White-crowned sparrow	*Zonotrichia leucophrys*	M
Song sparrow	*Melospiza melodia*	M
Fringillidae		
House finch	*Carpodacus mexicanus*	M
MAMMALS		
Geomyidae		
Botta's pocket gopher	*Thomomys bottae*	

Protected Status[1]

FE	Federally Endangered
FT	Federally Threatened
CE	California Endangered
CT	California Threatened
FSC	Federal Species of Concern
CSSC	California Species of Special Concern
M	Federal Migratory Bird Treaty Act

Blackberry/Baccharis Scrub. This habitat occurs near the center of the project area. It consists primarily of Himalayan blackberry and some coyote brush (*Baccharis pilularis*). This vegetation type provides habitat for common species that also occur within the previously mentioned habitats (Figure 3.4-1). See Figure 3.4-2, Photograph A for a view of typical blackberry/Baccharis scrub habitat on the project site.

Regional Special-status Species

Regional special-status species are plants and wildlife species that are listed as either endangered or threatened under the Federal or California Endangered Species Act, considered rare under the California Native Plant Protection Act, or considered sensitive (but not legally listed) by resource agencies, professional organizations, and the scientific community.

Based on information obtained by the CNDDB query, previously conducted surveys, and a literature review, a preliminary list was compiled of special-status species known to occur in the region. Each regional special-status species was evaluated in terms of its likelihood to occur within the proposed project site based on the species' known distribution, habitat requirements, and the results of previous surveys. Species that are known to occur, or have the potential to occur within the vicinity of the project site, are discussed in further detail below.

Plants. Special-status plant species that were determined to have the potential to occur within the property were based on a query of the CNDDB and California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California,* and previously conducted

surveys. As a result of the database review, several plant species are known to occur within the project area. However, based on the existing habitat, elevation, nearest known occurrence locations, and soils within the project site, only stink-bells (*Fritillaria argestis*) actually have the potential, however low, to occur within the project site.

As surveys conducted by Padre and other organizations were performed during the fall and winter, an additional survey should be conducted during the plants blooming period, which is from March-April, in order to determine the presence of this species on site.

Wildlife. Special-status wildlife species determined to have the potential to occur within the vicinity of the property were also based on a query of the CNDDB. As a result of the database review, seven wildlife species are known to occur within the vicinity of the property. However, based on the reconnaissance-level survey conducted by Padre, a review of other regional environmental documents, professional experience, and previous biological surveys conducted by Padre in the area, it was determined that only the following wildlife species actually have the potential, however low, to occur within the project site:

- Swainson's hawk (*Buteo swainsoni*)
- White-tailed kite (*Elanus leucurus*)
- Cooper's hawk (*Accipiter cooperii*)
- Western burrowing owl (*Athene cunicularia hypugea*)
- California horned lark (*Eremophila alpestris actia*)
- Loggerhead shrike (*Lanius ludovicianus*)
- Grasshopper sparrow (*Ammodramus savannarum*)

Upon completion of the field survey conducted by Padre, no special-status wildlife species were observed within the property. The following is a brief description of those species listed above and the potential for each species to occur within the property.

Swainson's hawk *(Buteo swainsoni)*. This species is listed as state Threatened. The Swainson's hawk places its nest in tall trees and forages in grasslands. It was not observed during the field survey. Although suitable nesting habitat for this species occurs within the project area, the grassland foraging habitat is minimal and intense usage of this area by humans would make it unlikely that Swainson's hawk would breed on site. This species has the potential to occur as a forager within grassland habitat located in the project site.

Cooper's hawk *(Accipiter cooperii)*. This species is a California Species of Special Concern. It nests and forages in woodlands and can be found breeding in areas close to human habitation. Nests are typically constructed in treetops with dense foliage. Cooper's hawks were not observed during the field survey, however, suitable nesting and foraging habitat for this species occurs within the project area.

White-tailed kite *(Elanus leucurus)*. This species is considered a California Fully Protected species during its nesting period. The white-tailed kite typically nests in woodlands, and forages in grasslands, meadows, and marshes. Nests are typically constructed in treetops with dense foliage. White-tailed kites were not observed during

the field survey. Although suitable nesting habitat for this species occurs within the project area, the grassland foraging habitat is minimal. This species has the potential to occur as a forager within grassland habitat located in the project site.

Western burrowing owl *(Athene cunicularia hypugea)*. This species is considered a California Species of Special Concern. Burrowing owls are found in open habitats such as grasslands and deserts and typically nest in mammal burrows. In California, the California ground squirrel (*Spermophilus beecheyi*) is the primary provider of nest sites for burrowing owls. Burrowing owls were not identified within the project site during the survey conducted by Padre and no ground squirrels or burrows were observed. The potential for this species to occur within the project site is considered low.

Loggerhead shrike *(Lanius ludovicianus)*. This species is considered a California Species of Special Concern during its nesting period. Loggerhead shrikes are found in open habitats with scattered trees or fence-posts and typically nest in dense shrubs or trees. Loggerhead shrikes were not identified within the project site during the survey; however, suitable nesting and foraging habitat for this species exists within the project site. The potential for this species to occur within the project site is considered moderate.

California horned lark *(Eremophila alpestris actia)*. This species is considered a California Species of Special Concern. It inhabits shortgrass plains, fields, and barren areas. Habitat for this species within the project area is limited due to the dense nature of the vegetation and it was not observed on site during the field survey. The potential for this species to occur within the project site is considered low to moderate.

Grasshopper sparrow *(Ammodramus savannarum)*. This species is considered a California Species of Special Concern. It breeds and forages in grasslands. At the time of the survey, no grasshopper sparrows were observed; however, since most populations of grasshopper sparrows are migratory, they could potentially occur here in the breeding season. A survey should be conducted in spring to search for breeding grasshopper sparrows. The potential for this species to occur within the project site is considered moderate.

Other protected bird species. A number of bird species potentially occurring on the project site, including those species discussed above, are protected under the provisions of the Federal Migratory Bird Treaty Act of 1918 (MBTA). As previously discussed, existing oak and willow scrub habitat within the project site provides nesting opportunities for raptors and several migratory bird species. Additionally, non-native annual grassland habitat provides suitable nesting habitat for a variety of ground-nesting migratory bird species. Therefore, the potential for nesting migratory bird species to occur within the proposed project site is considered to be high.

3.4.3 Answers to Checklist Questions

Question A:

Development of the project site could potentially result in the mortality of terrestrial species, particularly less mobile species such as reptiles and small mammals. More mobile species are likely to be displaced to adjacent habitat areas, but may experience poor survival due to competition. However, due to the relatively small area affected, impacts to non special-status species are considered less than significant. Species that could be affected by the project are Swainson's hawk and migratory birds.

Swainson's Hawk.

Breeding Habitat. The nearest recorded occurrence of a Swainson's hawk nest occurred in 2001, approximately 9.4 miles from the site near the intersection of Fiddyment Road and Blue Oaks Boulevard on the west side of Roseville (CNDDB Occurrence 952). There are no breeding records of Swainson's hawk from the project area. However, several trees within the vicinity of the parcel provide potential nesting habitat. Construction activities within 0.25-mile of an active nest site in urban areas, or 0.5-mile of an active nest site in rural areas, could result in nest abandonment or forced fledging, which is considered a "take" by the California Department of Fish and Game.

Foraging Habitat. The majority of the project site consists of annual grassland. Numerous rodent burrows, runways, and droppings were observed throughout the area indicating a prey base, which could be utilized by Swainson's hawks and other predators occurring in the area. CDFG requires mitigation for losses of Swainson's hawk foraging habitat within ten miles of an active nest.

Mr. James Estep, a biological and recognized expert with respect to Swainson's hawks and their biology, conducted a pedestrian survey of the project site on June 1, 2005. Mr. Estep found that the project site and surrounding habitat does not support Swainson's hawk habitat, is outside the breeding range of this species, and determined that the project would not result in impacts to this species.

Migratory Birds.

A number of migratory bird species could potentially nest in the various habitat areas of the project site. These include both ground nesters and small tree/shrub nesters. Nest destruction from ground-clearing activities and vegetation clearing could destroy nests, nestlings, or hatchlings, and result in a violation of the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712) and CDFG Code (Section 3503). However, implementation of the proposed mitigation measures outlined within the following section will reduce potential impacts to a less than significant level.

Question B:

The riparian scrub within the project area is not extensive, but it is considered a sensitive habitat. Under the Town of Loomis Tree Preservation and Protection Ordinance, any trees within 50 feet of a seasonal stream, or within 100 feet of a perennial stream, are protected and mitigation must be provided to compensate for impacts. The proposed project will have a substantial adverse effect on riparian habitat as the entire riparian scrub community will be removed.

Question C:

Jurisdictional (Federally protected) wetlands are identified based on evidence of three delineation criteria (hydrophytic vegetation, hydric soils, and wetland hydrology). However, the wetland delineation used by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) requires that only one criterion of the wetland delineation be present to define a wetland. Based on the jurisdictional wetland delineation conducted at the site in 1997 (Area West, 1997), a number of sites were determined to meet either the Federal wetland definition, or the USFWS/CDFG definition.

The swale on the eastern edge of the project site is fed by urban runoff. Based on the delineation, the swale is dominated by hydrophytic plant species, primarily iris-leaved rush, and lesser amounts of curly dock (Rumex crispus), and Himalayan blackberry.

Based on vegetation observed on July 13, 2004, several small patches (a few hundred square feet) of hydrophytic vegetation occurs within the swale, which meets the CDFG wetland definition. In spring, the entire swale (about 0.2 acres) may be dominated by hydrophytic vegetation. According to the a letter dated January 6, 2005 from the United States Army Corps of Engineers, approximately 0.17 acres of waters of the United States, including wetlands, are present within the project area. These waters are regulated under Section 404 of the Clean Water Act because they are adjacent to an unnamed tributary of Secret Ravine. Secret Ravine is a tributary to Dry Creek, which is a tributary of the Natomas East Main Drainage Canal, which flows into the Sacramento River, a navigable water of the United States.

The excavated channel in the project site is fed by urban runoff. Based on observations made by Area West (1997), the channel supports hydrophytic plant species, including umbrella sedge (*Cyperus eragrostis*), Mediterranean barley (*Hordeum marinum*), and tall fescue (*Festuca arundinacea*). However, most of the channel is dominated by non-wetland species such as rip-gut brome and soft chess (*Bromus hordaeceus*).

The channel was observed after two different rainfall events and was found not to have standing water or saturated soil.

Question D:

The project site is surrounded by roadways and residential areas, and does not include a topographic or habitat feature that would facilitate fish or wildlife movement through the

site. Therefore, movement of any native resident or migratory fish or wildlife species will not be substantially affected by the proposed project. Furthermore, the proposed project will not interfere with any wildlife corridors or impede the use of any native wildlife nursery sites.

Question E:

The Loomis Tree Ordinance is applicable to native trees within the project area, as defined by the ordinance (Appendix C). The applicant has submitted a tree condition report (Appendix C) prepared by a qualified arborist that documents those species located within the proposed development (Kemper Tree Care, 2004). Based on the arborist report, a total of 44 native trees (e.g., interior live oak and valley oak) exist within the proposed development area (see Appendix C). As noted in Figure 2-4, implementation of the proposed project would result in the removal of all 44 native trees. Removal of these trees would be required to enable construction of the houses and to facilitate construction of necessary road improvements to provide adequate access to the site from Taylor Road.

Question F:

No adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional state habitat conservation plan is applicable for the subject property.

3.4.4 Mitigation

Mitigation measures have been identified to ensure all potential impacts are mitigated to a level of insignificance.

Mitigation Measure BIO-1. Initial rough grading operations and vegetation removal shall be conducted prior to, or after, the typical migratory bird nesting season (March 1 – August 1) to avoid any potential impact to migratory bird nesting activity. Therefore, initial grading should be conducted between the months of August and February. If this construction window is infeasible, pre-construction surveys shall be conducted prior to any initial grading activity and vegetation removal to identify any potential bird nesting activity, including the following:

A. If any nest sites of bird species protected under the MBTA are observed within the vicinity of the project site, then the project shall be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs, and/or young; and,

B. If active nest sites of raptors and/or birds species of special concern are observed within the vicinity of the project site, then CDFG shall be contacted to establish the appropriate buffer around the nest site. Construction activities in the buffer zone shall be prohibited until the young have fledged the nest and achieved independence.

Mr. James Estep conducted pre-construction surveys on June 1, 2005 for nesting raptors. No special-status species or their nests were observed and no active raptor nests were observed in the project area during the survey. However, active nests occupied by shrub jay and plain titmouse were located in trees within the project area. Both species are very common throughout the foothill region and would be expected to nest in the project area on the basis of habitat suitability and availability. Both are also protected under the MBTA. Because much of the vegetation is fairly dense and difficult to observe, it is likely that a more intensive survey for active nests would reveal the location of other nesting birds of these and other common species. Mr. Estep anticipates that nesting will be completed and young fledged from these nests by late July to mid-August.

As such, if construction occurs in 2005, an additional pre-construction survey is not required.

Mitigation Measure BIO-2. Prior to Final Map approved by the Town, the applicant shall develop and submit a Native Tree Replacement and Mitigation Plan to the Town of Loomis to ensure that the project is in compliance with the Town of Loomis Native Tree Ordinance (Appendix C). As such, native trees removed during project implementation shall be replaced off-site.

Mitigation Measure BIO-3. Upon the completion of mitigation, a final status report shall be prepared by the project arborist and submitted to the Town of Loomis, certifying the project was in compliance with the mitigation measures, which will be included within the proposed Native Tree Replacement and Mitigation Plan, as described above.

Mitigation Measure BIO-4. Lost wetlands shall be mitigated at a replacement-to-loss ratio from 1:1 to 4:1, as determined by the ACOE, based on the biotic value of the wetland established by the required environmental analysis, and shall ensure that there is no net loss of wetland functions and values.

3.4.5 Findings

With the incorporation of mitigation, the proposed project would result in less than significant impacts to biological resources.

3.5 CULTURAL RESOURCES

Would the proposal:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) Cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5?	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐

Would the proposal:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature of paleontological or cultural value?	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒

Setting information taken largely from the Cultural Resources Assessment prepared by Peak & Associates, Inc. for the proposed project on April 13, 2005.

3.5.1 Environmental Setting

Prehistoric Setting

At the time of the gold rush, the project vicinity was occupied by the Nisenan people, identified by the language they spoke. The following text by Norman Wilson, where not cited, is derived from Wilson and Towne 1978 and Wilson 1982.

The Nisenan peoples occupied the drainages of the Yuba, Bear, and the American Rivers from the Sacramento River on the west to the summit of the Sierra in the east. The Foothill and Hill Nisenan peoples were distinctive from the Valley Nisenan and were loosely organized into triblets or districts with large central villages, surrounded by smaller villages. These are often referred to as winter villages by older Indians. These central villages and their leaders seemed to have had power or control over the surrounding smaller villages and camps, and specific surrounding territory (Beals 1933; Littlejohn 1928; Wilson and Towne 1978). These districts were oriented to the natural resources and the land forms. In the foothills and mountains the major drainages became formal or informal boundaries, with the land in between forming the district. Thus, the Placerville District is between the Cosumnes River and the Middle Fork of the American River, the Auburn District between the Middle Fork of the American River and the Bear River, and the Nevada City District between the Bear River and the Yuba River.

In the valley there is also the pattern of major villages controlling land and local groups of Nisenan. Different than the hills, the land between drainages becomes the separation between districts with the controlling villages situated along the major rivers. *Pujuni* at the mouth of the American River is a good example. There also seems to be a separation of the Valley Nisenan and the Foothill Nisenan near the edge of the valley where the foothills start. The valley peoples were more oriented to the Sacramento, American, Yuba, Feather and the Bear Rivers on the valley floor. Their large villages with their complex and rich culture are usually found along these water courses. It is believed that they occupied both sides of the rivers and used the river courses for communication and major resource exploitation. Smaller stream courses were often occupied with permanent villages and seasonal camp sites. They were not large villages and some may reflect a budding-off of valley peoples as populations expanded in late times.

While the Hill Nisenan in the Sierra foothills carried on trade with the valley peoples and shared some of the cultural traits, they lacked the complexity or richness of the Valley Nisenan. The Hill Nisenan has a different resource base to work with, which required greater mobility and a more intense use of the available resources (Matson 1972). They developed a local culture that was more oriented to the gathering, storage and year round use of the acorn, continual foraging of resources by everyone in the village group, specialized hunting strategies and availability of different plants to gather and process (Erskian and Ritter 1972). They depended on activities attuned to the seasonal ripening of plant foods and the seasonal migrations and increased populations of animals and insects. The foothill people relied more on foraging for food, for immediate use or short term storage, rather than gathering for future needs. This meant they had to be much more mobile in their use of the land and its resources. Population densities and the large number of campsites reflect the more limited ability to acquire and utilize the fewer available resources: they had to work harder for less.

This continual movement meant the foothill people did not have large year-round villages. There are no known major villages in the foothills or mountains that can compare with the valley permanent village sites or population densities. However, there are hundreds of small campsites and villages scattered across the foothills and mountains with certain localities as the centers for these hill peoples. There was no area in the resource range that was over two days travel from the winter village or camp and much surplus food was carried back to the home village during the year for winter use. It was not uncommon for the older people and very young children to stay at the home village year round. These centers or winter villages provided both a home base for the storage of foods and the opportunity for social intercourse during the part of the year when the foraging and gathering of plants was limited and the weather required the shelter of more substantial winter houses.

These winter villages and camps were larger and are often distinguished today by their size and depth of midden. Often there was a semi-subterranean excavated dance house, a permanent water source and a cemetery at or near these sites. The foothill people often left these winter villages and went down slope to the valley edge to take advantage of the fish runs, waterfowl and herds of large game. For the Auburn-Newcastle group it was not over 10 miles, or a day's trip, to the valley floor or any other area or village in their district.

Historic Setting

The project site lies within an area that was prospected for gold in the 1850s and early 1860s. Secret Ravine, located approximately 2/3 mile from the project site, was known as a thriving mining area. Agriculture was also one of the earliest endeavors of Euro-Americans in the area, with fruit orchards taking hold as the primary economic activity with the coming of the railroad in 1864.

The introduction of malaria to central California in 1831 occurred as a result of expeditions of several fur brigades of the Hudson's Bay Company with infected individuals. The introduction of the disease led to the 1833 malaria epidemic that decimated the Native groups in the Central Valley. This epidemic not only played a major role in defining the post-contact land use patterns

of the Native groups in the region, but also had a major impact on Euro-American economic development.

