Draft Initial Study
and
Notice of Intent to Adopt a Mitigated Negative Declaration

for the

Flying Change Farms Project

Prepared for:

Town of Loomis

Prepared by:

Adrienne L. Graham, AICP

May 2018

NOTICE OF INTENT
TO ADOPT A MITIGATED NEGATIVE DECLARATION FOR THE

FLYING CHANGE FARMS PROJECT

Date: June 1, 2018

To: Interested Persons

Subject: Notice of Intent to Adopt a Mitigated Negative Declaration for the Flying Change Farms Project

Lead Agency: Town of Loomis
Planning Department
3665 Taylor Road
Loomis, CA 95650
Phone: (916) 652-1840
RKing@loomis.ca.gov

Contact: Robert King, Town Planner

Project Applicant: Flying Change Farms

Project Location: 5145 James Drive, Town of Loomis

Project Summary: The proposed project would construct and operate a private equestrian center on approximately 11 acres. The project would include a 40-stall barn, a covered riding arena, two outdoor arenas, and associated facilities. A maximum of 55 horses would be boarded at any one time. Up to two clients are expected to trailer in on 3 to 4 days a week. The facility will not host horse shows or similar events. The site has a single residence, which would be the on-site manager's quarters. Two additional employees would live off site.

IS/MND: The Town of Loomis is the Lead Agency pursuant to the California Environmental Quality Act (CEQA) for the proposed Flying Change Farms project (Proposed Project). The Town intends to adopt a Mitigated Negative Declaration for the Proposed Project.

Comment Period: The proposed IS/MND is available for public review from 9:00 a.m. to 5:00 p.m., Monday through Friday, at the offices of the Town of Loomis (address listed above) and online at the Loomis website at:

http://loomis.ca.gov/home

The public comment period on the IS/MND closes at 5pm on Monday, July 2, 2018. Written comments may be submitted to Robert King, Town Planner at the above address. Emailed comments should be submitted to "RKing@loomis.ca.gov " and should include the phrase "Flying Changes Farm IS/MND" in the subject line.

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1. BACKGROUND AND INTRODUCTION

Project Title:	Flying Change Farms
Lead Agency Name and Address:	Town of Loomis Planning Department 3665 Taylor Road Loomis, CA 95650
Contact Person and Phone Number:	Robert King, Town Planner Phone: (916) 652-1840
Project Location:	5145 James Drive Town of Loomis
Project Sponsor's Name and Address:	Flying Change Farms 5145 James Drive Loomis, CA 95650
General Plan Designation:	Residential Estate (2.3-acre minimum)
Zoning:	RE—Residential Estate
Description of the Project:	See Chapter 2
Other Public Agencies Whose Approval may be Required:	Placer County Air Pollution Control District Central Valley Regional Water Quality Control Board South Placer Fire District
Tribal Consultation:	United Auburn Indian Community (ongoing)

INTRODUCTION

This Initial Study was prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 1500 *et seq*.) to evaluate the effects of the Flying Change Farms project (Proposed Project), which would construct and operate a private equestrian center in the Town of Loomis, on the environment.

CEQA requires that the lead agency analyze impacts of a proposed project on the environment. Such impacts are analyzed in this Draft Initial Study. Recently, the Supreme Court ruled that a lead agency needs to analyze the effects of the environment on a project's residents or users only where the project itself might worsen existing environmental hazards in a manner that could have an adverse effect [*California Building Industry Association v. Bay Area Quality Management District* (Section 213477, December 17, 2015)]. For example, a project located within an area with potential seismic activity that could expose project occupants to risks associated with earthquakes would not require analysis in a CEQA document as long as the project did not exacerbate the frequency, duration or strength of potential seismic events.

Although the Town no longer needs to analyze such impacts due to the Court's ruling, information regarding site constraints and other factors that could affect the safety and stability of project development are provided for the reader's information (see, for example, Item 6, Geology and Soils).

2. PROJECT DESCRIPTION

PROJECT LOCATION

The project site is located on 40 acres within the Town of Loomis in Placer County (see Figure 2-1, Regional Location), north of Rocklin Road (see Figure 2-2, Project Location). The project site is bounded by Sierra College property to the west, a church and residential development to the south, vacant land to the east and the north. The area immediately west and north of the project site is located in the City of Rocklin. The Proposed Project would generally occur within the northwest quadrant of the project site.