After the discovery of gold in 1848 and the subsequent influx of thousands to California, one of the earliest military posts was established to protect the settlers was Camp Far West, on the Bear River in 1849. The post was abandoned in 1852 because, "In common with the whole Sacramento Valley, this post is very sickly from June till October" (Gray and Fontaine 1951:25). The site of the post is at an elevation of about 150 feet. The illness, apparently malaria, led to the relocation of the troops to a new post at the northern end of the Sacramento Valley, Fort Reading, abandoned similarly in 1856 due to malaria.

Malaria remained endemic to the mining camps of the Sierran foothill region, with frequent sharp local outbreaks throughout the Central Valley until about 1880. The Third Biennial Report of the State Board of Health published in 1875, referenced an undated article from *The Placer Press* that reported, "Almost everybody living west of Gold Hill is either down with fever, or chills and fever, or more or less affected by the miasmatic poison generated and floating around in that locale" (Gray and Fontaine 1951:27).

The commercial fruit industry expanded rapidly in western Placer County in the late 1870s and early 1880s. Chinese laborers were reportedly used because they seemed to endure the malaria, while the white laborers could/would not. In 1894, Japanese laborers began to move into the region, eventually providing virtually all of the fruit orchard labor. J. Parker Whitney initiated the "English Colony" at Loomis in 1889 with 2,000 to 3,000 acres subdivided for colonists from England. They tried to establish an English countryside in the Placer County foothills between Loomis and Newcastle, building fine homes and establishing a country club. Malaria, combined with the financial depression of 1893 to 1897, ruined the colony. After the demise of the colony, the orchards became full bearing and very profitable, worked by Asian labor forces. The palm trees that line portions of Delmar Avenue and Citrus Colony Road are a relic of the Whitney attempt at an early "planned community."

Agricultural production in this relatively arid area was limited until artificial water supplies were developed. In the mid-1880s F. Birdsall built a plank reservoir in Auburn that was capable of holding over one million gallons of water. By February 1888, a group of landowners in Loomis contracted to advance Birdsall four thousand dollars to install a thirteen inch pipe from the dam in Auburn to Loomis. The water was stored in a tank and distributed where needed. Birdsall sold all his ditch properties to the South Yuba Water Company in 1889.

During the late 1950s and early 1960s, the increased urbanization and expansion of suburban communities from Sacramento to the northeast along the Highway 80 corridor, led to growth of the housing market in western Placer County. Beginning in the 1980s, the lower cost of living and land have drawn high technology firms and other industries to the region, resulting in the subsequent commercial and residential development and expansion of the communities of Roseville, Rocklin, and Loomis, virtually closing out the era of large cattle ranches and orchards.

3.5.2 Cultural Resources Study

Records Search

A records search was conducted by Peak & Associates, Inc. at the North Central Information Center of the California Historical Resources Information System on March 11, 2005. The purpose of the records search was to identify previous cultural resources studies in and near the area and previously recorded resources in the project area that might be impacted by the proposed development. The Information Center review indicated that no sites have been recorded on the project site and no previous survey of the project site is on record.

However, the property adjacent to the project site on the east has been surveyed, and a large, multi-component site was recorded. This site, CA-PLA-297/H included a prehistoric component consisting of a total of 22 mortars on three separate boulders and a historic component in the form of the remains of a granite quarry. No prehistoric artifacts were observed, but there were several pieces of hardware and ceramic pipe fragments related to quarrying.

The historical information provided in the Historic Setting section was based on research undertaken at the California State Library, California State Archives, Placer County Recorder's Office, Placer County Archives, and Bureau of Land Management, utilizing primary source documents. The ethnographic material was based largely on original research conducted by the late Norman Wilson, much of it published elsewhere.

Native American Contact

The Native American Heritage Commission was contacted by Peak & Associates, Inc. to request a search of the Sacred Lands Inventory and to obtain a list of Native Americans who might have information on the project area. No properties listed on the Sacred Lands Inventory are registered near the project area. No replies have been made regarding Native American communication (i.e., The Native American Heritage Commission did not state that they had any concerns with the project).

Field Survey

The project site was surveyed on foot by Sue Merritt of Peak & Associates, under the supervision of Melinda A. Peak on March 21, 2005. The open meadow characteristic of the project site was well suited to the use of linear transects with a spacing of no more than 15 meters between survey lines. There is very little exposed bedrock in the area, but a single cup bedrock mortar was identified.

Ground surface visibility over most of the project area was limited, due to heavy grass cover, but adequate due to brush clearing and grazing which has occurred on the property. The only major hindrance to inspection was a narrow strip of blackberry bramble along the eastern boundary of the project site. Still, small holes were dug by trowel to examine mineral soil in some areas where dense ground cover hindered surface observation.

One prehistoric site was found on the property. An unusual feature of the property is a mound along most of the eastern property boundary that extends into the property about 100 feet in some places. This has a sharp drop on the south side down to the bulk of the project site. On top of this mound is a large flat slab of granitic rock that was devoid of mortars. Just west of this is a smaller granitic boulder with a single small mortar hole on it, measuring 13 cm by 10 cm, by about 4 cm deep. Very dense vegetation around the boulder made inspection of the ground surface for associated artifacts very difficult. The site was assigned field number PA-05-02.

Site Testing

Due to the bedrock mortar found on the project site, Robert Gerry of Peak & Associates, Inc. conducted a series of shovel test pits (STPs) on April 9, 2005. Four STPs were excavated located roughly in the cardinal directions from the bedrock mortar. The first three of these produced no artifacts, however the fourth, located just east of the larger granitic boulder that lies near the mortar, produced a fine grained silicate fragment with a few vague by definite flake scars. Another STP was excavated 8 meters south of the fourth one; however it produced the same results as STP 1-3.

It was apparent that there was no consistent subsurface artifact deposit. The single artifact recovered from the five STPs did not indicate a deposit with the potential to return significant results through further excavation. This site does not have the potential to yield "...information important in prehistory or history," and is therefore not eligible for the National Register of Historic Places.

3.5.3 Answers to Checklist Questions

Question A:

This site does not have the potential to yield "...information important in prehistory or history," and is therefore no eligible for the National Register of Historic Places. As such, impacts to historical resources would not occur.

Questions B and D:

A single bedrock mortar was identified at the project site. The surface inspection and subsequent shovel test pits did not reveal any significant cultural resources. The proposed project involves the removal of the existing bedrock mortar at the site. The Peak & Associates report determined that the bedrock mortar was associated with site CA-PLA-297/H, which was previously destroyed, and that the bedrock mortar is not eligible for the National Register of Historic Places. According to Mr. John Nadolski of Pacific Municipal Consultants, who reviewed Peak & Associates' report on August 7, 2005, the subsurface excavations at the bedrock mortar on the parcel were adequate to identify buried deposits that might be associated with it. Furthermore, Mr. Nadolski determined that the recording of and excavations at the bedrock mortar appear to have captured all the data potential of the site. See Appendix D.

Question C:

Because the project site has been previously disturbed, no impacts to paleontological resources are expected.

3.5.4 Mitigation

Mitigation Measure CUL-1. If construction activities expose archeological resources (artifacts, unusual amounts of stone, bone or shell) or human remains, work shall stop within the immediate vicinity of the resource until such time as the resource can be evaluated by a qualified archeologist and any other appropriate individuals consistent with the provisions of CEQA - Section 15064.5. If human remains are unearthed, the Placer County Coroner must be contacted. If the bone is likely to be Native American in origin, the coroner must contact the Native Heritage Commission to identify most likely descendants.

3.5.5 Finding

With the incorporation of mitigation, impacts to cultural resources would be less than significant.

3.6 SEISMICITY, SOILS, AND GEOLOGY

Would the proposal result in or expose people to potential impacts involving:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides? v) Subsidence?	☐	☐	☒
b) Result in substantial soil erosion, siltation, changes in topography, the loss of topsoil or unstable soil conditions from excavation, grading or fill?	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral	☐	☒	☐

Would the proposal result in or expose people to potential impacts involving:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
spreading, subsidence, liquefaction or collapse?			
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒
f) Result in substantial soil degradation or contamination?	☐	☐	☒

3.6.1 Environmental Setting

Regional Faulting

The major fault systems in the region tend to occur along the interface between differing geological materials. The nearest fault system near Loomis is the Foothill Fault System, which traverses Amador, El Dorado, and Placer counties in a path more than 350 kilometers long and several kilometers wide. Two segments of this system are relatively close to Loomis; the segment of the Bear Mountain Fault Zone (Spenceville Fault) between Folsom and Auburn, and the Melones Fault Zone, about 15 miles to the east.

No active faults are known to exist in Placer County, and no Alquist-Priolo Special Studies Zones are designated in the County. The nearest known active fault that has been mapped is the Dunnigan Hills Fault, well to the northwest of the Town, across the Central Valley (Loomis 2001).

Within the Loomis area, an inactive inferred fault was mapped across the area's southern boundary (Livingston, 1974). The potential for seismic events originating from this fault is considered low.

Seismic Hazards

The underlying geologic formation of the region is a relatively unbroken batholith that extends along the Sierra Nevada. During seismic events, this material tends to react as a uniform block, which has the effect of reducing ground movement, acceleration, and the likelihood of ground rupture. Consequently, the California Geological Survey classifies the region as a low severity earthquake area. Typical seismic hazards include surface rupture, groundshaking, and various types of ground failure. The potential for these hazards to exist in the Loomis area is described below:

Surface Rupture. Surface rupture during earthquakes is typically limited to those areas immediately adjacent to the fault on which the event is occurring. Because the project area contains no active faults, the likelihood of surface rupture is considered low.

Groundshaking. The most serious direct earthquake hazard is the damage or collapse of buildings caused by groundshaking, which, in addition to property damage, can cause injury or death. Groundshaking is the primary seismic concern for Loomis. Portions of Loomis are located on alluvial deposits, which increase the potential groundshaking damage. As earthquake waves pass from more dense rock to less dense alluvial material, they tend to reduce velocity, but increase in amplitude. Ground motion lasts longer on loose, water-saturated materials than on solid rock. The potential for groundshaking may be considered highest on the alluvial deposits along the creeks and ravines in the northern portion of Loomis.

Typical effects of groundshaking include cracked chimneys, moved furniture, and broken glassware inside structures. However, historic records suggest that the probability of these types of events occurring in Loomis is very low.

Ground Failure. In addition to structural damage caused by groundshaking, there are other ground effects caused by such shaking. This includes liquefaction, subsidence, lurch cracking, and lateral spreading.

Liquefaction. Liquefaction in soils and sediments can occur during earthquake events when material is temporarily transformed from a solid to a liquid (gelatinous) by increases in interpore pressure. Earthquake-induced liquefaction most often occurs in low-lying areas with soils composed of unconsolidated, saturated, clay-free sands and silts, but can also occur in dry, granular soils or saturated soils with some clay content. Liquefaction also occurs in areas overlain by unconsolidated fill, particularly artificial fill.

The presence of several unconsolidated and saturated soils throughout the area indicates a moderate liquefaction potential, particularly on the alluvial soils found along the low-lying ravines and creeks.

Subsidence. Subsidence is the compaction of soils and alluvium caused by groundshaking. It occurs irregularly and is largely a function of the underlying soils. Depending on the event, the amount of compaction can vary from a few inches to several feet. In Loomis, the potential for subsidence is greatest in areas underlain by alluvium or other soft water-saturated soils.

Lurch Cracking. Lurch cracking refers to fractures, cracks and fissures produced by groundshaking and may occur far from an earthquake's epicenter.

Lateral Spreading. Lateral spreading is the horizontal movement of soil toward an open face of a stream bank or the side of a levee. Steep-side artificial fill embankments are most susceptible to damage. The potential for these hazards is greatest on steep-sided alluvial soils where the groundwater table is high. In Loomis, this would include areas adjacent to Antelope Creek, Secret Ravine, and Sucker Ravine.

3.6.2 Regulatory Setting

State of California. For excavation and grading activities, Title 8 of the California Code of Regulations (CCR) and Occupational Safety and Health Act (OSHA) requirements state that excavations must be shored or otherwise stabilized to preclude slope failure during construction. In addition, the Universal Building Code (UBC) (Section A33 - Excavation and Grading) also requires that shoring of trenches or other structural integrity measures are implemented, as well as erosion control measures.

Alquist-Priolo Earthquake Fault Zoning Act. The Alquist-Priolo Earthquake Fault Zoning Act, signed into law December 1972, requires the delineation of zones along active, potentially active and well-defined faults. The purpose of the Alquist Priolo Act is to regulate development on or near active fault traces to reduce the hazard of fault rupture. The proposed project site is not located within an Alquist-Priolo Earthquake Fault Hazard Zone nor is it located on any known active or potentially active faults (Jennings, 1994, Hart, 1997).

Seismic Hazards Mapping Act. The Seismic Hazards Mapping Act, enacted by the California legislature in 1990, was developed to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and other hazards caused by earthquakes. This Act requires the State Geologist to delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones. Before a development permit is granted for a site within a seismic hazard zone, a geotechnical investigation of the site has to be conducted and appropriate mitigation measures incorporated into the project design.

California Building Code. The California Building Code is another name for the body of regulations known as the California Code of Regulations (CCR.), Title 24, Part 2, which is a portion of the California Building Standards Code. Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they are not enforceable (Bolt, 1988).

Published by the International Conference of Building Officials, the Uniform Building Code is a widely adopted model building code in the United States. The California Building Code incorporates by reference the Uniform Building Code with necessary California amendments. About one-third of the text within the California Building Code has been tailored for California earthquake conditions.

3.6.3 Thresholds of Significance

A project will normally result in a significance impact to seismicity, soils and geology if it would:

- Expose people or structures to major geologic hazards;
- Cause a substantial or potentially substantial adverse change in any of the physical conditions of the project area by the project;

- Alteration of topography during construction; and,
- Exposure of lives of property associated with new development to geologic hazards.

3.6.4 Answers to Checklist Questions

Question A:

The project site is located more than 100 miles from the Lassen Peak and Mono Lake-Long Valley Volcanic areas. Therefore, the risk to the site associated with volcanic hazards is considered very low.

The project site is not located within a seismically active region and the proposed structures would not likely be subjected to seismic shaking during the life of the project. No active faults are known to exist in Placer County, and no Alquist-Priolo Special Studies Zones are designated in the County. The nearest known active fault that has been mapped is the Dunnigan Hills Fault, well to the northwest of the Town across the Central Valley (Loomis 2001).

Question B:

The project will require excavation and grading to construct the residential houses and commercial buildings. It is possible the soil erosion may occur.

Questions C and D:

Unique geologic features or formations do not exist within the project area. However, there is the potential for soil erosion to occur during project construction. There is also a potential for seismically-induced settlement to adversely affect the project site. Without subsurface exploration and laboratory analyses, it is not possible to estimate the magnitude of that potential settlement. Therefore, a geotechnical study should be completed for design of the planned improvements.

Question E:

The project will not require a septic system.

Question F:

The project will not result in substantial soil degradation or contamination; however, soil erosion may occur during construction.

Mitigation

Mitigation Measure GEO-1. Before finalization of the construction specifications, a geotechnical investigation shall be conducted. Any measures identified in this report shall be incorporated into the specifications, consistent with Uniform Building Code.

Mitigation Measure GEO-2. Implement Mitigation Measure HWQ-1.

3.6.5 Finding

With the incorporation of mitigation, impacts to seismicity, soils, and geology would be considered less than significant.

3.7 HAZARDS

Would the proposal involve:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒
b) 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 or risk explosion?	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working the project area?	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒
i) Expose people to existing or potential hazards and health hazards other than those set forth above?	☐	☒	☐

3.7.1 Environmental Setting

More than 60,000 different chemicals are produced in the United States. Over 11,000 of these are used for commercial purposes. Within the Town of Loomis, over 5,000 manufacturing and service industries use or store hazardous materials, including pesticides, acids, caustics, solvents, plastics and heavy metals. Many businesses commonly use or store hazardous materials, including gasoline stations, automotive repair facilities, dry cleaners, agricultural facilities, and miscellaneous commercial and industrial facilities. Industrial use of hazardous materials is centered in the downtown area, particularly along Taylor Road.

Hazardous Materials Transport

The Union Pacific Railroad and Interstate 80 are major transcontinental transportation routes that pass through Loomis. Trains and 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 hazards 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 by air or water from the accident site.

Although standard accident and hazardous materials recovery procedures are enforced by the state and followed by private transportation companies, the Town of Loomis is at relatively high risk because of its location along interstate rail and highway corridors. In addition, the relatively low over head clearance for the freeway bridges in the Town pose an additional risk for trucks transporting hazardous materials, which is a primary reason why some trucks divert from the freeway and travel through the Town on Taylor Road.

The project site lies within the Town of Loomis, in an area of northern California commonly referred to as the Loomis Basin. The subject site is predominately flat and the basin topography is flat to moderately low rolling hills typical of the Sierra Nevada foothills of western Placer County. The site has been graded and cultivated in the past with no current signs of agricultural activity.

Phase I Environmental Site Assessment

A physical inspection of the site was performed August 19th and 20th, 1998 by Earthworks Environmental; the site was located and walked according to the site map. Earthworks Environmental also performed a records search of the site. No issues were observed that would cause concern regarding serious environmental concerns at the site. A second physical site inspection was performed on October 26th, 2004. A second records search was also performed.

Although several items were identified, including the presence of a 55-gallon drum, trailer, and old vehicle, (and recommendations made to address them), adequate on-site investigation/inspection has been completed and no further issues regarding environmental concerns exist at the site as of October 26th, 2004.

3.7.2 Regulatory Setting

Federal. Many agencies regulate hazardous substances. These include federal agencies such as the EPA, the Occupational Safety and Health Administration (OSHA), the Nuclear Regulatory Commission (NRC), the Department of Transportation (DOT) and the National Institute of Health (NIH). The following represent federal laws and guidelines governing hazardous substances.