The Assessor's Parcel Number (APN) for the project site is 045-150-003. The 40-acre project site is designated in the Town of Loomis General Plan as Residential Estate with a 2.3-acre minimum per dwelling unit. The zoning is RE-Residential Estate.

The project site would be accessed from James Drive via Rocklin Road.

The project site is in General Plan Land Use Policy Area 3, which applies to the area designated Residential Estate northwest of Rocklin Road and Barton Road. Subdivisions that are not adjacent to Rocklin Road or Barton Road, such as the project site, may provide minimum 2.3-acre lots. Agricultural uses, such as equestrian facilities, are also allowed within this designation. The General Plan states that, "To the extent feasible, building sites should be set back from Rocklin Road and Barton Road to retain native vegetation and terrain features, and to preserve the present appearance as a rural road corridor."[1] The Proposed Project would comply with this requirement by placing all structures in the northwest portion of the project site, so that it would not be in proximity to Rocklin Road or existing development. Further, the Proposed Project would retain the majority of the project site in existing, undisturbed condition.

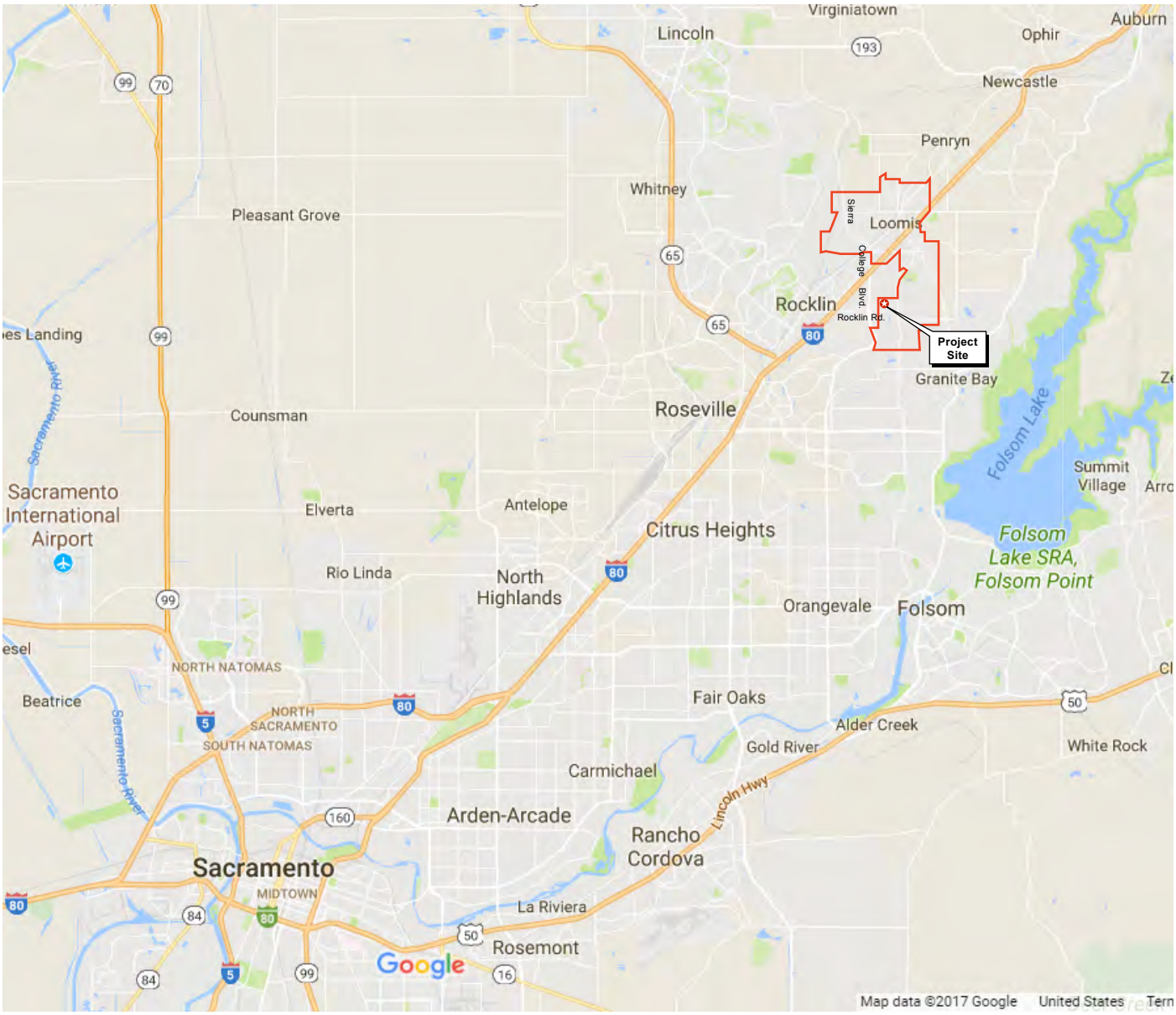
EXISTING ENVIRONMENT

The project site is currently grazing land with one residence and associated out buildings. The residence would remain if the Proposed Project were approved. There is also an 8-stall "mare motel" (barn for mares and foals) on the site.

The project site consists of gently rolling topography, with elevations ranging from 340 to 380 feet. Most of the site is composed of grasslands and oak woodland, and is used for grazing. A seasonal pond is located along the northern border of the project site. This pond drains to a larger pond north of the project site in the City of Rocklin. In addition to the pond, there are seeps and wetland swales located on the project site.

Existing access to the site is from James Drive, an 18-foot wide gravel road, via Rocklin Road. Currently no other public streets abut the project site or provide access. The easement for James Drive is 33-feet wide from Rocklin Road to the entrance of the project site. There is an additional 17-foot easement along James Drive adjacent to the two parcels immediately north of Rocklin Road.[2]

1 Town of Loomis, *Town of Loomis General Plan*, July 2001, page 41.
2 Atteberry and Associates, *Parcel Map No. 72448*, June 1977, Recorder's Certificate, November 17, 1977.



Project Location

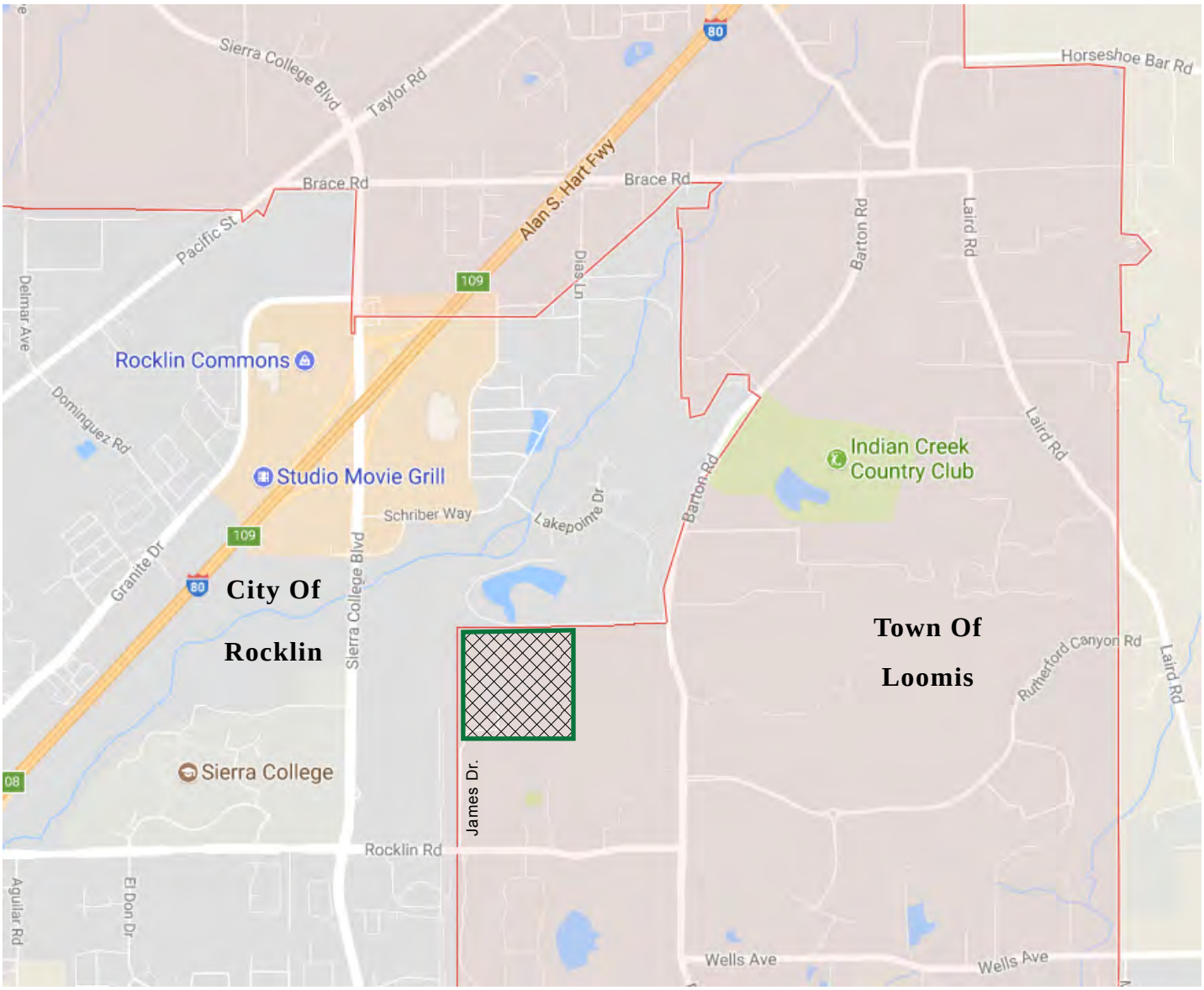
Town of Loomis Boundaries

N No Scale

SOURCE: Google Earth, A.L. Graham & Associates, 2017.

Figure 2-1

Regional Location



Project Boundary

Town of Loomis

N No Scale

SOURCE: Google Earth, A.L. Graham & Associates, 2018.

Figure 2-2

Project Location

At present, the project site is surrounded primarily by grasslands and oak woodlands. Sierra College property is located to the west. This portion of the college is undeveloped grassland. Rural residences and a church are located to the south, between the project site and Rocklin Road, and to the east. The land to the north of the project site is located in the City of Rocklin. A band of trees and other vegetation abuts the northern project boundary. A large pond is also located immediately north of the project site.

Although the project site is surrounded by undeveloped open spaces and rural residences at present, higher-density development is present south and southwest of the project site, south of Rocklin Road in the City of Rocklin. Residential estates are located to the south of Rocklin Road, on parcels ranging in size from 40,000 square feet to 4.6 acres in size. Smaller lot residential subdivisions are located farther west, south of Rocklin Road in the City of Rocklin. To the west, along Barton Road, are more rural residences.

The area surrounding the project site would develop over time. Sierra College has partnered with a development company on an application to develop the parcel west of the project site with a 107-acre Planned Development in the City of Rocklin. The "North Village" of this project would be located immediately west of the project site, and would include residential and mixed uses (e.g., residential, institutional, medical, retail, office) along the project site's western boundary. The northern most edge of the North Village would be designated used for parks and/or open space.[3]