- Federal Water Pollution Control Act
- Clean Air Act
- Occupational Safety and Health Act
- Federal Insecticide, Fungicide, and Rodenticide Act
- Comprehensive Environmental Response Compensation and Liability Act
- Guidelines for Carcinogens and Biohazards
- Superfund Amendments and Reauthorization Act Title III
- Resource Conservation and Recovery Act
- Safe Drinking Water Act
- Toxic Substances Control Act

At the federal level, the principal agency regulating the generation, transportation and disposal of hazardous substances is the EPA, under the authority of the Resource Conservation and Recovery Act (RCRA). The EPA regulates hazardous substance sites under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). Applicable federal regulations are contained primarily in Titles 29, 40, and 49 of the Code of Federal Regulations (CFR).

Hazardous Substances Handling Requirements. The RCRA established a federal hazardous substance "cradle-to-grave" regulatory program that is administered by the EPA. Under the RCRA, the EPA regulates the generation, transportation, treatment, storage and disposal of hazardous substances. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the "cradle-to-grave" system of regulating hazardous substances. The HSWA specifically prohibits the use of certain techniques for the disposal of some hazardous substances. Under the RCRA, individual states may implement their own hazardous substance management programs as long as they are consistent with, and at least as strict as, the RCRA. The EPA must approve state programs intended to implement the RCRA requirements.

Hazardous Substances Worker Safety Requirements. The Federal Occupational Safety and Health Administration (Fed/OSHA) is the agency responsible for ensuring worker safety. Fed/OSHA sets federal standards for implementation of training in the work place, exposure limits, and safety procedures in the handling of hazardous substances (as well as other hazards). Fed/OSHA also establishes criteria by which each state can implement its own health and safety program.

State. The California Environmental Protection Agency (Cal/EPA) and the Governor's Office of Emergency Services (OES) establish rules governing the use of hazardous substances. The State Water Resources Control Board (SWRCB) has primary responsibility to protect water quality and supply.

Applicable State laws include the following:

- Porter Cologne Water Quality Act
- Public Safety/Fire Regulations/Building Codes
- Hazardous Substance Control Law
- Hazardous Substances Information and Training Act
- Hazardous Substances Release Response Plans and Inventory Act
- Air Toxics Hot Spots and Emissions Inventory Law
- Underground Storage of Hazardous Substances Act

Within Cal/EPA, the Department of Toxic Substances Control (DTSC), formerly the Department of Health Services, has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for the generation, transportation and disposal of hazardous substances under the authority of the Hazardous Waste Control Law (HWCL). State regulations applicable to hazardous substances are indexed in Title 26 of the California Code of Regulations (CCR).

Hazardous Substances Handling Requirements. In California, approval of the state hazardous substance management program is still pending, so both existing state and federal hazardous substances laws apply to the handling of hazardous substances. The current State program was created by the enactment of the HWCL, which is administered by the DTSC. The DTSC regulations govern the generation, transportation, and disposal of hazardous substances.

Regulations implementing the HWCL list 791 hazardous chemicals and 20 or 30 more common substances that may be hazardous; establish criteria for identifying, packaging and labeling hazardous substances; prescribe management of hazardous substances; establish permit requirements for hazardous substances treatment, storage, disposal and transportation; and identify hazardous substances that cannot be deposited in landfills.

Under both the RCRA and the HWCL, the generator of a hazardous substance must complete a manifest that accompanies the waste from the point of generation to the ultimate treatment, storage, or disposal location. The manifest describes the waste, its intended destination, and other regulatory information about the waste. Copies must be filed with the DTSC. Generators must also match copies of waste manifests with receipts from the treatment, storage, or disposal facility to which it sends waste.

Hazardous Substances Worker Safety Requirements. The California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing work place safety regulations within the State. Cal/OSHA standards are more stringent than federal regulations.

Cal/OSHA regulations concerning the use of hazardous substances include requirements for safety training, availability of safety equipment, hazardous substances exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous substances, describing the hazards of chemicals, and documenting employee training programs.

Both federal and state laws include special provisions for hazard communication to employees who work with and/or encounter hazardous materials and wastes. The training must include safe methods for handling hazardous substances, an explanation of Material Safety Data Sheets, use of emergency response equipment, implementation of an emergency response plan and use of personal protective equipment.

Groundwater Regulatory Background. As described above, the SWRCB and the Central Valley RWQCB are the responsible agencies for implementing regulations designed to protect California waters, including groundwater. The RWQCB is responsible for overseeing groundwater contamination investigations and remedial activities. The RWQCB implements the clean-up standards required for sites of contaminated groundwater and assures site compliance with appropriate state regulations. Cal/EPA (Department of Toxic Substances Control) and Cal-OSHA are the agencies that are responsible for overseeing that appropriate measures are taken to protect workers from exposure to potential groundwater contaminants.

3.7.3 Answers to Checklist Questions

Questions A and B:

Minor amounts of hazardous substances, such as cleaning, maintenance and landscaping supplies may be stored and used in and around the various residential houses and commercial buildings. Any hazardous substances used at the site for cleaning, maintenance and landscaping by the residents or tenants of the commercial buildings would be required to store hazardous material in a manner that complies with all applicable codes and ordinances, laws, or other pertinent requirements.

The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials in the environment or risk explosion.

Question C:

The project would not emit hazardous emissions or involve handling hazardous or accurately hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Questions D and I:

A Phase I Environmental Site Assessment dated October 28, 2004, found that the project site had been graded/cultivated at some time in the past and that there were no

issues on site or via historical research that would suggest further site investigation. However, the study did observe some items and made recommendations on addressing these. Such items included that a portion off the project site (Lot #24) is in close proximity to the propane dispenser tank of the adjacent KOA campground.

Questions E and F:

The project site is not located within 2 miles of a public use airport or a private airstrip; therefore, the project would not result in a safety hazard for people residing or working in the project area.

Question G:

The project would not interfere with an adopted emergency response plan or emergency evacuation plan. The Town's emergency response plan is based, in part, upon the ability of vehicles to travel on town streets in response to an emergency. The project will not affect emergency response or an evacuation plan.

Question H:

The project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. The project site does contain large trees and vegetation that could catch fire; however, the site does not constitute a major wildland nor is it adjacent to a large wilderness area.

3.7.4 Mitigation

Mitigation Measure HAZ-1. Prior to construction, the applicant will perform the following:

- Remove trash and debris from the site;
- Remove the empty 55-gallon drum from site and properly dispose;
- Properly dispose of the vehicle with particular care taken to prevent spillage of oil from the engine. Remove any stained soils and properly characterize and dispose with a certified facility;
- Coordinate with PG&E regarding the buried high pressure natural gas line that is present along the northern boundary of the site adjacent to Taylor Road; and,
- Properly dispose of trailer and debris off site.

Mitigation Measure HAZ-2. Disclose to homebuyers purchasing properties within 100 feet of the high pressure LPG/propane tank that is located on the KOA property approximately 15 feet south of the Lot #24 fence/property line.

3.7.5 Finding

With the incorporation of mitigation, impacts to hazards and hazardous materials would be considered less than significant.

3.8 HYDROLOGY AND WATER QUALITY

Would the proposal result in or expose people to potential impacts involving:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge or the direction or rate of flow of ground-water such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☒	☐
c) 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?	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course or stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☒	☐
e) 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?	☐	☒	☐
f) Otherwise substantially degrade surface or groundwater quality?	☐	☒	☐
g) 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?	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami or mudflow?	☐	☒	☐

3.8.1 Environmental Setting

Water Resources

Most of the Town's water is supplied by the Placer County Water Agency (PCWA); however, some of the more rural portions of the Town are not connected to the Agency's infrastructure and are supplied by private wells. PCWA's water supplies include 125,000 acre-feet of water per year (AFY) from the Yuba-Bear River watershed and 120,000 AFY from the Middle Fork of the American and Rubicon rivers. An additional 117,000 AFY can be purchased from the U.S. Bureau of Reclamation.

Loomis is within PCWA's Zone 1 service area, which extends from as far north and east as Auburn, west to Lincoln, and south to Granite Bay. PCWA operates five treatment plants in Zone 1: the Auburn, Bowman and Newcastle treatment plants serve the upper portion of Zone 1, while the Foothill and Sunset plants serve the lower portion of the service area. The Foothill/Sunset water treatment system provides the required water treatment for the domestic water supplied to the Loomis community, as well as some adjacent areas. Residential, commercial, and industrial customers in the Town receive water service by feeder lines that branch from a 24-inch main running along the Union Pacific Railroad corridor on the west side of Taylor Road. The primary north-south main in the community is a 12-inch pipeline along Laird Road.

Groundwater

The Loomis area overlies a portion of the Placer County Hydrologic Basin, as defined by the California Department of Water Resources. Groundwater yield within this basin is sporadic and highly variable. Individual wells may demonstrate sufficient yields, while nearby wells may show almost no yield (Placer County 1993). Groundwater in sufficient quantity to supply domestic requirements occurs only in small openings along bedrock fractures. Wells within alluvial Terrace deposits are unreliable and subject to surface contamination. During recharge by winter rains, water tables rise up near the surface, where the quality of groundwater decreases as it intercepts septic tank leach zones.

Drainage and Flood Hazard

The Loomis area is within the Dry Creek watershed, which covers about 101 square miles in Placer and Sacramento counties. Antelope Creek, Secret Ravine, and their tributaries are the primary drainages in the area, all of which ultimately flow into Dry Creek. Flooding has historically been a relatively minor hazard in the Loomis area, primarily due to its relatively elevated location within the Dry Creek watershed. However, some homes have been flooded in the past during major rainfalls, primarily in areas near creeks where drainage infrastructure has become impeded and flood waters have backed up onto adjoining properties. The lower portions of the Dry Creek watershed have historically been harder hit by flooding, particularly in the Roseville area (where tributaries of Dry Creek converge) and in the flatlands in the Rio Linda area. In addition, certain portions of the Town are subject to consistent but minor flooding, notably the portions of Antelope Creek near Saunders Avenue, Del Mar Avenue, and No Name

Lane. Secret Ravine has also flooded in the recent past, affecting some neighboring properties (Town of Loomis 2001).

The National Flood Insurance Study of the Federal Emergency Management Agency (FEMA) produced the Flood Insurance Rate Map (FIRM) for the Town in 1998. The map identifies special flood hazard areas in the community, focusing on areas that could be inundated in the event of a 100-year flood (which statistically has a 1% chance of occurring in any given year). The map shows the locations of 100-year and 500-year flood plains in the community, which are generally along Secret Ravine, Antelope Creek, Secret Ravine, and their tributaries. The project site is not within the 100-year flood zone.

Dam Inundation

Loomis is not in the dam inundation area for any major stream or river in the region. There are no dams or reservoirs (except small local detention facilities) upstream of Loomis on any tributary of Antelope Creek or Secret Ravine. Loomis is not subject to potential damage from dam inundation.

3.8.2 Regulatory Setting

Federal and State of California.

Federal Floodplain Management and Federal Emergency Management Agency (FEMA). FEMA administers the National Flood Insurance Program (NFIP) and determines areas subject to flood hazards zones on a FIRM map for each community participating in the NFIP. Construction activities are restricted within the flood hazard areas designated on the FIRM panels depending upon the potential for flooding within each area.

Federal Clean Water Act and the State of California Porter-Cologne Act. The Regional Water Quality Control Board (RWQCB) establishes water quality standards that are required by Section 303 of the Federal Clean Water Act and the state Porter-Cologne Water Quality Act. The State Water Resources Control Board (SWRCB) has adopted a NPDES general permit for Storm Water Discharges Associated with Construction Activity (State Permit) that requires every construction project greater than one acre to submit a Notice of Intent (NOI) for coverage, and prepare and implement a Storm Water Pollution Prevention Plan (SWPPP).

Under the conditions of the state permit, the project site would be required to eliminate or reduce non-storm water discharges to waters of the nation, develop and implement a SWPPP for the project construction activities, and perform inspections of the storm water pollution prevention measures and control practices to ensure conformance with the site SWPPP. The state permit prohibits the discharge of materials other than storm water discharges, and prohibits all discharges that contain a hazardous substance in excess of reportable quantities established at 40 Code of Federal Regulations (CFR) 117.3 or 40 CFR 302.4. The state permit also specifies that construction activities must meet all applicable provisions of Sections 301 and 402 of the Clean Water Act.

3.8.3 Thresholds of Significance

Hydrology and water quality impacts would be considered significant if they would:

- Increase runoff flood peaks over existing conditions. Any increase in site runoff could exacerbate downstream flood-prone areas;
- Potentially cause a violation of state or federal water quality standards or objectives, including general narrative objectives for preventing aquatic toxicity, maintaining existing beneficial uses, and anti-degradation of state waters;
- Result in disturbance of existing channel banks and channel beds to the extent that short-term or long-term erosion and siltation could occur upstream or downstream;
- Potentially deplete surface water and ground water resources used for other beneficial uses; or
- Locate structures in a Federal Emergency Management Agency-approved 100-year floodplain.

3.8.4 Answers to Checklist Questions:

Question A:

A potential water quality impact would be the loading of toxic materials in storm water discharges from the site after the project has been constructed. Stormwater runoff from developed urban uses can have higher levels of metals, oils, greases, fertilizers, and other potential contaminants than runoff from undeveloped uses. The discharge of runoff containing these materials could result in a deterioration of the quality of the receiving surface waters and violation of water quality standards or waste discharge requirements.

Runoff generated from the site would be directed to necessary storm drainage facilities required for the project that the applicant would construct consistent with Town requirements.

Question B:

The project site is approximately 9 acres. Construction of the residences and commercial buildings will result in the introduction of impervious surfaces but would not interfere substantially with groundwater recharge or the direction or rate of flow of groundwater such that there would be a net deficit in aquifer volume or lowering of the local groundwater table level. The project would not utilize groundwater supplies for the residences or commercial buildings. All water required for the project would be provided by the PCWA water system, which is supplied by surface water. No septic systems that would add water to the ground would be constructed and excavations that could potentially intercept groundwater would be relatively shallow.

Questions C through F:

The proposed project would not substantially alter the drainage pattern of the site or area and would not involve the alteration of the source of a stream or river that would result in substantial erosion or siltation on or off-site. The project will, however, impact approximately 0.17 acres of waters of the United States, including wetlands. These waters are regulated under Section 404 of the Clean Water Act because they are adjacent to an unnamed tributary of Sucker Ravine, which is a tributary to Dry Creek, which is a tributary of the Natomas East Main Drainage Canal, which flows into the Sacramento River, a navigable water of the United States.

The project would introduce impervious surfaces, which may change absorption rates, drainage patterns, or the rate and amount of surface runoff. The applicant would be required to obtain a general permit under Section 402 of the Clean Water Act (CWA) for storm water drainage. Under the conditions of the state permit, the project site would be required to eliminate or reduce non-storm water discharges to waters of the nation, develop and implement a SWPPP for the project construction activities, and perform inspections of the storm water pollution prevention measures and control practices to ensure conformance with the site SWPPP. The state permit prohibits the discharge of materials other than storm water discharges, and prohibits all discharges that contain a hazardous substance in excess of reportable quantities established at 40 Code of Federal Regulations (CFR) 117.3 or 40 CFR 302.4. The state permit also specifies that construction activities must meet all applicable provisions of Sections 301 and 402 of the Clean Water Act. Conformance with Section 402 of the CWA would ensure that the proposed project does not violate any water quality standards or waste discharge requirements. Furthermore, it would ensure that the project would not substantially degrade surface or groundwater quality.

The applicant would be required to construct any necessary storm drainage facilities to divert stormwater runoff to the Town's stormwater system.

Question G:

The project site is not within a 100-year flood hazard area as mapped on a federal Flood Hazards Boundary of Flood Insurance Rate Map or other flood hazards delineation map.

Question H:

Construction of the proposed project would not involve placement of structures within a 100-year flood hazard area, which could impede or redirect flood flows.

Question I:

Loomis is not in the dam inundation area for any major stream or river in the region and is not subject to potential damage from dam inundation. Also, the project site is not

within a 100-year flood zone. Therefore, the project would not expose people or structures to a significant risk of loss, injury or death involving flooding.

3.8.5 Mitigation

Mitigation Measure HWQ-1. Prior to construction, the Town of Loomis shall develop a Storm Water Pollution Prevention Plan (SWPPP) and submit a Notice of Intent to comply with the NPDES "General Permit for Storm Water Discharge Associated with Construction Activity (99-08-DWQ). The SWPPP would include:

- Slope surface stabilization measures, such as temporary mulching, seeding, and other suitable stabilization measures to protect exposed erodible areas during construction, and installation of earthen or paved interceptors and diversion at the top of cut or fill slopes where there is a potential for erosive surface runoff;
- Erosion and sedimentation control devices, such as energy absorbing structures or devices, would be used, as necessary, to reduce the velocity of runoff water to prevent polluting sedimentation discharges;
- Installation of mechanical and/or vegetative final erosion control measures within 30 days after completion of grading; and,
- Minimizing the land area disturbed and the period of exposure to the shortest feasible time.

Mitigation Measure HWQ-2. Prior to obtaining a building permit, the applicant will prepare a hydrology drainage study that will be submitted to the Town Engineer for review and approval. The Plan will detail project on-site drainage facilities to control long-term storm water runoff consistent with the principles and policies of the Placer County Flood Control and Water Conservation District and the Town of Loomis as outlined in the Stormwater Management Manual (199). Based on the Town of Loomis Mitigation Fee Analysis Final Report (Sinclair 2005), the fees would be as follows:

Table 3.8-1. Drainage Fees

Per Single Family Residential Dwelling Unit	Per Multi-family Residential Dwelling Unit	Per acre of Commercial
$519	$323	$2,726

3.8.6 Finding

With the incorporation of mitigation, impacts to hydrology and water quality would be considered less than significant.

3.9 LAND USE AND PLANNING

Would the proposal:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) Physically divide an established community?	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒

3.9.1 Environmental Setting

The Town of Loomis is characterized by a village-style core containing a historical, small-scale downtown, surrounded by medium-density housing and some light industry, with much lower density rural residential areas beyond. The land use goals and policies of the Town of Loomis General Plan are all oriented toward maintaining this historical arrangement of land uses, because the Town recognizes the importance of the land use pattern in determining community character. Higher-intensity uses are intended to be concentrated adjacent to the downtown, along Taylor Road, and adjacent to Interstate 80 (I-80), with the land uses in surrounding areas becoming progressively less intense (and with lower residential densities) as the distance from the "core" increases. This arrangement of land uses within the Town is known in Loomis as the "core concept" (Town of Loomis 2001).