The area south of the eastern portion of the project site is approved for the Poppy Ridge 1 project. The site is zoned Residential Estate, and is planned to develop seven lots on 20 acres. The area to the east is also designated Residential Estate, which allows for residential development on lots of at least 2.3 acres. The partially-developed Croftwood project is located to the north, in the City of Rocklin. The Croftwood Unit 1 project plans for 156 single-family homes with minimum 10,000 square foot residential lots.[4] The pond immediately north of the project site is within designated open space, so it is planned to remain in place.

Public services to the project site are provided by several districts and departments, including the South Placer Fire District, the Placer County Sheriff's Department, Loomis Union School District, and Placer Union High School District. Although only groundwater wells are used at present, the project site is also in the Placer County Water Agency service area.

At present, the project site relies on groundwater wells for water supply and a septic system for wastewater disposal. There are no drainage facilities located on site. There are natural swales that collect and convey runoff. A portion of the project site drains to the pond to the north in the City of Rocklin.

PROJECT CHARACTERISTICS

New Facilities

The Proposed Project would construct and operate a commercial equestrian center catering to dressage and hunter/jumper riders. Facilities would be concentrated on approximately 11 acres in the northwestern portion of the project site (see Figure 2-3).

3 Sierra Villages Preliminary Project Description and Application Packet, received January 9, 2017, accessed at https://www.rocklin.ca.us/post/sierra-villages, October 13, 2017.

4 City of Rocklin, *Development Activity Report*, April 2013, page 270.

Project Site

Primary Areas of Disturbance/Construction

N No Scale

SOURCE: Google Earth, A.L. Graham & Associates, 2018.

Figure 2-3
Characteristics Of Project Site And Surrounding Area

The following facilities would be constructed in this area (see Figure 2-4):

- 40-stall barn,
- 250-foot x 120-foot covered riding arena,
- 230-foot x 150-foot outdoor arena,
- 210-foot x 75-foot outdoor arena (dressage court),
- 30-foot x 90-foot building for storage of hay, bedding and fodder system,
- 30-foot x 40-foot manure storage,
- 2 75-foot diameter round pens,
- 3 130-foot x 50-foot paddocks, and
- Associated facilities (e.g., parking, trash enclosures).

The barn would be U-shaped. Each leg of the barn would have a central aisle with stalls on either side. In addition to 40 stalls, the barn would have feed rooms, wash racks, grooming bays, tack rooms, a rest room, an office, and a lounge. The barn would be approximately 15 feet tall at its highest point.

The covered arena would be free spanning, with concrete pier footings and pitched, metal roofing. The sides would be open. The arena would be 20 to 23 feet at its highest point.

The covered arena would use footing that does not require watering and is dust free. The footing for outdoor arenas would also be dust free, and require little watering. A tractor would be used to daily "drag" (i.e., fluff and level) the arena.

Lighting would be suspended from the covered arena roof, and would not be visible from outside of the arena, unless one were looking directly at the opening at either end. Outdoor arenas would be fenced but not covered, and would not have artificial lighting. Security lighting would be provided for ingress/egress and at trailer parking area.

Construction Activities

Project construction would require grading to level the building sites and create pads. Concrete work would be undertaken for barn and arena footings. Standard techniques would be used to construct the barn. The driveway and parking areas would be paved.

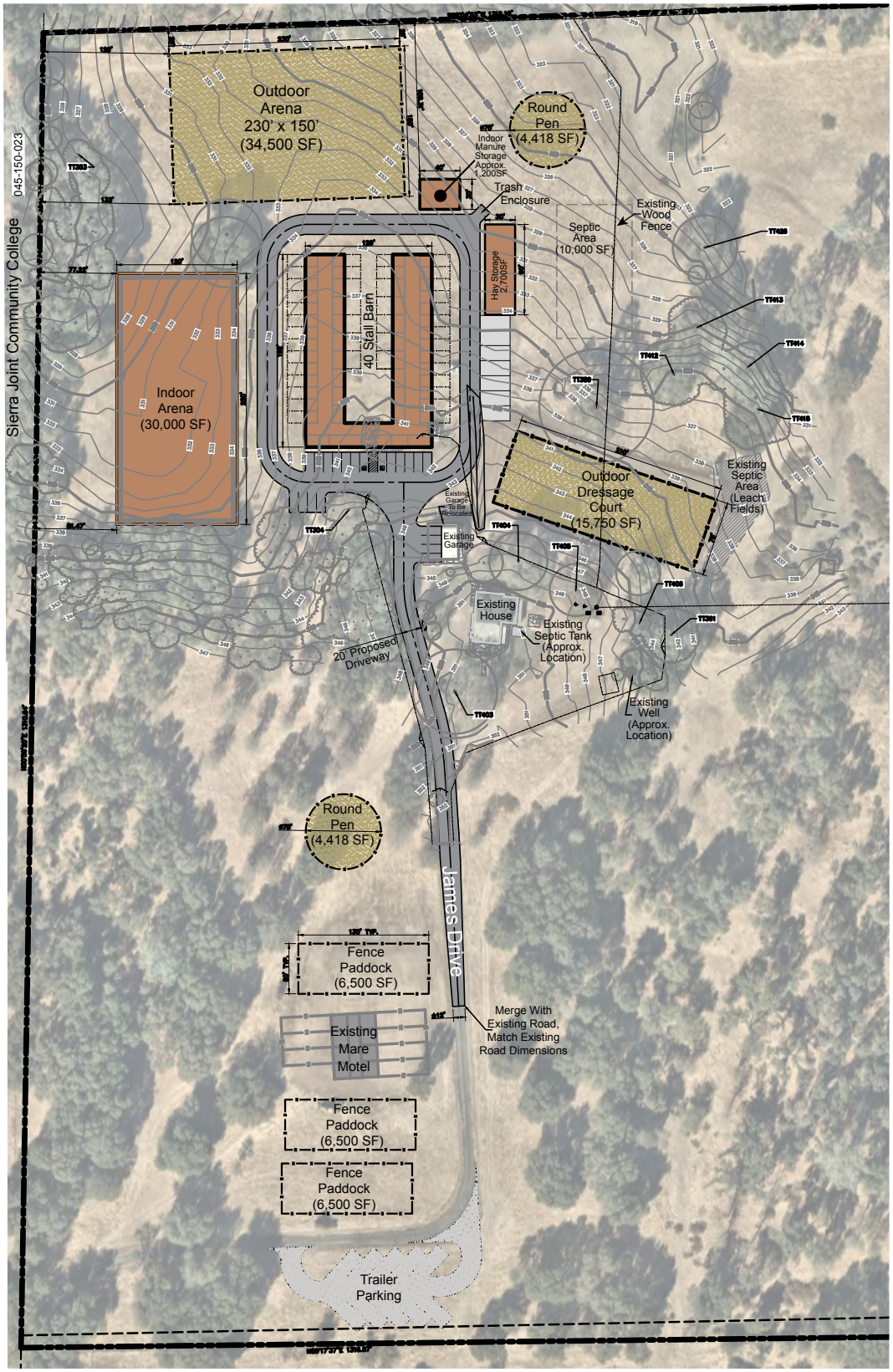
An estimated 5.3 acres would be graded, including 0.1 acres offsite (the intersection improvements). Approximately 11,500 cubic yards of soil are expected to be disturbed and distributed on site. The site would be balanced, so that no native soil would be exported or imported. The off-site improvements, discussed below, would require approximately 2,250 cubic yards of cut. These materials would be used on site.