Land Use Designation

The Town is divided into land uses designations that reflect its largely rural residential character. The land use designation for the project site is General Commercial. This designation is intended mainly for retail and service commercial uses located outside of the downtown core, that primarily serve local residents and businesses. Areas within this land use designation may also accommodate residential uses as part of mixed-use structures of site development. Under the Town's General Plan, building heights are limited to two stories or 35 feet and structural development shall not exceed lot coverage of 50 percent. The density of residential uses may range from two to 10 dwellings per acre.

3.9.2 Answers to Checklist Questions

Question A:

Implementation of the proposed project would not physically divide an established community. Commercial use in the proposed location is consistent and compatible with the existing adjacent commercial use. As proposed, the residential uses are consistent with the surrounding existing and future uses.

Question B:

According to the Land Use Element of the Town's General Plan, the land use designation for the site is general commercial. This designation allows for retail and commercial uses outside the downtown core and residential uses as part of mixed-use structures. The proposed commercial buildings, as designed, would meet the two-story or 35 feet height requirement and do-not-exceed lot coverage of 50 percent. The density of the residential uses, as designed, would not exceed 10 dwellings per acre. As such, the project is consistent with the Town's General Plan. The project would not conflict with Town's Zoning Ordinance or other plan or ordinance.

3.9.3 Finding

The proposed project would result in less than significant impacts to land use and planning.

3.10 MINERAL RESOURCES

Would the proposal result in impacts to:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) Result in a loss of availability of a known mineral or other natural resource (timber, oil, gas, water, etc.) that would be of value to the region and the residents of the state?	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☒

3.10.1 Environmental Setting

The Loomis area is located within the Sierra Nevada geomorphic province, which extends about 400 miles from Lassen Peak in the north to the Mojave Desert in the south. Much of the Sierra Nevada batholith is composed of Mesozoic (144 million to 245 million years ago-roughly the period in which dinosaurs lived) plutonic and volcanic rocks. A metamorphic belt, characterized by extremely folded and faulted Paleozoic Tertiary (5-65 million years ago) and Quaternary age (1.8 million years ago to present) volcanic and alluvial deposits overlie the basement rocks in some areas.

Loosely dumped rocky tailings from mines and quarries occur in some areas of Loomis, particularly along Secret Ravine and Antelope Creek. These tailings are unsuitable for structural foundations despite their 100+ year age. These tailings are often unstable and contribute to local erosion problems.

3.10.2 Answers to Checklist Questions

Questions A and B:

The site does not provide any known mineral or natural resources, such as timber, oil or gas that would be of value to the region and the residents of the state. There are a few trees that would be removed as part of the project, but these do not represent a significant timber resource, nor is the lumber from valley oaks utilized for commercial purposes. The project would not utilize groundwater.

3.10.3 Finding

The proposed project would result in less than significant impacts to mineral resources.

3.11 NOISE/VIBRATION

Would the proposal result in:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐
b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒

3.11.1 Environmental Setting

Noise is generally defined as unwanted or objectionable sound. Decibels and other technical terms are defined in Table 3.11-1. Noise levels are measured on a logarithmic scale because of physical characteristics of sound transmission and reception. Noise energy is typically reported in units of decibels (dB). Noise levels diminish (or attenuate) as distance to the source

increases according to the inverse square rule, but the rate constant varies with type of sound source. Sound attenuation from point sources, such as industrial facilities, is about 6 dB per doubling of distance. Heavily traveled roads with few gaps in traffic behave as continuous line sources and attenuate at 3 dB per doubling of distance. Noise from more lightly traveled roads is attenuated at 4.5 dB per doubling of distance.

Table 3.11-1. Definitions of Acoustical Terms

Term	Definitions
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the sample sound pressure to the standard sound pressure, which is 20 micropascals (20 micronewtons per square meter)
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear, and correlates well with subjective reactions to noise. All sound levels in this reports are A-weighted
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 P.M. to 10:00 P.M. and after addition of 10 decibels to sound levels in the night between 10:00 P.M. and 7:00 A.M.
Day/Night Noise Level, L_{dn}	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 P.M. and 7:00 A.M.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence, tonal or information content, as well as the prevailing ambient noise level

Community noise levels are measured in terms of the A-weighted decibel (dBA). A-weighting is a frequency correction that correlates overall sound pressure levels with the frequency response of the human ear. Equivalent noise level (L_{eq}) is the average noise level on an energy basis for a specific time period. The duration of noise and the time of day at which it occurs are important factors in determining the impact on communities. Noise is more disturbing at night and noise indices have been developed to account for the time of day and duration of noise generation. The Community Noise Equivalent (CNEL) and Day Night Average Level (DNL or L_{dn}) are such indices. These indices are time-weighted average values equal to the amount of acoustic energy equivalent to a time-varying sound over a 24-hour period. The CNEL index penalizes night-time noise (10 p.m. to 7 a.m.) by adding 5 dB to account for increased sensitivity of the community after dark. The L_{dn} index penalizes nighttime noise the same as the CNEL index, but does not penalize evening noise.

Effects of Noise

People are subject to a multitude of sounds in the environment. Excessive noise cannot only be undesirable but may also cause physical and/or psychological damage. The amount of annoyance or damage caused by noise is dependent primarily upon three factors: the amount and nature of the noise, the amount of ambient noise present before the intruding noise, and the activity of the person working or living in the noise source area.

The difficulty in relating noise exposure to public health and welfare is one of the major obstacles in determining appropriate maximum noise levels. Although there has been some dispute in the scientific community regarding the detrimental effects of noise, a number of general conclusions have been reached:

- Noise of sufficient intensity can cause irreversible hearing damage;
- Noise can produce physiological changes in humans and animals;
- Noise can interfere with speech and other communication; and,
- Noise can be a major source of annoyance by disturbing sleep, rest, and relaxation.

Noise Study

The Acoustics & Vibration Group completed a noise impact study for the proposed project on August 16, 2004. See Appendix D. Standard sound measuring equipment was used during background sound tests. A CEL 593 Sound Analyzer (s/n 3/0201692) and two CNEL 480 Sound Level Meters (s/n 129858 and 2/112179) were employed during the test. Field tests were done on July 20, 2004 from 11:40 p.m. to 2:15 p.m. at the project site. Sound level meters were mounted on tripods with the microphones 5.5 to 6 feet above ground level at each test position. Sound levels were measured during consecutive five minute intervals with additional data collected in 5 second intervals. Measurements were made at two positions near the west property line. One was approximately 84 feet from the near lane of Taylor Road. The other position was inline with Position #1, but was 153 feet from the near lane of Taylor Road. This is the approximate position of the residential units behind the commercial buildings. Measurements were made at both positions for the duration of the test.

Interstate 80 is east of the site and parallels Taylor Road. West of Taylor Road is a Union Pacific Distribution Services Yard and the rail line on which westbound freight and passenger trains operate. The land is relatively flat with a natural berm along Taylor Road. This berm varies in height from less than 1 foot to 5 feet at the high point with some trees planted on it.

Heavy rail traffic on the Union Pacific Railroad rail line is the major sound source. Traffic on Taylor Road is the second most important sound source at the project site followed by vehicular traffic on Interstate 80 and activity at the KOA campground. Taylor Road is a major local road, and comprises of one lane in each direction. The speed of vehicles varies greatly, but is estimated to be between 35 and 50 miles per hour.

Day-night average L_{dn} sound levels in the year 2020 would be 71 to 72 dB at the outdoor activity areas of homes to be built closest to Taylor Road. This assumes no barrier along the road and that the trains continue to sound their horn as they approach the rail crossing at Sierra College Boulevard. The assumed outdoor activity areas are the back yards of the residences. L_{dn} sound levels for homes farther from the road would be less as the distance from Taylor Road increases and because of the shielding provided by the intervening homes and the proposed commercial buildings closest to the road.

3.11.2 Regulatory Setting

State of California

The State of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles, freeway noise affecting classrooms, sound transmission control, occupational noise control, and airport noise. The state has also developed land use compatibility guidelines for community noise environments.

The State Office of Noise Control in "Guidelines for the Preparation and Content of Noise Elements of the General Plan," (February 1976) provided guidance for the acceptability of projects within specific CNEL contours. It diagrammatically identifies "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable" noise levels for various land use types. These land use compatibility guidelines are provided in Table 3.11-2.

The Town of Loomis Noise Element requires interior L_{dn} sound level to be 45 dB or less in habitable spaces. The Town also sets an interior L_{dn} sound level of offices spaces and has a goal of 65 dB L_{dn} for exterior sounds levels in the outdoor activity areas of residential dwellings.

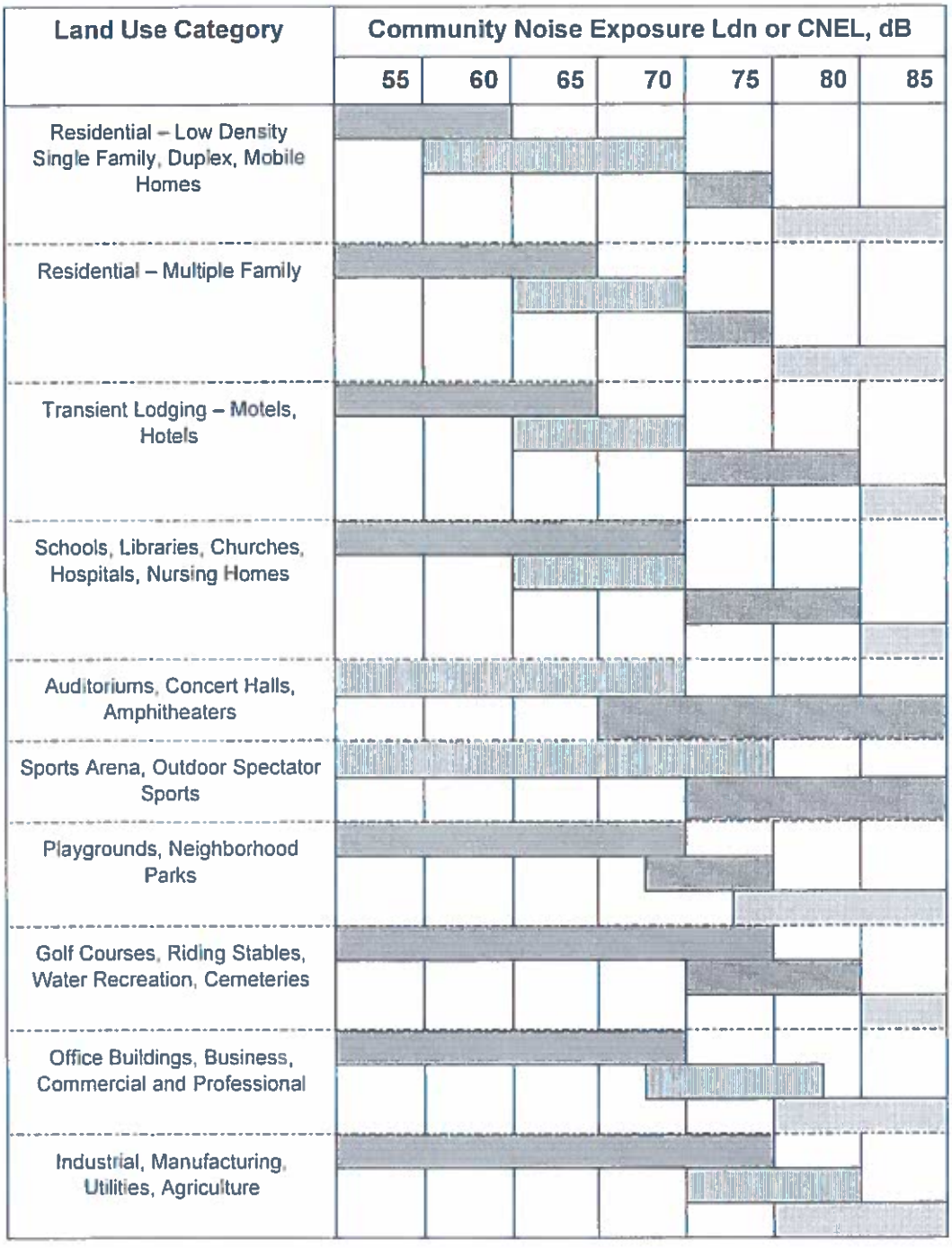
3.11.3 Answers to Checklist Questions

Question A:

The ambient noise level would be temporarily raised during the construction of the project by the operation of heavy equipment and other associated activities. Noise from construction may affect surrounding land uses.

The Noise Study determined that the day-night average Ldn sound levels in the year 2020 would be 71 to 72 dB at the outdoor activity areas of homes to be built closest to Taylor Road. As such, this would exceed the Town's goal of 65 dB L_{dn} for exterior sounds levels in the outdoor activity areas of residential dwellings. As such, exterior sound attenuation is required. The study also determined that the interior L_{dn} sound level in homes closest to Taylor Road would exceed the Town's requirement of 45 dB L_{dn} or less. Interior sound attenuation is needed for residential and commercial lots closest to Taylor Road.

Table 3.11-2. Land Use Compatibility for Community Noise Exposure



Question B:

During construction, graders and compactors may be used that would generate excessive ground-borne vibration or ground-borne noise levels that may affect adjacent residents.

Question C:

The project will not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. The proposed project involves construction of residential homes and commercial buildings that would be utilized by residents and tenants on a long-term basis. Such use would not result in a substantial permanent increase in ambient noise levels.

Question D:

The project will result in a substantial temporary increase in ambient noise levels in the project vicinity above levels existing without the project due to construction activities. Following construction, noise levels within the project area would be similar to pre-project conditions.

Questions E and F:

The project site is not within an airport land use plan or within two miles of a public airport or public use airport or within the vicinity of a private airstrip.

3.11.4 Mitigation

Mitigation Measure NOI-1. The applicant shall ensure that the construction contractor employs the following noise reducing measures:

- Standard construction activities shall be limited to between 7:00 a.m. and 6:00 p.m. Monday through Friday;
- All equipment shall have sound-control devices no less effective than those provided by the manufacturer. No equipment shall have un-muffled exhaust pipes; and,
- Stationary noise sources shall be located as far from sensitive receptors as possible, and they shall be muffled and enclosed within temporary sheds, or insulation barriers or other measures shall be incorporated to the extent possible.

Mitigation Measure NOI-2. To meet the Town's goal of 65 dB L_{dn} for exterior sounds levels in the outdoor activity areas of residential dwellings, the applicant shall construct the following:

- An 8-inch wall from the residential street in front of the house on Lot 39, parallel to the driveway until it reaches the north property line, the running east until it

reaches the east property line of the lot. The exact location of the section of wall is estimated to be about 30 feet west of the west face if the house. The wall shall be 7 feet high from the east property line of Lot 39 to the east face of the home on Lot 24 as measured above the pad height of Lot 24. At that point, the wall height can be reduced to 6 feet from this point to the east property line.

- A 7-inch sound barrier wall along the back property line of Lots 40 and 41 separating the two residential lots in the middle of the project site from two of the commercial buildings;
- A 7-inch sound barrier wall along the west property line of Lot 2 adjacent to commercial Lot 1;
- All sound barrier walls must have a minimum surface weight of 3.5 to 4.0 lbs/sq-ft;
- The structures must be continuous along their width and height with no gaps at the ground;
- The wall can be constructed from wood, metal or masonry; and,
- All wall heights are referenced from house pad elevation.

Mitigation Measure NOI-3. The following general construction requirements shall be followed for the project:

- All joints in exterior walls shall be sealed airtight around windows and doors, at the wall perimeter, and at major seams;
- All above ground penetrations of exterior walls by electrical and plumbing components shall include a ¼ to ½-inch airspace around the perimeter. This space shall be filled loosely with fiberglass insulation. The space shall then be sealed airtight on both sides of the wall with a resilient, non-hardening caulking or mastic;
- Basic exterior wall construction shall comprise the following or material of equal surface weight and Sound Transmission Class, STC rating:
  - 2" x 4" wood studs at 16 inches on center;
  - Minimum R-13 insulation in the stud cavities;
  - 5/8" gypsum wallboard fastened to the interior face of the wood studs. The wall shall be fully taped and finished, and sealed around the perimeter with a combination of backer rod and resilient, non-hardening caulking;
  - The exterior surface shall be finished with the following or with another product with equal or greater surface weight:
    - ½" plywood;
    - Building paper and wire mesh,
    - Finished with minimum 7/8" three-cot dense stucco.
  - Ceilings shall be finished with a minimum 5/8" gypsum board with minimum R-19 insulation in the ceiling;

- Windows shall have a minimum STC rating of 29 or better. Windows shall have an air infiltration rate of less than or equal to 0.20 CFM/lin.ft when tested with a 25 mile an hour wind per ASTM standards;
- Exterior sliding glass doors shall have a minimum SCT rating of 29;
- Exterior doors shall have a minimum STC rating of 29; and,
- There shall be no need to open windows, doors or other exterior openings to provide adequate ventilation.

Mitigation Measure NOI-4. The following special construction requirements shall be followed for the project:

- Lots 37 through 39
  - Upstairs Bedroom Windows on the North and West Side of House.
    - Windows shall be a minimum STC 35 rating. Windows shall have an air infiltration rate of less than or equal to 0.15 CFM/lin.ft. when tested with a 25 mile an hour wind per ASTM standards.
    - This is equivalent to a dual glazed window comprising ¼" float, ½" air space and ¼" float glass.
  - Downstairs Windows on the North and West side.
    - Windows shall be a minimum STC 30 rating. Windows shall have an air infiltration rate of less than or equal to 0.15 CFM/lin.ft. when tested with a 25 mile an hour wind per ASTM standards.
    - Windows shall be constructed using double glazed window, a minimum ½ inch airspace.
- Homes on Lots 40 and 41.
  - Windows on the North and West Side of the Homes.
    - Windows in these rooms shall be a minimum STC 30 rating. Windows shall have an air infiltration rate of less than or equal to 0.15 CFM/lin.ft. when tested with a 25 mile an hour wind per ASTM standards.
    - Windows shall be constructed using double glazed window, a minimum ½ inch airspace.
- Home on Lot 2.
  - Upstairs Bedroom Windows on the North and West Side of House.
    - Windows shall be a minimum STC 35 rating. Windows shall have an air infiltration rate of less than or equal to 0.15 CFM/lin.ft. when tested with a 25 mile an hour winder per ASTM standards.
    - This is equivalent to a dual glazed window comprising ¼" float, ½" air space and ¼" float glass.
  - Downstairs Windows on the North and West Side.

- Windows shall be a minimum STC 30 rating. Windows shall have an air infiltration rate of less than or equal to 0.15 CFM/lin.ft. when tested with a 25 mile an hour wind per ASTM standards.
- Windows shall be constructed using double glazed window, a minimum ½ inch airspace.

Mitigation Measure NOI-5. The following special construction requirements shall be followed for the project:

- General Requirements
  - All joints in exterior walls shall be sealed airtight around windows and doors, at the wall perimeter and at major seams.
  - All above ground penetrations of exterior walls by electrical and plumbing components shall include a ¼ to ½ inch around the perimeter. This space shall be filled loosely with fiberglass insulation. The space shall then be sealed airtight on both sides of the wall with a resilient, non-hardening caulking or mastic.
  - Basic exterior wall construction shall comprise the following or material of equal surface weight and Sound Transmission Class, STC rating:
    - 2" x 4" wood studs at 16 inches on center.
    - Minimum R-13 insulation in the stud cavities.
    - 5/8" gypsum wallboard fastened to the interior face of the wood studs. The wall shall be fully taped and finished, and sealed around the perimeter with a combination of backer rod and resilient, non-hardening caulking.
    - The exterior surface shall be finished with the following or with another product with equal or greater surface weight:
      - ½" plywood;
      - Building paper and wire mesh; and
      - Finished with a minimum 7/8" three-coat dense stucco.
  - Attic vents shall not be placed on Taylor Road/rail line side of the building unless sound attenuating duct is attached.
  - Windows facing or with a view of Taylor Road shall have a minimum STC rating of 35 or better. Windows shall have an air filtration rate of less than or equal to 0.15 CFM/lin.ft. when tested with a 25 mile an hour wind per ASTM standards. This is equivalent to a dual glazed window comprising ¼" float, ½" air space and ¼" float glass.
  - Exterior doors facing or with a view of Taylor Road shall have a minimum STC 33 rating.
  - There shall be no need to open windows, doors or other exterior openings to provide adequate ventilation.
- Special Requirements

- If a building is used for offices rather than general commercial, additional calculations of interior sound levels will be required to assess window and door requirements.

3.11.5 Finding

With the incorporation of mitigation, noise impacts would be considered less than significant.

3.12 POPULATION AND HOUSING

Would the proposal:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) Cumulatively exceed official regional or local population projections?	☐	☐	☒
b) Substantially change the demographics in the area?	☐	☐	☒
c) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒
d) Substantially alter the location, distribution, or density of the area's population?	☐	☐	☒
e) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒
f) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒
g) Conflict with adopted housing elements?	☐	☐	☒

3.12.1 Environmental Setting

Loomis is a small, semi-rural community located in western Placer County in California's agricultural Central Valley. Incorporated in 1984, the Town is located within a fast-growing metropolitan region approximately 25 miles northwest of the City of Sacramento, along Interstate 80. Loomis is in the western portion of the Loomis Basin, an 80-square mile area of the Placer County foothills. Loomis maintains a distinct small-town, semi-rural character through large residential lots with continuing agricultural activities, rural roads, and equestrian trails, a compact downtown "village" area, the preservation of historic structures, and extensive open space areas.

Most of the Town's land area is occupied by large-lot residential/agricultural and single-family residential development. Many local landowners maintain small-scale, "hobby" agricultural activities on small ranches, including the raising of farm animals. Higher density residential development is concentrated near the Taylor Road commercial corridor.

Because population growth affects all types of community change, estimates of future population growth is used as a basis for land use planning. The Sacramento Council of

Governments developed population, housing and employment projections for all jurisdictions within the six counties surrounding Sacramento, which includes Placer County. The projections for Loomis are shown in Table 3.12-1. While the projections estimate that Loomis will grow by approximately three percent annually through the year 2020, employment is expected to grow by over eight percent annually. As with any population growth projection, there is the possibility that continuing rapid economic growth in the region could cause even higher annual growth rates in Loomis.

Table 3.12-1. Town of Loomis Population, Housing, and Employment Projections

Town of Loomis	1998*	2000	2005	2010	2015	2020	Annual % Change
Population	6,025	6,100	6,900	8,600	9,700	10,300	3.2%
Housing Units	2,205	2,215	2,500	3,100	3,450	3,650	3.0%
Employment	-	1,500	2,000	2,700	3,450	4,150	8.4%

*California Department of Finance, City/County Estimates, 1998.
Source: Sacramento Council of Governments (SACOG), Projections – Six County Area, 2000-2002

According to the California Department of Finance, the Town of Loomis currently has 2,353 dwelling units, including nearly 2,000 single-family houses, and a population of 6,250. With an anticipated population of 12,000 residents by the year 2020, the Town will need an additional 2,407 dwelling units for a total of 4,612 housing units. This assumes a vacancy rate of 3.27 percent and an average household size of 2.69 persons (Town of Loomis 1998). Currently, the Town has an average household size of 2.731 (Town of Loomis 2005).

3.12.2 Answers to Checklist Questions

Question A:

The Sacramento Area Council of Governments projects an annual population growth rate of approximately 3% for the Town of Loomis. The addition of 29 single-family residential homes, including 18 with carriage units, and 4 half-plexes would not result in a cumulative exceedance of the official population projections for the Town.

Question B:

The 18 carriage units would be 462 sq-ft one bedroom/one bath units with a kitchen and an off-street parking space, which would be located adjacent to the garage per carriage unit. The carriage units would be used by either the primary homeowner, a family member, or rented out. The current rent would be in the $500 per month range. The construction of the 30 units may result in a minor change in the demographics of the Loomis area by providing low-income affordable housing.

Question C:

The proposed project involves the construction of 29 residential homes 18 carriage houses, 4 half-plexes and approximately 20,240 sq-ft of commercial space. The addition of 29 residential homes, carriage houses, and 4 half-plexes would not induce substantial population growth in the Loomis area. The project would meet current workforce housing needs.

Question D:

The project site is located on Taylor Road, adjacent to existing commercial and residential development and is nearby downtown Loomis. The project would result in a minor increase in the density of population within the area, but would not substantially alter the location, distribution, or density of the area's population.

Questions E and F:

The project would not result in the displacement of existing housing or persons, necessitating the construction of replacement housing elsewhere.

Question G:

The Town of Loomis General Plan-Housing Element contains several goals, policies and programs consistent with the Regional Housing Allocation Plan for the region and also reflects the appropriate research and conclusions of the Placer County Housing Element. One of the major goals of the housing element is to provide a continuing supply of affordable housing to meet the needs of existing and future residents of the Town of Loomis in all income categories. Specific policies associated with this goal that the project meets include the following:

- The Town shall encourage "mixed-use" projects where housing is provided in conjunction with compatible non-residential uses. The Town shall promote the mixed-use policies of the Town Center Master Plan to encourage development of mixed-uses;

- The Town shall give highest priority for permit processing to development projects that include a lower income residential component; and,

- Housing for low-income households that is required in a new residential project shall not be concentrated into a single building or portion of the site, but shall be dispersed throughout the project, to the extent practical, given the size of the project and other site constraints.

3.12.3 Finding

The proposed project would result in less than significant impacts to population and housing.

3.13 PUBLIC SERVICES

Would the proposal have an effect upon or result in a need for new or altered government services in any of the following areas:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) Fire protection?	☐	☒	☐
b) Police protection?	☐	☒	☐
c) Schools?	☐	☐	☒
d) Parks?	☐	☐	☒
e) Electrical power or natural gas?	☐	☐	☒
f) Communication?	☐	☐	☒
g) Other public or utility services?	☐	☒	☐

3.13.1 Environmental Setting

Fire Protection

The Loomis Fire Protection District (LFPD) serves nearly the entire Town as established by the 1999 boundaries. Small portions of the Town limits are served by the Penryn Fire Protection District and South Placer Fire District. Mutual aid and automatic agreements are in place with the City of Rocklin, the South Placer Fire District, the Penryn Fire Protection District and the State of California Division of Forestry.

LFPD provides fire protection, fire suppression, emergency medical service, open area (wildlands) fire protection, assists in search and rescue operations and assists appropriate agencies with site control during removal of hazardous materials. The LFPD operates out of two stations with a paid staff of 12 and a volunteer base of 35 positions. The headquarters station is at Horseshoe Bar Road and Magnolia, houses the permanent staff, and contains one emergency medical rescue unit and three engines. The second station is not staffed except on call and is located at Horseshoe Bar Road and Tudsbury Roads, about two miles from the headquarters station, and contains one rescue unit/grass fire truck and two engines. LFPD provides response times of 5 minutes or less on 80% of all calls for service.

Police Protection

Law enforcement services are provided in Loomis by the Placer County Sheriff's Department. The department operates from the South Placer Substation located at Horseshoe Bar Road and Interstate 80 in Loomis. About 27 deputies are based out of this substation and are responsible for patrolling west and south Placer County. The South Placer Substation staff includes 4.25 patrol deputy, 05 sergeant, and 0.25 detective positions patrolling for Loomis. Deputies from this substation provide 24-hour protection.

Schools

The Loomis area encompasses portions of three school districts: Placer Union High School District (PUHSD), Loomis Union School District (LUSD), and Penryn School District (PSD). The PUHSD operates several high schools while the LUSD operates three schools. Loomis Elementary School serves grades K-6 while both Franklin and Placer Elementary schools serve grades K-8. The only school within the Penryn School District is Penryn School, which is a K-8 facility located on English Colony Way in Penryn, about 3 miles northeast of Loomis.

Revenue from school facility construction comes from both state and local sources, including developer fees. Both the PUHSD and LUSD participate in school construction programs, whereby new development contributes half the cost of new facilities, while the remainder is supplied by state and local resident taxes. The LUSD has implemented its Mutual Benefit School Impact Fee Agreement, which imposes the following fees on residential development: $5,211 per single-family home; $3,138 per duplex; and $2,012 per multi-family unit. A similar agreement was initiated by the PUHSD in March 1998, with fees as follows: $3,483 per single-family home; $2,589 per duplex; and $656 per multi-family unit

Parks

See Section 3.14

Electrical Power or Natural Gas

The Pacific Gas and Electric Company (PG&E) supplies natural gas and electricity to homes and business in Loomis. These services are provided in accordance with Public Utilities Commission (PUC) rules and regulations. Some rural locations on the periphery of the community are not connected to the existing gas distribution network and are instead on individual propane hookups. This service is provided by many private propane providers on an individual basis.

Telephone

Pacific Bell currently provides phone services to homes and business in the Loomis area and is responsible for maintaining telephone infrastructure in the area. However, many alternative local and long-distance companies are available to provide service using Pacific Bell's network of phone lines.

Cable Television

Starstream Communications of Rocklin is the cable television provider to the Loomis community. No service deficiencies have been identified.

3.13.2 Answers to Checklist Questions

Question A:

The project is expected to result in an incremental increase in demand for fire protection services. The Loomis Fire Protection District has established a district-wide zone of benefit, which it uses to create project-specific zones of benefit. The project-specific zones of benefit provide for property tax assessments that are used to cover the cost of fire protection services associated with these projects. Once a zone of benefit has been established, the District issues a will-serve letter that indicates that it can serve the project.

Question B:

Project development would add both people and material improvements to the site, resulting in a potential increase in the need for response from the Sheriff's Department.

Question C:

Educational services are provided by the Loomis Union School District and the Placer Union High School District. Based on the student yield rates, construction of the residential portion of the project is estimated to generate approximately fourteen (14) K-5 students, six (6) 6-8 students, and nine (9) 9-12 students (Placer County Office of Education, 2004). It is also expected that a small number of student-age children would be generated from the proposed carriage units.

The average cost for providing facilities in these districts is $18,780 per student for grades K-5, $26,564 per student for grades 6-8, and $34,883 per student for grades 9-12. The school districts actively pursue all sources for construction funding including the School Facilities Project under Proposition 45. These sources of funding are dependent upon current regulations, eligibility requirements, and are available on a first-come, first-serve basis. Therefore, the availability of and access to state funds are unpredictable. California school districts are also required to locally fund 50% of new construction costs.

Both the Loomis Union Elementary School District and Placer Union High School District successfully passed bonds for construction and modernization projects. These funds have been used to access state funding to construct new facilities.

Both districts have established a program to levy and collect development fees, as authorized by State statute and local ordinance. These fees provide an essential local contribution to the cost of providing adequate schools.

Question D:

See Section 3.14

Question E:

Necessary infrastructure to establish electrical and natural power to the site would be constructed by the project applicant. Monthly services fees would be paid by the residents of the constructed homes and tenants of the commercial buildings.

Question F:

Communication services would be provided via Pacific Bell's network. Cable services would be provided by Starstream Communications.

Question G:

The construction of the project may impact other public services, such as drainage, wastewater service, and water service.

3.12.3 Mitigation

Mitigation Measure PUB-1. The applicant shall pay the appropriate fire protection fees in accordance with the Loomis Fire Protection District.

Mitigation Measure PUB-2. The applicant shall pay appropriate school fees based on estimated student yield rates and will be consistent with the requirements of the Loomis Union Elementary School District, Placer Union High School District, and Placer County Office of Education.

Mitigation Measure PUB-3. Prior to issuance of a building permit, the applicant will pay all other community facilities fees based on the Town of Loomis Mitigation Fee Analysis Final Report (Sinclair 2005). According to this report, the community facility fees would be as follows:

Table 3.13-1. Community Facility Fees

Per Single Family Residential Dwelling Unit	Per Multi-family Residential Dwelling Unit	Per 1,000 Square Feet of Commercial
$2,256	$1,496	$442

3.13.4 Finding

With the incorporation of mitigation, the project would result in less than significant impacts to public services.

3.14 RECREATION/OPEN SPACE

Would the proposal result in impacts to:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒

3.14.1 Environmental Setting

The Town owns and operates the Sunrise-Loomis Neighborhood Park. The Town also contributes funds to the Loomis Unified School District (LUSD) to provide recreational improvements to their facilities. Although schools limit the use of their facilities, they represent a significant source for meeting recreational needs for Loomis residents. Placer County operates the Loomis Basin Regional Park on the northeast border of the Town, which is regularly used by Loomis residents. In addition, Sierra Community College has recreational facilities available for limited use by non-residents. Bikeways, hiking and equestrian trails also provide recreational opportunities for residents.

A Parks and Recreation Needs Assessment was prepared and adopted by the Town in 1996. This plan indicated that the appropriate parks standard to apply to Loomis is five acres of park per 1,000 persons. To fulfill this standard, the Town needs a minimum of approximately 7.9 acres of active parkland and 30 acres of passive/open space acreage. The Town is in the process of reviewing its park development fess and open space requirements. This development will be subject to the new fees and consideration of open space needs in conformance with the Town's General Plan.

3.14.2 Answers to Checklist Questions

Question A:

The project's resident population would increase the use of existing neighborhood and regional parks or other recreational facilities. Considering that there is a shortage of parks within Loomis, this may result in an impact to the Town's recreational facilities.

Question B:

The project does not include recreational facilities; therefore, there would be no adverse physical effect on the environment. The project would increase the use of recreational facilities, thereby increasing the need to construct a new or expand an existing facility,

which may have an adverse physical effect on the environment. The Town of Loomis Park and Recreation Master Plan (adopted 1998) supports the preservation of open space by establishing a goal to provide at least five acres of passive park and open space land for each one thousand residents (in addition to five acres of active park land). Construction of the project may be inconsistent with the Town of Loomis Park and Recreation Master Plan.

3.14.3 Mitigation

Mitigation Measure REC-1. Prior to issuance of a building permit, the applicant will either provide the appropriate facility on site or pay all parkland acquisition mitigation fees based on the Town of Loomis Mitigation Fee Analysis Final Report (Sinclair 2005). According to this report, the parkland acquisition fees would be as follows:

Table 3.14-1. Park Land Acquisition Fees

Per Single Family Residential Dwelling Unit	Per Multi-family Residential Dwelling Unit	Per 1,000 Square Feet of Commercial
$1,575	$1,044	$308

Mitigation Measure REC-2. Prior to issuance of a building permit, the applicant will provide the appropriate facility on site or pay all passive park and open space land acquisition mitigation fees based on the Town of Loomis Mitigation Fee Analysis Final Report (Sinclair 2005). According to this report, the fees would be as follows:

Table 3.14-2. Passive Park and Open Space Land Acquisition Fees

Per Single Family Residential Dwelling Unit	Per Multi-family Residential Dwelling Unit	Per 1,000 Square Feet of Commercial
$958	$636	$187

3.14.4 Finding

With the incorporation of mitigation, impacts to recreation would be considered less than significant.

3.15 TRANSPORTATION/CIRCULATION

Would the proposal result in:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☒	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the County Circulation Element?	☐	☒	☐
c) Result in a change in air, rail or water-borne traffic patterns, including either a significant increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses, hazards or barriers for vehicles, pedestrians, or bicyclists?	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒
f) Result in inadequate parking capacity?	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☒
h) Substantially accelerate physical deterioration of public and/or private roads?	☐	☐	☒

3.15.1 Environmental Setting

Existing Roadway System

Roadways and intersections that provide primary circulation near the project site include the following:

Taylor Road is a major arterial street that runs parallel to Interstate 80 and links Loomis with the City of Rocklin to the west and the communities of Penryn and Newcastle to the east. Taylor Road is generally a two-lane road through Loomis, but incremental half section widening has occurred as development has proceeded. Along the existing project frontage, Taylor Road has one travel lane in each direction, but to the east the roadway has been widened to provide a

continuous two-way left turn lane (TWLT) and to the west the roadway has been widened to accommodate auxiliary turn lanes at the Sierra College Blvd intersection. Recent traffic counts conducted by the Town of Loomis in December 2004 indicate that Taylor Road carriers an Average Daily Traffic (ADT) volume of about 10,460 vehicles per day (vpd) in the area from Sierra College Blvd to Shawn Way, 10,300 between Shawn Way and Horseshoe Bar Road, 16,031 ADT between Horseshoe Bar Road and King Road and 6,964 ADT east of King Road.

Sierra College Blvd is a major arterial street that links Loomis with the City of Lincoln to the north and with Interstate 80 and the City of Rocklin to the south. Today, Sierra College Blvd has one travel lane in each direction from Rocklin Road across Interstate 80 to its northern terminus at SR 193. Incremental widening has occurred to accommodate auxiliary turn lanes at the Taylor Road intersection. Del Oro High School and Loomis Elementary School are located along Taylor Road in the area east of downtown Loomis. Recent traffic counts reveal that Sierra College Blvd carries about 20,720 ADT between Granite Drive and Brace Road and 10,585 ADT north of the Taylor Road intersection.