Footing for the arenas would be imported.

Approximately 1.75 acres of new impervious surface would be created onsite. An additional 0.09 acres of impervious surface would be created at the offsite intersection of James Drive with Rocklin Road.

Operation

At its inception, Flying Change Farms would have enough space to board 48 horses. Eventual expansion would not exceed a total of 55 horses on site. These horses would be predominantly



N

0 20 40 60 80

Scale In Feet

SOURCE: TSD Engineering, Inc., March 14, 2018.

Figure 2-4
Preliminary Site Plan

high-end performance horses, competing in dressage and hunter/jumper disciplines. The average boarder would visit their horse(s) 4-6 times per week. Two trainers would be on site daily to train horses and give lessons. All the boarded horses would be in a full or partial training program. There would be 40 stalls in the proposed main barn, and 8 more stalls available in the existing "mare motel" (while this facility is existing, it is not occupied). There would also be the possibility of boarding additional horses in pasture. A maximum of 55 horses would be boarded at any one time.

One to two clients are expected to trailer in 3 to 4 days per week for lessons, primarily from the surrounding area, such as Auburn, Newcastle, Penryn, Loomis, Granite Bay and Orangevale.

The facility would not host horse shows or similar events.

The site has a single residence, which would be the on-site manager's quarters. Two additional employees would live off site.

Operating hours would be 7am to 8:30 pm, seven days per week.

The barn would be equipped with an Automatic Fly Control System that provides a timed release of fly repellent throughout the day. The applicant anticipates installing a "Shoo-Fly Automatic Insect Control System" or comparable system, which control flies and other pests, including mosquitoes, wasps, hornets, fleas, roaches, waterbugs, silverfish, crickets, scorpions, millipedes, and gnats. The barn aisle would also have large ceiling fans to repel flies from entering the barn.

Covered trash bins would be set on concrete pads located in the corner along the circular drive around the barn, between the hay shed and the manure garage. These bins would be emptied by a commercial service on a weekly basis.

Hay and Feed

Horses would be fed hay three times a day, typically between 6:00 AM and 8:00 AM, at noon, and between 4:00 PM and 6:00 PM. Feeding would be done with a quad and small trailer driven down the aisles or by hand cart. Feed would be delivered to the facility by an outside commercial carrier with a semi-truck and trailer every 4 to 6 months.