The **Taylor Road/Sierra College Blvd intersection** is controlled by an actuated traffic signal. Left turn lanes and right turn lanes exist on each approach. Pedestrian indications and crosswalks exist on each leg of the intersection. Sierra College Blvd crosses the Union Pacific Railroad (UPRR) tracks that run parallel and north of Taylor Road. This crossing is equipped with crossing arms and warning signals and is linked to the operation of the Taylor Road/Sierra College Blvd traffic signal.

Horseshoe Bar Road is an east-west arterial that links Loomis with Interstate 80 and continues easterly into the area of rural Placer County near Folsom Lake. Horseshoe Bar Road has two travel lanes in each direction and the most recent traffic counts available from the Town indicate that Horseshoe Bar Road carries about 13,186 ADT in the area between Taylor Road and Interstate 80.

The **Taylor Road/Horseshoe Bar Road intersection** is controlled by an actuated traffic signal. Left turn lanes exist on the Taylor Road legs of the intersection. The two Horseshow Bar Road approaches operate in "split" phases and northbound Horseshoe Bar Road has been striped with a separate right turn lane that is controlled by an "overlap" phase that is linked to the westbound left turn on Taylor Road. Crosswalks and pedestrian indications are provided on each leg of the intersection.

King Road is an east-west arterial street that traverses the Town from Sierra College Blvd across Taylor Road and Interstate 80 to the Auburn Folsom Road in rural Placer County. King Road has a travel lane in each direction, although auxiliary turn lanes exist at the Taylor Road intersection. Recent traffic counts available from the Town indicate that King Road carries about 2,462 between Sierra College Blvd and Bankhead Road, 5,593 ADT between Arcadia Avenue and Taylor Road and 4,254 ADT between Taylor Road the Interstate 80 overcrossing.

The **Taylor Road/King Road intersection** is controlled by an actuated traffic signal. Separate left turn lanes are available on each leg of the intersection and short right turn lanes have been striped on the King Road approaches. Taylor Road has been widened in this area to

accommodate an additional through lane in each direction, but because these lanes are short, they generally function as separate right turn lanes. King Road crosses the Union Pacific Railroad (UPRR) tracks that run parallel and north of Taylor Road. This crossing is equipped with crossing arms and warning signals and is linked to the operation of the Taylor Road/King Road traffic signal.

Bus Service. Bus services are provided to the Loomis area by Placer County Transit. The Taylor Road Shuttle links Loomis, Penryn, Auburn and Sierra College Blvd in Rocklin. This route stops within Loomis at the downtown multi-modal center. Service is provided between 6:30 a.m. and 4:14 p.m. Monday through Friday with four stops per day. Loomis is also served by Placer Commuter Express, which runs during commute hours and links the community with downtown Sacramento. The area is also served by Placer County Transit Dial-a-Ride from 6:00 a.m. to 8:00 p.m.

Rail Service. Rocklin is served by both Amtrak California's Capitol Corridor Trains and three or four connecting motor coaches (depending on weekday or weekend service). The Rocklin station is an un-staffed stop that is located at the corner of Rocklin Road and Pacific Street.

Bicycle Facilities. The existing bicycle system consists of a series of Class I (off-street rails) and Class II (on-street lanes) facilities on major arterials. Class II lanes exist on Taylor Road between Sierra College Blvd and downtown Loomis.

Sidewalks. Sidewalks are currently provided on portions of Taylor Road where development has occurred, including the area east of the proposed project.

Traffic Study

A detailed traffic study was prepared for the project by KD ANDERSON Transporation Engineers. This study was prepared with input from the Town of Loomis and examined existing circulation conditions along with potential impacts caused by the project. A copy of the traffic study is included in Appendix E. Based on discussions with the Town, the following roads and intersections were analyzed:

- Taylor Road/King Road;
- Taylor Road/Horseshoe Bar Road;
- Taylor Road/Sierra College Blvd;
- Taylor Road/South Project Access; and,
- Taylor Road/North Project Access.

New a.m. and p.m. peak hour traffic counts were completed for the study on December 2, 2004. Conditions on major roads were also evaluated within the context of current daily traffic volumes. The AM peak hour period is defined as one-hour of peak traffic flow counted some time between 7:00 AM and 9:00 AM and the PM peak hour is defined as one-hour of peak traffic

flow counted some time between 4:00 PM and 6:00 PM. Figure 2 of Appendix E shows the existing AM and PM peak hour intersection traffic volumes and land configurations and Table 1 shows the current daily traffic volumes and levels of service. In summary, the Study determined conditions for four different project stages:

1. Existing Conditions;
2. Existing Plus Project Conditions; and,
3. Cumulative Plus Project Conditions.

Level of Service Criteria. The operating conditions experienced by motorists are described as "levels of service" (LOS). LOS is a qualitative measure of the effect of a number of factors, including speed and travel time, traffic interruptions, freedom to maneuver, driving comfort, and convenience. Levels of service are designated "A" through "F" from best to worst, which cover the entire range of traffic operations that may occur. LOS "A", "B", and "C" are considered satisfactory to most motorists, while LOS "D" is marginally acceptable. LOS "E" and "F" are associated with increasingly long delays and congestion, and are considered unacceptable to most motorists. The Town of Loomis has established LOS "C" as an operational threshold beyond which mitigation is required, although the General Plan recognizes that the Taylor Road/King Road intersection currently operates at LOS "D" during the a.m. peak hour. The General Plan also contains thresholds based on the volume of traffic on individual roadway segments. Measured in terms of the Volume/Capacity ratio (V/C), unsatisfactory conditions occur when the V/C ratio exceeds 0.80.

LOS were calculated for study intersections using the methodologies contained in the 2000 Highway Capacity Manual. In the case of intersections controlled by side street stop signs, both the overall LOS for the intersection and the individual LOS for all movements were identified. LOS and V/C ratio for roadway segments were calculated using the capacity thresholds identified in the General Plan.

Existing Conditions. Current AM and PM peak hour LOS are summarized in Table 3 of Appendix E. As shown, the AM peak hour LOS at the King Road/Taylor Road intersection currently exceeds the Town's LOS "C" threshold. However, conditions at the other study intersections are LOS "C". As noted in the Town's General Plan, conditions at the Taylor Road/King Road intersection are greatly influenced by the traffic headed to and from Del Oro High School during the periods before and after school. Extreme congestion and long queues are prevalent during the peak fifteen minutes before and after school, primarily as a result of the lack of alternative access to the school.

3.15.2 Answers to Checklist Questions

Questions A and B:

Short-term

Construction of the proposed project would temporarily affect access to adjacent land uses and streets for both general and emergency traffic during construction work hours. The potential for the proposed project to affect emergency access routes would result in a less than significant impact.

Long-term

Existing Plus Project Conditions. As shown in Table 7 of Appendix E, the addition of project traffic will exacerbate conditions that are already in excess of capacity on the segment of Taylor Road between Horseshoe Bar Road and King Road and will result in conditions in excess of the 0.80 standard in the area between the project site and Sierra College Blvd. All other segments will continue to operate within the Town's minimum LOS standard. As shown in Table 8 of Appendix E, the LOS at the Sierra College Blvd/Taylor Road intersection is projected to deteriorate from LOS C to LOS D with development of the project. This would result in a significant impact.

Cumulative Plus Project Conditions. As shown in Table 10 of Appendix E, LOS F conditions are projected on most major roads with and without the proposed project. The Town of Loomis General Plan Update notes the range of improvements needed to deliver acceptable conditions, including major widening of Sierra College Blvd from 4 to 6 lanes. However, the General Plan Update acknowledges that significant and unavoidable cumulative impacts would remain after all improvements are constructed. As shown in Table 11 of Appendix E, LOS D is projected at the Sierra College Blvd/Taylor Road intersection. This would result in a significant impact.

Question C:

The proposed project would not result in rail, waterborne or air traffic impacts.

Question D:

Short-term

Lane blockages during project construction would result in temporary alterations in bicycle and pedestrian circulation. Such an effect would inconvenience people who use those bikeways and sidewalks. Construction signs and flagging would be installed to warn vehicles, pedestrians, or bicycles of heavy equipment or hazardous conditions. The potential for the proposed project to temporarily affect bicycle or pedestrian routes would result in a less than significant impact.

Long-term

The project would not substantially increase hazards due to design features or incompatible uses, hazards or barriers for vehicles, pedestrians, or bicyclists. All improvements would be constructed according to improvement standards related to roadways and intersections.

Question E:

Project site access would be accomplished from Taylor Road via two new roadways. Based on the projected peak hour turning movements at these locations, the number of existing automobiles queuing in each approach to Taylor Road was calculated under the Town's guidelines using standard queue theory for existing vehicles. Per Town guidelines, a 95% confidence level was assumed, meaning that the forecast queue length would only be exceeded 5% of the time during the peak hour. The western access queue is estimated to be less than or equal to three vehicles and at the eastern driveway, the queue is projected to be one vehicle. The throat depths for each driveway are proposed to be about 110 feet in length, which would provide room for 4 vehicles between the parking lot connections and Taylor Road. Thus, the throat depths have been proposed are adequate to meet Town standards and would provide adequate emergency access.

Question F:

Each single-family residence would be provided two parking spaces; each carriage unit would have one off-street parking space. The approximately 20,240 sq-ft of commercial space would provide a minimum total of 90 parking spaces (restaurants would require more), consistent with the Town's Zoning Ordinance.

Question G:

The proposed project would not conflict with policies supporting alternative transportation. Employees, students, and residents accessing the proposed project site would be encouraged to use bicycles and other alternative forms of transportation.

Question H:

The project would increase ADT on project roadways, which may accelerate physical deterioration of public and/or private roads.

3.15.3 Mitigation

Mitigation Measure TRA-1. The applicant shall construct standard frontage improvements along Taylor Road.

Mitigation Measure TRA-2. Prior to construction, the applicant shall pay its fair share to the cost of needed improvements identified in the Town's General Plan. Based on the

Town of Loomis Mitigation Fee Analysis Final Report (Sinclair 2005), the fees would be as follows:

Table 3.15-1. Road Improvement Fees

Fee Program	Per Single Family Residential Dwelling Unit	Per Multi-family Residential Dwelling Unit	Per 1,000 square-feet of Commercial
Road circulation/Major roads fee	$2,300	$1,360	$2,944
Sierra College Boulevard fee	$691	$422	$912

3.15.4 Finding

With the incorporation of mitigation, impacts to transportation/circulation would be considered less than significant.

3.16 UTILITIES AND SERVICE SYSTEMS

Would the proposal result in the need for a new systems or supplies, or substantial alterations to the following utilities:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction which could cause significant environmental effects?	☐	☒	☐
d) Have sufficient water supplies (including fire flow available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒

Would the proposal result in the need for a new systems or supplies, or substantial alterations to the following utilities:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒

3.16.1 Environmental Setting

Water Supply.

See Section 3.8.1

Storm Drain. The Town provides storm drainage for developed properties within Town limits. Improvements to the system are generally installed and funded by development projects. The applicant would provide the necessary storm drainage facilities for the project.

Sewer. About half of the planning area is connected to wastewater collection infrastructure, a service provided by the South Placer Municipal Utility District (SPMUD). North of Interstate 80, the Town is served by sewer lines ranging from 6 to 12 inches in diameter. The primary service is a 15-inch pipe near Taylor Road, known as the Lower Loomis Trunk Sewer. South of the freeway, the Middle Secret Ravine Trunk extends to Barton Road and a tributary pipe network serves portions of the community in the area. The trunk sewer system collects wastewater from residential and commercial uses and transports it to the Roseville Regional Wastewater Treatment Plan (RRWWTP). The RRWWTP currently treats an inflow of about 13 million gallons per day (mgd), and was recently expanded to accommodate up to 18 mgd.

Solid Waste. The Auburn Placer Disposal Service (APDS) provides solid waste disposal for the project area. APDS estimates that individual households produce about 100 pounds of solid waste per week (Town of Loomis, Heritage Park Estates EIR, 1998). This figure is somewhat higher than that of the Placer County Solid Waste Management Plan, which estimates about 3.5 pounds per person per day, or 65 pounds per household per week. However, it is lower than the results suggested by a recent survey in Rocklin, which indicates a per capita disposal rate of 9 pounds per day, or about 164 pounds per week per household. Solid waste is ultimately taken to the Western Regional Sanitary Landfill in western Placer County at the intersection of Athens Avenue and Fiddyment Road. The landfill is managed by the Western Placer Waste Management Authority, which consists of representatives from Rocklin, Lincoln, Roseville, and Placer County. The 800-acre landfill has been operating since 1979.

3.16.2 Thresholds of Significance

A significant impact would occur if the Town's growth exceeds the waste hauler's existing or planned capacity to dispose of the refuse. Another significant impact would occur if the existing

landfills could not adequately serve the additional refuse. Impacts on the sewer system are considered significant if sewage generated by the Town's growth will exceed the existing of planned capacity of the sewage collection or treatment system, or required extension of a trunk line with capacity to serve new development.

3.16.3 Answers to Checklist Questions

Questions A, B, and E:

The project site is within the service area of the SPMUD and is eligible for sewer service. All sewer service that the SPMUD provides to the project would be subject to all ordinances, resolutions, rules and regulations, taxes, charges, fees, and assessments of the SPMUD. The design and construction of all on-site and off-site facilities which may be required as a result of the project would be the responsibility of the applicant. All work would have to conform to the Standard Specifications of SPMUD.

Question C:

Development of the site may result in minor increases of storm water runoff in the area. The District would need to install storm drainage facilities at the project site to drain stormwater runoff. This action would reduce storm drainage impacts. Such impacts would be further minimized through implementation of Mitigation Measure HWQ-1.

Question D:

Presently, treated water can be made available from the Placer County Water Agency via their pipeline located in Taylor Road. To obtain service, the applicant would have to enter into a pipeline extension or service order agreement with the Agency to provide any on-site or off-site pipelines or other facilities required to supply water for domestic or fire protection purposes. It would also have to pay all fees and chargers required by the Agency, including Water Connection Charges.

Questions F and G:

The project would generate solid waste during construction of the new residential homes and commercial buildings and from operations after the homes and commercial buildings are occupied. During the construction phase of the project, solid waste generated would consist of lumber, metals, plastics, insulation, wallboard, concrete and other construction materials.

The Auburn Placer Disposal Services would service the project site with weekly solid waste pick up. Collected waste would be disposed of at the Western Regional Sanitary Landfill.

3.16.4 Mitigation

Mitigation Measure USS-1. The applicant shall design and construct all on-site facilities required as a result of the project to enable sewer service for the project. All work shall conform to the Standard Specifications of SPMUD. Improvement plans shall be submitted to SPMUD for review and approval prior to issuance of a Building Permit from the Town.

Mitigation Measure USS-2. The applicant shall design and construct all on-site stormwater drainage facilities as specified by the hydrology report approved by the Town Engineer (see Mitigation Measure HWQ-2).

Mitigation Measure USS-3. Implement Mitigation Measure HWQ-1.

Mitigation Measure USS-4. The applicant shall enter into a pipeline extension or service order agreement with the Place County Water Agency to provide any on-site pipelines or other facilities required to supply water for domestic or fire protection purposes. It would also have to pay all necessary fees and chargers required by the Agency, including Water Connection Charges.

Mitigation Measure USS-5. In the interest of reducing the amount of solid waste going to the landfills (and to conserve natural resources), the applicant shall consult with the Town to encourage tenants of the houses and commercial buildings to establish recycling programs that include separating green waste (lawn and pruning), paper products and other recyclable materials from non-recyclable materials. The applicant shall also encourage the construction contractor to separate wood scraps (and other recyclable items) from other waste in order to reduce the amount of material going to the landfill. Clean wood scraps can be "chipped" and composted at private facilities.

3.16.5 Finding

With implementation of the mitigation, the proposed project would result in less than significant impacts to utilities and service systems.

3.17 MANDATORY FINDINGS

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐
b) Does the project have environmental impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐

3.17.1 Mandatory Findings of Significance Discussion

A. As discussed in the preceding sections, the proposed project may have the potential to significantly degrade the quality of the environment, including effects on animals, or plants, or to eliminate historic or prehistoric resources.

B. As discussed in the preceding section, the project does not have the potential to achieve short-term, to the disadvantage of long-term environmental goals. Implementation of the proposed project would help to achieve the long-term goals of proving educational facilities for the region.

C. When project impacts are considered along with, or in combination with other impacts, the project-related impacts may be significant. Mitigation measures may be incorporated into the project to reduce project-related impacts to a less than significant level.

D. The project does not have environmental effects that could cause substantial adverse effects on human beings, either directly or indirectly, nor is the project expected to result in a significant unavoidable impact to paleontological resources. Mitigation measures have been developed that would reduce the impacts to a less than significant level.

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4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below potentially would be affected by this project.

- ☒ Aesthetics
- ☐ Agricultural Resources
- ☒ Air Quality
- ☒ Biological Resources
- ☒ Cultural Resources
- ☒ Seismicity, Soils, and Geology
- ☐ Hazards
- ☒ Hydrology and Water Quality
- ☐ Land Use and Planning
- ☐ Mineral Resources
- ☒ Noise/Vibration
- ☐ Population and Housing
- ☒ Public Services
- ☒ Recreation
- ☒ Transportation/Circulation
- ☒ Utilities and Service Systems
- ☒ Mandatory Findings of Significance

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5.0 ALTERNATIVE ANALYSIS

5.1 Project Alternative

Although CEQA does not require an Initial Study/Mitigated Negative Declaration to analyze project alternatives, one alternative was analyzed in comparison to the proposed project. Table 5-1 provides a summary of the qualitative comparison of the project alternative with respect to each issue area analyzed in Chapter 3.0.

There are various site constraints, including wetlands, adjacent railroad tracks, and native oak trees along Taylor Road (grade differential – they are 3' or so higher than Taylor Road). Approximately 7-foot acoustic walls are proposed to mitigate noise issues associated with noise generated by passing locomotives, which may create visual impacts. As such, a project design alternative has been developed (see Figure 6-1) that involves the following:

- Avoidance of need for sound wall through use of a berm;
- Avoidance of wetlands through incorporation into open space; and,
- Avoidance of oak trees along Taylor Road through adherence to Town Center Master Plan.

To meet these requirements, the total commercial space would be reduced by approximately 8,000 sq-ft and several of the single-family residences would be constructed as half-plexes. The total number of residences would remain unchanged.