In addition to purchased hay, the Proposed Project would include a fodder system, where grass would be grown hydroponically in trays in a climate-controlled container. This system would reduce the amount of traditional hay fed to the horses.

The hay, fodder system container, and stall bedding would all be located in a metal building. The building would be located on a concrete slab situated along the circular drive around the main barn for easy delivery access (see Figure 2-4.) The building would be 16-feet tall at its peak. In addition to housing hay, bedding and the fodder system, the building would store a tractor and other equipment used for management of the facility.

Manure Management

Manure and soiled bedding would be removed from stalls and common areas once or twice each day and placed in a bin in the "manure garage", a 30-foot x 40-foot metal structure with two roll-up doors. The manure garage would be located near the hay building and garbage bins (see Figure 2-4). The structure would be 14-feet tall at its peak. The doors would be closed at night.

The manure bin would be emptied and hauled offsite by a manure removal service.

Infrastructure

Vehicle Access and Parking

As stated above, the project site would be accessed from Rocklin Road via James Drive. James Drive is not a Town-maintained road. The existing driveway would be paved within the project site. The project applicant proposes to work with neighbors to overlay the existing road with new asphalt. In addition, the road would be widened to 20 feet for a minimum of 50 feet from Rocklin Road, where the driveway would taper to 12 feet, widening again to 20 feet when it enters the project site (see Figure 2-5).

The 20-foot-wide paved drive would make a circular loop around the barn (see Figure 2-4), providing access for horse trailer parking, manure removal bins, trash, hay deliveries and overall traffic flow. The total length of the driveway would be approximately 400 feet.

At the intersection of James Drive and Rocklin Road, additional pavement would be provided on either side of James Drive. This area would be approximately 15 feet wide at James Drive, tapering for 150 feet until it meets Rocklin Road (see Figure 2-5).

Access to the facility would be through an electronic gate with an entrance code.

A decomposed granite path would connect the paved drive to the indoor arena. A secondary decomposed granite trailer parking lot would be provided near the main entrance drive.

The main vehicle parking area would be asphalt and incorporated in the loop around the barn. It would be located at the short end of the barn, which is the main entrance for pedestrians. There would be 21 spaces (9-foot x 20-foot), including two accessible spaces.

There would also be 7 trailer parking stalls (12-foot x 40-foot) located off the main barn loop. A secondary trailer parking lot, near the entrance to the facility, would provide another 10 parking stalls.