5.1.1 Aesthetics

The proposed project involves construction of a concrete sound wall (see Figure 2-6) in the northwest corner of the project site to minimize noise impacts. As opposed to the proposed project, the project alternative involves preserving the wetlands in the northwest corner of the project site and constructing an 8' – 8" sound berm between the wetland area and the proposed residences. This alternative also includes avoiding removal of the existing valley oaks along Taylor Road. This alternative would have less visual impacts than the proposed project.

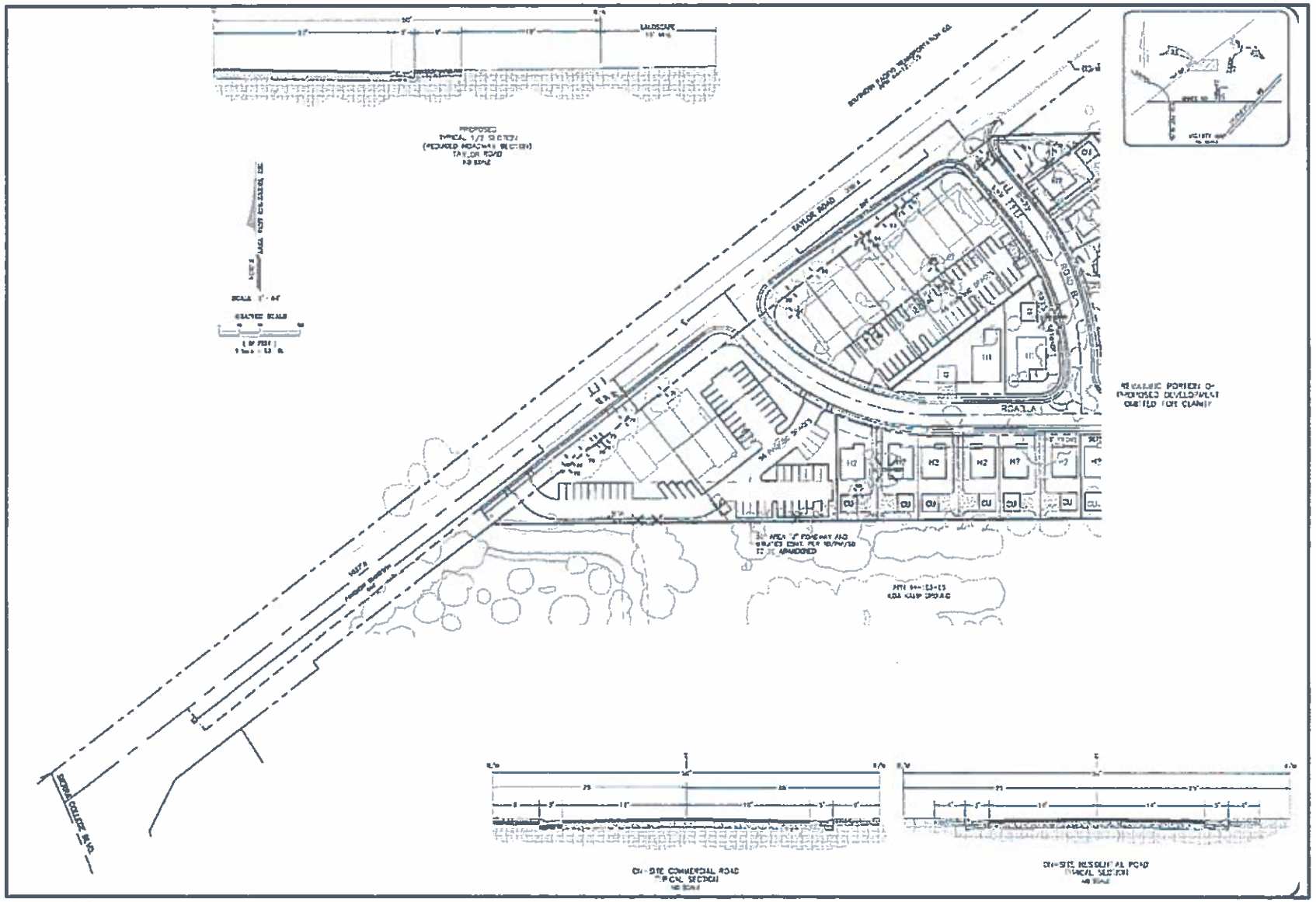
5.1.2 Agricultural Resources

Impacts to agricultural resources would be the same under the project alternative as the proposed project.

Table 5-1. Qualitative Comparison of Project Alternatives

Alternative	Issue Area															
	Aesthetics	Agricultural Resources	Air Quality	Biological Resources	Cultural Resources	Geology & Soils	Hazards/ Hazardous Materials	Hydrology and Water Quality	Land Use	Mineral Resources	Noise	Population/ Housing	Public Services/ Utilities	Recreation	Transportation/Circulation	Utilities and Service Systems
Proposed Project	1	U	1	1	1	U	U	U	1	U	U	1	U	1	1	U
Project Alternative	2		2	2	1				2			2		2	2	

Note: 1 = Greatest Impact, 2 = Lowest Impact, U=Unchanged



Source: Area West Engineers

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Taylor Road Mixed-Use Project

PROJECT ALTERNATIVE SITE PLAN

FIGURE 5-1

5.2.3 Air Quality

Because the total commercial space constructed would be reduced by 8,000 sq-ft, the short-term air quality emissions associated with construction would be less, as would the long-term emissions resulting from vehicle trips. Therefore, impacts to air quality would be less under the project alternative as the proposed project.

5.2.4 Biological Resources

Under the project alternative, there would be neither removal of the oak trees along Taylor road nor any impacts to the wetland, which would remain as open space. As such, the project alternative would have fewer impacts to biological resources than the proposed project.

5.2.5 Cultural Resources

Impacts to cultural resources would be similar under the project alternative as the proposed project.

5.2.6 Geology and Soils

Impacts to geology and soils would be similar under the project alternative as the proposed project.

5.2.7 Hazards and Hazardous Materials

Impacts to hazards and hazardous materials would be same under the project alternative as the proposed project.

5.2.8 Hydrology and Water Quality

Impacts to hydrology and water quality would be similar under the project alternative as the proposed project.

5.2.9 Land Use Planning

The project alternative may have slightly fewer impacts to land use planning by having greater consistency with the Town's Zoning Ordinance, which requirements replacement of native trees, if removed. Also, the project alternative may be more consistent with the Town's semi-rural nature by not having a concrete sound wall or not resulting in the removal of the oak trees along Taylor Road.

5.2.10 Mineral Resources

The project alternative would have the same impacts to mineral resources as the proposed project.

5.2.11 Noise

Under the project alternative, an earthen berm, instead of a concrete sound wall, would be constructed at the northwest corner of the project site to attenuate noise. Also, the wetlands would be preserved as open space by moving several of the houses further away from Taylor Road. Therefore, the project alternative would have similar impacts to noise as the proposed project.

5.2.12 Population and Housing

The project alternative would involve a reduction in commercial space by 8,000 sq-ft and construction of the same number of single family residences (some of the single family residences would be half-plexes). Although there would be less commercial space constructed, this amount would be negligible. Therefore, impacts to population and housing would be similar under the project alternative as the proposed project.

5.2.13 Public Services

The project alternative would involve a reduction in commercial space by 8,000 sq-ft and construction of the same number of single family residences (some of the single family residences would be half-plexes). Although there would be less commercial space constructed, this amount would be negligible. Therefore, impacts to public services would be similar under the project alternative as the proposed project.

5.2.14 Recreation

Under the project alternative, a portion of the project site would be maintained as open space to preserve the wetlands at the site. Although it would not be a park, the open space may provide some recreational opportunities to the residences. Therefore, impacts to recreation would be less under the project alternative than the proposed project. Maintaining the open space would require oversight and active management, including pruning, control of non-native vegetation, and other activities. Because the development does not involve the creation of a homeowners association, a management instrument would need to be created to enable maintenance of the open space.

5.2.15 Transporation/Circulation

The project alternative would involve a reduction in commercial space by 8,000 sq-ft and construction of the same number of single family residences (some of the single family residences would be half-plexes). This reduction in commercial space would result in a reduction in vehicle trips. Therefore, the project alternative would have slightly fewer impacts to transportation/circulation than the proposed project.

5.2.16 Utilities and Service Systems

The project alternative would involve a reduction in commercial space by 8,000 sq-ft and construction of the same number of single family residences (some of the single family

residences would be half-plexes). Although there would be less commercial space constructed, this amount would be negligible. Therefore, impacts to utilities and service systems would be similar under the project alternative as the proposed project.

5.3 Conclusion

In the comparison presented in Table 5-1, it is apparent that the Project Alternative would generally have fewer impacts than the proposed project. In particular, the alternative would have fewer visual impacts because the oak trees along Taylor Road would not be removed, a sound berm would be constructed instead of a concrete wall, and the wetland area would remain as open space. However, the Project Alternative may not meet all of the project objectives and may have limited feasibility.

5.3.1 Preservation of Oak Trees along Taylor Road

The Project Alternative; however, will not meet all of the objectives of the project. One of the primary objectives of the project is to develop a viable commercial complex along Taylor Road. To be viable, the commercial complex must be visible to motorists traveling along Taylor Road (Personal communication, Pat Cannon, 2005). Preservation of the trees (approximately 15 trees) along Taylor Road would require maintaining the existing berm, which ranges from 3 to 7 feet in height. At this height, motorists would only be able to see upper portions of the buildings, which would primarily be the roofs. This reduction in the visibility of the commercial center from motorist traveling along Taylor Road would greatly reduce the viability of the commercial center (Personal Communication, Pat Cannon, 2005).

In addition, according to Mr. Jay Bate, ISA Certified Arborist WE-1257, road improvements to Taylor Road would result in severe root system impacts to the fifteen trees (Bate 2005). This could affect the stability and long-term viability of the trees. Grade cuts and excavation to sub-grade associated with road improvements would occur within the driplines of several of the trees. Mr. Bate recommends that the fifteen trees be removed due to the severe root system impacts that would occur from the road improvements (Bate 2005).

5.3.2 Wetland Preservation

The United States Army Corps of Engineers (ACOE) recommends a minimum 25-foot upland buffer be established around a wetland for it to be considered protected (Area West Environmental 2005). Typically, three-strand barbed wire or split rail fencing is installed to demarcate the preserved area. According to West Coast Environmental, the ACOE has required third party monitoring of preserved wetlands to ensure that wetlands remain protected. To preserve the wetlands at the project site would require preserving and monitoring approximately 0.425 acre, or about 6 percent of the project site.

The 0.17 acre wetland receives some direct precipitation, but the primary hydrologic input to the wetland is from residential runoff that enters the site at the southeast corner and flows to the northwest. Existing non-jurisdictional drainages would be filled or placed in culverts. Therefore, according to West Coast Environmental, the runoff received from the residential development

southeast of the project will be placed in a culvert and will no longer be an input to the wetland. Therefore, the wetland may be affected by this decrease in hydrologic input (West Coast Environmental 2005).

Third-party organizations were contacted to determine if they would undertake monitoring the preserved wetland and upland buffer (West Coast Environmental 2005). The response from the organizations contacted was that monitoring of the 0.425-acre area would not be feasible because the project site is too small and does not support particularly sensitive habitats (i.e., adjacent to riparian corridor of special interest). All of the organizations declined undertaking the project (West Coast Environmental 2005).

6.0 DETERMINATION

On the basis of the initial evaluation:

☐ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because the project-specific mitigation measures described in Section 4.0 have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Signature: _____ Date: _____

Ms. Kathy Kerdus, Director For Town of Loomis
Printed Name

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APPENDIX A

MITIGATION MONITORING AND REPORTING PROGRAM

REQUIRED MITIGATION AND MONITORING PROGRAMS

OVERVIEW

This Mitigation Monitoring and Reporting Program (MMRP) was developed to ensure that mitigation measures included in the Initial Study/Mitigated Negative Declaration (IS/MND) for the new middle school project are fully implemented to reduce environmental impacts to a less than significant level. In addition, this MMRP complies with the requirements of Public Resources Code 21081.6, which requires the lead agency to adopt a reporting or monitoring program.

This MMRP is a comprehensive monitoring program capable of being implemented immediately upon approval of the project which is comprised of mitigation measures from the project's MND, implementation timing, and the agencies responsible for monitoring and verification. The MMRP would serve a dual purpose of verifying completion of the mitigation measures for the proposed project and generating information on the effectiveness of the mitigation measure to guide future decisions. However, the MMRP is dynamic in that changes may be made to the MMRP as specific information with regards to the monitoring efforts is provided.

The District would coordinate construction activities through direct contact with the construction superintendent (CS) and the supporting contractors. District staff would be responsible for oversight of construction activities to ensure compliance with mitigation measures and would also utilize environmental consultants to assist in supervising project construction. This program is based on the following compliance actions:

- Oversight of construction activities;
- Sediment and Erosion Control Monitoring, and,
- Traffic Safety

OVERSIGHT OF CONSTRUCTION ACTIVITIES

The mitigation measures adopted as conditions of approval by the District would be monitored prior to and during construction to ensure implementation. The oversight of construction activities to ensure implementation and compliance with mitigation measures would be accomplished by District personnel, or by a third party specialist to serve as a mitigation monitor for specific task (i.e., marine wildlife monitoring).

Prior to any project implementation, a pre-construction meeting would take place between the District, the construction contractor, and other individuals retained to assist in implementation of the MMRP. The goal of the meeting would be to establish the responsibility and authority of the participants and overall project procedures and schedules. Mitigation measures, which need to be defined in greater detail, would be addressed during the meeting.

SPECIFIC MMRP REQUIREMENTS

The core of the MMRP is described in the following Implementation Table (Table A-1) listing measures from the MND, the implementation timing, administrative action needed to ensure that the mitigation is included in the plans and construction of the project, and the party responsible for verification.

Table A-1. Mitigation Monitoring for the Taylor Road Mixed-Use Project - Implementation Table

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
AESTHETICS, LIGHT AND GLARE				
AES-1	To reduce the impacts of on-site lighting, all new on-site security lighting shall be hooded and adjusted to reduce or eliminate illumination of surrounding properties and roadways. Such lighting shall be designed to fit with the Town's evolving design guidelines.	During construction	Incorporate into contraction specifications	Town of Loomis
AES-2	The proposed homes and commercial buildings shall include the use of earth-tone paint and roof colors designed to blend with the surrounding semi-rural environment and reduce the potential for reflected light and glare.	During construction	Incorporate into contraction specifications	Town of Loomis
AES-3	To mitigate the visual impact associated with the sound wall (see Figure 2-6) that would be constructed along Taylor Road, landscaping, including construction of berms and planting of shrubs, shall be performed. Trees shall also be planted along Taylor Road to mitigate the loss of large mature oaks, which would be removed as part of the project.	During construction	Incorporate into contraction specifications	Town of Loomis
AIR QUALITY				
AQ-1	The following Regulation VII Control Measures shall be fully implemented during the construction period to reduce PM10 impacts to a level of less than significant. • All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover; • All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or	During construction	Monitor construction activities	Town of Loomis

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	chemical stabilizer/suppressant;			
	• All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking; • With the demolition of buildings up to six stories in height, all exterior surfaces of the building shall be wetted during demolition;			
	• When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained; • All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.) (Use of blower devices is expressly forbidden.); • Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant; • Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday; and, • Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.			
AQ-2	This measure focuses on reducing ozone formation from project-related ozone precursors, NOx and ROG.	During construction	Monitor construction activities	Town of Loomis

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	The primary source of these emissions would be ROG released during application of paint to the proposed residential and commercial structures. The rate of ozone formation is greatest during periods of clear weather, low winds and high temperatures. One of the following measures shall be implemented to prevent exceedances of the State 1-hour ozone standard: • Paint shall not be applied from May through September; OR • Paint emissions shall not exceed the 185 pound per day significance threshold (88 gallons per day based on 2.08 pounds VOC per gallon); AND • Paint emissions shall not exceed the 2.5 ton per quarter significance threshold (2,403 gallons per quarter based on 2.08 pounds VOC per gallon). The use of pre-coated materials, or naturally colored materials and high transfer efficiency painting methods (e.g., HVLP, brush/roller, etc.) to the maximum extent feasible would reduce the amount of paint used and facilitate compliance with the thresholds.			
BIOLOGICAL RESOURCES				
BIO-1	Initial rough grading operations and vegetation removal shall be conducted prior to, or after, the typical migratory bird nesting season (March 1 – August 1) to avoid any potential impact to migratory bird nesting activity. Therefore, initial grading should be conducted between the months of August and February. If this construction window is infeasible, and construction does not occur in 2005, pre-construction surveys shall be conducted prior to any initial grading activity and vegetation removal to identify any potential bird nesting activity, and: A. If any nest sites of bird species protected under the Migratory	Prior to construction	Pre-construction survey	Town of Loomis

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	Bird Treaty Act are observed within the vicinity of the project site, then the project shall be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs, and/or young; and, B. If active nest sites of raptors and/or birds species of special concern are observed within the vicinity of the project site, then CDFG shall be contacted to establish the appropriate buffer around the nest site. Construction activities in the buffer zone shall be prohibited until the young have fledged the nest and achieved independence.			
BIO-2	Prior to Final Map approved by the Town, the applicant shall develop and submit a Native Tree Replacement and Mitigation Plan to the Town of Loomis to ensure that the project is in compliance with the Town of Loomis Native Tree Ordinance (Appendix C). As such, native trees removed during project implementation shall be replaced off-site.	Prior to construction	Pre-construction survey	Town of Loomis
BIO-3	Upon the completion of mitigation, a final status report shall be prepared by the project arborist and submitted to the Town of Loomis, certifying the project was in compliance with the mitigation measures, which will be included within the proposed Native Tree Replacement and Mitigation Plan, as described above.	Prior to construction	Pre-construction survey	Town of Loomis
BIO-4	Lost wetlands shall be mitigated at a replacement-to-loss ratio from 1:1 to 4:1, as determined by the ACOE, based on the biotic value of the wetland established by the required environmental analysis, and shall ensure that there is no net loss of wetland functions and values.	Prior to construction	Pre-construction survey	Town of Loomis
CULTURAL RESOURCES				
CUL-1	If construction activities expose archeological resources (artifacts, unusual amounts of stone, bone or shell) or human remains, work shall stop within the immediate vicinity of	During construction	Monitor construction activities	Town of Loomis

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	the resource until such time as the resource can be evaluated by a qualified archeologist and any other appropriate individuals consistent with the provisions of CEQA - Section 15064.5. If human remains are unearthed, the Placer County Coroner must be contacted. If the bone is likely to be Native American in origin, the coroner must contact the Native Heritage Commission to identify most likely descendants.			
	SOILS, SEISMICITY, AND GEOLOGY			
GEO-1	Before finalization of the construction specifications, a geotechnical investigation would be conducted. Any measures identified in this report shall be incorporated into the specifications, consistent with the Uniform Building Code.	Prior to finalization of construction specifications	Incorporate findings of study into construction specifications	Town of Loomis
GEO-2	Implement Measure HWQ-1.	During construction	Incorporate into construction specifications	Town of Loomis
	HAZARDS			
HAZ-1	Prior to construction, the applicant will perform the following: • Remove trash and debris from the site; • Remove the empty 55-gallon drum from site and properly dispose; • Properly dispose of the vehicle with particular care taken to prevent spillage of oil from the engine. Remove any stained soils and properly characterize and dispose with a certified facility; • Coordinate with PG&E regarding the buried high pressure natural gas line that present along the northern boundary of the site adjacent to Taylor Road; and, • Properly dispose of trailer and debris off site.	Prior to construction	Incorporate into construction specifications	Town of Loomis
HAZ-2	Disclose to homebuyers purchasing properties within 100 feet of the high pressure LPG/propane tank that is located on the KOA property approximately 15 feet south of the	Prior to construction	Incorporate into construction specifications	Town of Loomis

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	Lot #24 fence/property line.			
	HYDROLOGY AND WATER QUALITY			
HWQ-1	Prior to construction, the BSD shall develop a Storm Water Pollution Prevention Plan (SWPPP) and submit a Notice of Intent to comply with the NPDES "General Permit for Storm Water Discharge Associated with Construction Activity (99-08-DWQ). The SWPPP would include: • Slope surface stabilization measures, such as temporary mulching, seeding, and other suitable stabilization measures to protect exposed erodible areas during construction, and installation of earthen or paved interceptors and diversion at the top of cut of fill slopes where there is a potential for erosive surface runoff;	Prior to and during construction	Incorporate into construction specifications	Town of Loomis
	• Erosion and sedimentation control devices, such as energy absorbing structures or devices, would be used, as necessary, to reduce the velocity of runoff water to prevent polluting sedimentation discharges; • Installation of mechanical and/or vegetative final erosion control measures within 30 days after completion of grading; • Confining land clearing and grading operations to the period between April 15 and October 15 to avoid the rainy season; and, • Minimizing the land area disturbed and the period of exposure to the shortest feasible time.			
HWQ-2	Prior to obtaining a building permit, the applicant will prepare a hydrology drainage study that will be submitted to the Town Engineer for review and approval. The Plan will detail project on-site drainage facilities to control long-term storm water runoff consistent with the principles and policies of the Placer	Prior to construction	Make appropriate funding to the Town	Town of Loomis

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	County Flood Control and Water Conservation District and the Town of Loomis as outlined in the Stormwater Management Manual (199). Based on the Town of Loomis Mitigation Fee Analysis Final Report (Sinclair 2005), the fees would be $519 per single family unit, $323 per multi-family unit, and $2,726 per acre of commercial.			
	NOISE			
NOI-1	The applicant shall ensure that the construction contractor employs the following noise reducing measures: • Standard construction activities shall be limited to between 7:00 AM. To 6:00 PM Monday through Friday; • All equipment shall have sound-control devices no less effective than those provided by the manufacturer. No equipment shall have un-muffled exhaust pipes; and, • Stationary noise sources shall be located as far from sensitive receptors as possible, and they shall be muffled and enclosed within temporary sheds, or insulation barriers or other measures shall be incorporated to the extent possible.	During construction	Incorporate into construction specifications	Town of Loomis
NOI-2	To meet the Town's goal of 65 dB L_{dn} for exterior sounds levels in the outdoor activity areas of residential dwellings, the applicant shall construct the following: • An 8-inch wall from the residential street in front of the house on Lot 39, parallel to the driveway until it reaches the north property line, the running east until it reaches the east property line of the lot. The exact location of the section of wall is estimated to be about 30 feet west of the west face if the house. The wall shall be 7 feet high from the east property line of Lot 39 to the east face of the home on Lot 24 as measured above the pad height of Lot 24. At that point, the wall	During construction	Incorporate into construction specifications	Town of Loomis

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	height can be reduced to 6 feet from this point to the east property line. • A 7-inch sound barrier wall along the back property line of Lots 40 and 41 separating the two residential lots in the middle of the project site from two of the commercial buildings; • A 7-inch sound barrier wall along the west property line of Lot 2 adjacent to commercial Lot 1; • All sound barrier walls must have a minimum surface weight of 3.5 to 4.0 lbs/sq-ft; • The structures must be continues along their width and height with no gaps at the ground; • The wall can be constructed from wood, metal or masonry; and, • All wall heights are referenced from house pad elevation.			
NOI-3	The following general construction requirements shall be followed for the project: • All joints in exterior walls shall be sealed airtight around windows and doors, at the wall perimeter, and at major seams; • All above ground penetrations of exterior walls by electrical and plumbing components shall include a ¼ to ½-inch airspace around the perimeter. This space shall be filled loosely with fiberglass insulation. The space shall then be sealed airtight on both sides of the wall with a resilient, nor hardening caulking or mastic; • Basic exterior wall construction shall comprises the following or material of equal surface weight and Sound Transmission Class, STC rating: o 2" x 4" wood studs at 16 inches on center; o Minimum R-13 insulation in the stud cavities; o 5/8" gypsum wallboard	During construction	Incorporate into construction specifications	Town of Loomis

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	fastened to the interior face of the wood studs. The wall shall be fully taped and finished, and sealed around the perimeter with a combination of backer rod and resilient, non-hardening caulking; o The exterior surface shall be finished with the following or with another product with equal or greater surface weight: ▪ ½" plywood; ▪ Building paper and wire mesh, ▪ Finished with minimum 7/8" three-cot dense stucco.			
	o Ceilings shall be finished with a minimum 5/8" gypsum board with minimum R-19 insulation in the ceiling; o Windows shall have a minimum STC rating of 29 or better. Windows shall have an air infiltration rate of less than or equal to 0.20 CFM/lin.ft when test with a 25 mile an hour wind pet ASTM standards; o Exterior sliding glass doors shall have a minimum SCT rating of 29; o Exterior doors shall have a minimum STC rating of 29; and, o There shall be no need to open windows, doors or other exterior openings to provide adequate ventilation.			
NOI-4	The following special construction requirements shall be followed for the project: • Lots 37 through 39 o Upstairs Bedroom Windows on the North and West Side of House. ▪ Windows shall be a minimum STC 35 rating. Windows shall have an air	During construction	Incorporate into construction specifications	Town of Loomis

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	infiltration rate of less than or equal to 0.15 CFM/lin.ft. when tested with a 25 mile an hour wind per ASTM standards. ▪ This is equivalent to a dual glazed window comprising ¼" float, ½" air space and ¼" float glass. o Downstairs Windows on the North and West side.			

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	▪ Windows shall be a minimum STC 30 rating. Windows shall have an air infiltration rate of less than or equal to 0.15 CFM/lin.ft. when tested with a 25 mile an hour wind per ASTM standards. ▪ Windows shall be constructed using double glazed window, a minimum ½ inch airspace. o Homes on Lots 40 and 41. o Windows on the North and West Side of the Homes. ▪ Windows in these rooms shall be a minimum STC 30 rating. Windows shall have an air infiltration rate of less than or equal to 0.15 CFM/lin.ft. when tested with a 25 mile an hour wind per ASTM standards. ▪ Windows shall be constructed using double glazed window, a minimum ½ inch airspace. • Home on Lot 2. o Upstairs Bedroom Windows on the North and West Side of House. ▪ Windows shall be a minimum STC 35 rating. Windows shall have an air infiltration rate of less than or equal to 0.15 CFM/lin.ft. when tested with a 25 mile an hour winder per ASTM standards. ▪ This is equivalent to a dual glazed window comprising ¼" float, ½" air space and ¼" float glass. o Downstairs Windows on the North and West Side. ▪ Windows shall be a minimum STC 30 rating. Windows shall have an air infiltration rate of less than or equal to 0.15 CFM/lin.ft. when tested with a 25 mile			

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	an hour wind per ASTM standards. ▪ Windows shall be constructed using double glazed window, a minimum ½ inch airspace.			
NOI-5	The following special construction requirements shall be followed for the project: ▪ General Requirements o All joints in exterior walls shall be sealed airtight around windows and doors, at the wall perimeter and at major seams. o All above ground penetrations of exterior walls by electrical and plumbing components shall include a ¼ to ½ inch around the perimeter. This space shall be filled loosely with fiberglass insulation. The space shall then be sealed airtight on both sides of the wall with a resilient, non-hardening caulking or mastic. o Basic exterior wall construction shall comprise the following or material of equal surface weight and Sound Transmission Class, STC rating: ▪ 2" x 4" wood studs at 16 inches on center. ▪ Minimum R-13 insulation in the stud cavities. ▪ 5/8" gypsum wallboard fastened to the interior face of the wood studs. The wall shall be fully taped and finished, and sealed around the perimeter with a combination of backer rod and resilient, non-hardening caulking.	During construction	Incorporate into construction specifications	Town of Loomis

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	▪ The exterior surface shall be finished with the following or with another product with equal or greater surface weight: • ½" plywood; • Building paper and wire mesh; and • Finished with a minimum 7/8" three-coat dense stucco. o Attic vents shall not be placed on Taylor Road/rail line side of the building unless sound attenuating duct is attached. o Windows facing or with a view of Taylor Road shall have a minimum STC rating of 35 or better. Windows shall have an air filtration rate of less than or equal to 0.15 CFM/lin.ft. when tested with a 25 mile an hour wind per ASTM standards. This is equivalent to a dual glazed window comprising ¼" float, ½" air space and ¼" float glass. o Exterior doors facing or with a view of Taylor Road shall have a minimum STC 33 rating. o There shall be no need to open windows, doors or other exterior openings to provide adequate ventilation. • Special Requirements o If a building is used for offices rather than general commercial, additional calculations of interior sound levels will be required to assess window and door requirements.			
	PUBLIC SERVICES			
PUB-1	The applicant shall pay the appropriate fire protection fees in accordance with the Loomis Fire Protection District.	Prior to and during construction	Make appropriate funding to the Loomis Fire Protection District	Town of Loomis
PUB-2	The applicant shall pay appropriate school fees based on estimated	Prior to construction	Make appropriate funding to the school	Town of Loomis

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	student yield rates and will be consistent with the requirements of the Loomis Union Elementary School District, Placer Union High School District, and Placer County Office of Education.		districts	
PUB-3	Prior to issuance of a building permit, the applicant will pay all other community facilities fees based on the Town of Loomis Mitigation Fee Analysis Final Report (Sinclair 2005). According to this report, the community facility fees would be $2,256 per single-family unit, $1,496 per multi-family unit, and $442 per 1,000 square feet of commercial.	Prior to construction	Make appropriate funding to the Town	Town of Loomis
RECREATION/OPEN SPACE				
REC-1	Prior to issuance of a building permit, the applicant will either provide the appropriate facility on site or pay all parkland acquisition mitigation fees based on the Town of Loomis Mitigation Fee Analysis Final Report (Sinclair 2005). According to this report, the parkland acquisition fees would be $1,575 per single-family unit, $1,044 per multi-family unit, and $308 per 1,000 square feet of commercial.	Prior to construction	Make appropriate funding to the Town	Town of Loomis
REC-2	Prior to issuance of a building permit, the applicant will provide the appropriate facility on site or pay all passive park and open space land acquisition mitigation fees based on the Town of Loomis Mitigation Fee Analysis Final Report (Sinclair 2005). According to this report, the fees would be $958 per single-family unit, $636 per multi-family unit, and $187 per 1,000 square feet of commercial.	Prior to construction	Make appropriate funding to the Town	Town of Loomis
TRANSPORTATION/CIRCULATION				
TRA-1	The applicant shall construct standard frontage improvements along Taylor Road.	During construction	Incorporate into construction specifications	Town of Loomis
TRA-2	Prior to construction, the applicant shall pay its fair share to the cost of needed improvements identified in the Town's General Plan. Based on the Town of Loomis Mitigation Fee Analysis Final Report (Sinclair	Following construction	Make appropriate funding to the Town	Town of Loomis

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	2005), the road circulation/major roads fee would be $2,300 per single-family unit, $1,360 per multi-family unit, and $2,944 per 1,000 square feet of commercial; and for the Sierra College Blvd fee it would be $691 per single-family unit, $422 per multi-family unit, and $912 per 1,000 square feet of commercial.			
	UTILITIES AND SERVICE SYSTEMS			
USS-1	The applicant shall design and construct all on-site facilities required as a result of the project to enable sewer service for the project. All work shall conform to the Standard Specifications of SPMUD. Improvement plans shall be submitted to SPMUD for review and approval prior to issuance of a Building Permit from the Town.	Prior to and during construction	Incorporate into construction specifications	Town of Loomis
USS-2	The applicant shall design and construct all on-site stormwater drainage facilities as specified by the hydrology report approved by the Town Engineer (see Mitigation Measure HWQ-2).	Prior to and during construction	Incorporate into construction specifications	Town of Loomis
USS-3	Implement Mitigation Measure HWQ-1.	During construction	Incorporate into construction specifications	Town of Loomis
USS-4	The applicant shall enter into a pipeline extension or service order agreement with the Place County Water Agency to provide any on-site pipelines or other facilities required to supply water for domestic or fire protection purposes. It would also have to pay all necessary fees and chargers required by the Agency, including Water Connection Charges.	Prior to construction	Develop agreement	Town of Loomis
USS-5	In the interest of reducing the amount of solid waste going to the landfills (and to conserve natural resources), the applicant shall consult with the Town to encourage tenants of the houses and commercial buildings to establish recycling programs that include separating green waste (lawn and pruning), paper products and other recyclable materials from non-recyclable materials. The applicant shall also encourage the	Prior to and following construction	Incorporate into contract specifications	Town of Loomis

Mitigation Number	Mitigation Measure	Implementation Timing	Administrative Action	Agency Responsible for Verification
	construction contractor to separate wood scraps (and other recyclable items) from other waste in order to reduce the amount of material going to the landfill. Clean wood scraps can be "chipped" and composted at private facilities.			

APPENDIX B

AIR QUALITY

APPENDIX C

BIOLOGICAL RESOURCES

Town of Loomis Tree Mitigation Policies

A. Applicability to protected trees. A protected tree is any of the following:

1. A native oak tree with a diameter of six or more inches as measured 54 inches above the ground.
2. A heritage, or landmark tree or grove identified by Council Resolution.
3. Significant groves or stands of trees identified by Council Resolution.
4. A mature tree other than those listed above, that is 19 inches or more in diameter as measured at 54 inches above the ground, and located on a commercial parcel, or on a residential parcel that can be further subdivided, or on a parcel in the RA, RE, or RR zones, provided that the tree is not a willow, fruit tree, eucalyptus, alder, cottonwood, or pine.
5. A tree required to be planted, relocated or preserved as a condition of approval of a Tree Permit or other discretionary permit, and/or as environmental mitigation for a discretionary permit.
6. A tree within 100 feet of a perennial stream, or within 50 feet of a seasonal stream.

B. Extent of replacement required. The review authority may condition any tree permit for the removal of a protected tree upon the replacement of trees in kind. The replacement requirement shall be calculated as follows:

Species of tree to be removed	Diameter of tree to be Removed(1)	Mitigation Value (required number of replacement trees)	Required Size and Species of Replacement Trees for mitigation Value
Valley oak	6 to 9 inches	6	15-gallon valley oaks
	10 to 15 inches	9	
	16 to 25 inches	15	
	26 or more inches	19	
Live oak	6 to 9 inches	4	15-gallon live oaks
	10 to 15 inches	6	
	16 to 25 inches	10	
	26 or more inches	13	
Other protected tree	19 to 25 inches	12	15-gallon trees
	26 or more inches	15	

Notes: (1) Diameter shall be measured at 4.5 feet above the ground at the base of the tree

C. Location and specifications for replacement trees.

1. All replacement trees shall be of the same native species as the trees being replaced, except in the case where a replacement tree is approved in a location characterized by non-native species (for example, within a roadway median where existing trees are ornamental non-natives, or as part of residential lot landscaping).

2. Up to 50 percent of the required replacement trees may have a 5-gallon container size, where the review authority determines that long-term tree health and survival will be improved by starting with smaller container size, and that each tree with a container size less than 15 gallons will not be in a location where it will be subject to damage while it is becoming established than a larger tree.

D. Revegetation. The review authority may, instead of requiring replacement trees, require implementation of a revegetation plan.

1. The developer shall enter into a written agreement with the Town obligating the developer to comply with the requirements of the revegetation plan.

2. A performance security or bond for 150 percent of the cost of the revegetation plan shall be required to ensure that the agreement is fulfilled. The director shall approve the bid for the proposed for work.

3. The revegetation program shall propagate native oak trees from seed using currently accepted methods, and shall identify the seed source of the trees to be propagated, the location of the plots, and the methods to be used to ensure success of the revegetation program.

4. A revegetation program shall not be considered complete until the trees to be propagated have survived in a healthy state for a minimum of ten years, or the Commission has approved a revegetation program which demonstrates the need for alternative success criteria and achieves mitigation on an inch-for-inch basis.

E. In-lieu mitigation fee. The review authority may determine that the remedies described above are not feasible or desirable and may instead require the payment of an in-lieu fee for the cost of purchasing, planting and irrigating the number of 15-gallon trees required. The in-lieu fee shall be calculated by multiplying the total mitigation value required for all trees to be removed, by $100 for the removal of one to four protected trees, $300 for the removal of five to nine protected trees, and $500 for the removal of ten or more protected trees. The in-lieu fee shall be deposited into the Oak Propagation Fund. This fund shall be used to propagate and protect native oak trees. Uses of the fund include, but are not limited to, purchasing property to plant or protect native oak trees, propagating native oak trees from seed or container stock and maintaining existing oak trees.

APPENDIX D

CULTURAL RESOURCES STUDY

APPENDIX E

NOISE STUDY

APPENDIX F

TRAFFIC STUDY