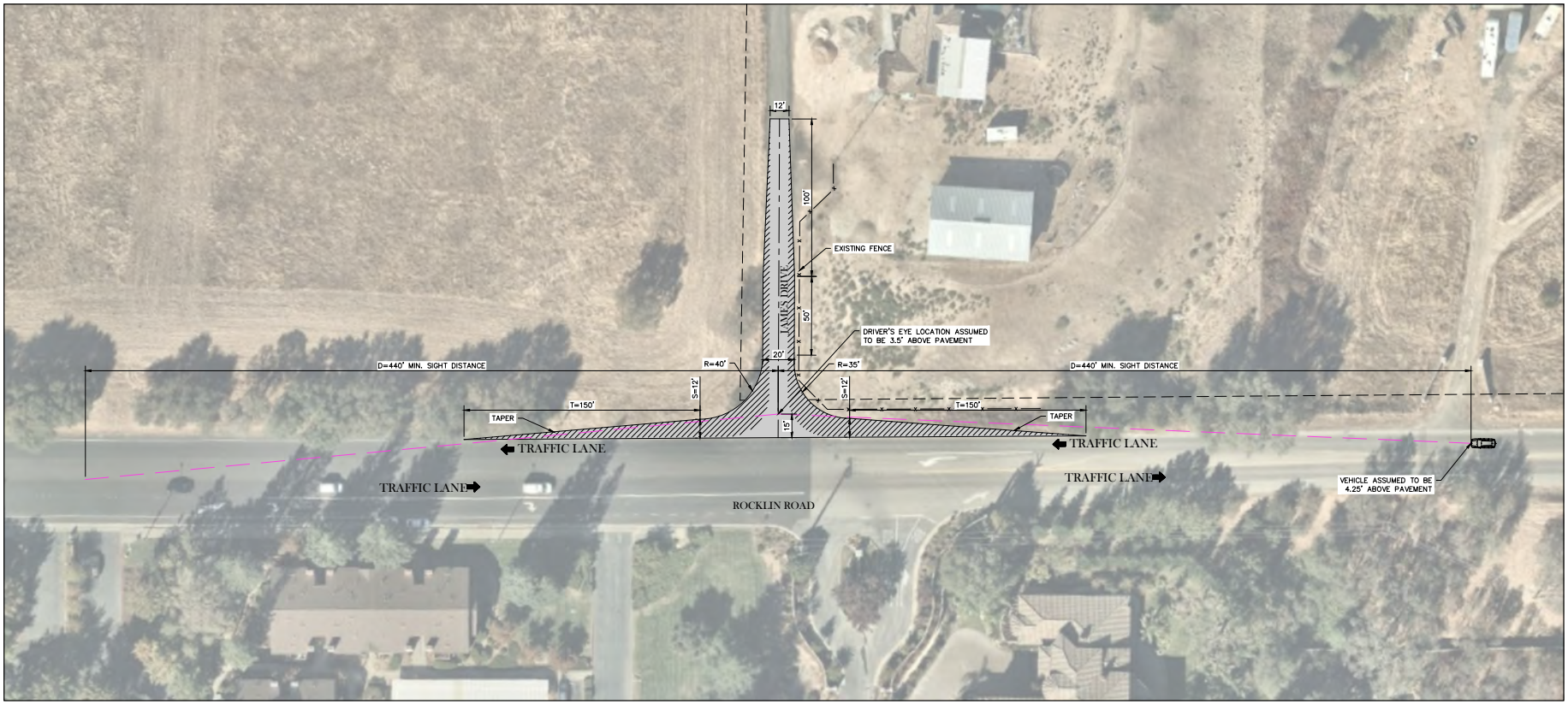
Water and Wastewater

Potable water would be provided by Placer County Water Agency (PCWA). A water line would be extended from the project site to the existing PCWA line in Rocklin Road. The water line would follow the alignment of James Drive. The only disturbance within a public road would occur where the line connects to the existing PCWA line.

The existing septic system would be retained for the house. A new leach field would be used to dispose of wastewater from the new restroom (see Figure 2-4). The septic system would meet Placer County Environmental Health Department standards.

Drainage

Stormwater would be collected from roof drains in trenches, which would drain to an approximately 2,370 square foot bio-retention area. The bio-retention area would provide water quality treatment and hydromodification. No underground drainage system would be installed. The project site would continue to discharge stormwater to Secret Ravine.



N

0 15 30 45 60

Scale In Feet

SOURCE: TSD Engineering, Inc., March 7, 2018.

Figure 2-5
Access Improvements

The Preliminary Drainage and Stormwater Quality Report identifies a number of measures that would be used to protect stormwater quality, including[5]:

- A 125-foot setback and buffer from the nearest creek;
- Permeable pavement in the parking area; and
- The following best management practices (BMPs):
    - To prevent accidental spills or leaks, materials would be stored indoors away from storm drains or sensitive areas.
    - For parking/storage areas and maintenance, trash receptacles would be provided, "No Litter" signs posted and surface sweeping shall be conducted regularly.
    - Indoor and structural pest control: Federal, State and local laws and regulations for the use, storage and disposal of pesticides shall be followed.
    - Landscape/outdoor pesticide use: Federal, State and local laws and regulations for the use, storage and disposal of pesticides shall be followed.
    - Outdoor storage of equipment or materials: Limit exposure to rainfall whenever possible
    - Building and grounds maintenance: Encourage proper lawn management and landscaping.

Public Services

The Loomis Fire Protection District recently consolidated with the South Placer Fire District, which now serves the project site. The South Placer Fire District provides both fire prevention and suppression and emergency medical services. The station closest to the project site is Station 20 at 5840 Horseshoe Bar Road in downtown Loomis (approximately 3.4 miles from the project site). The next closest stations are Stations 16 and 19 in Granite Bay, each of which is approximately 3.8 miles from the project site.

Law enforcement services are provided by the Placer County Sherriff's Department. Loomis, including the project site, is served by the South Placer Substation, located at 6140 Horseshoe Bar Road.

Offsite Improvements

As discussed above, the intersection of James Drive with Rocklin Road would be improved as part of the project. James Drive would be widened to 20 feet within approximately 100 feet of Rocklin Road. As shown in Figure 2-5, tapers would be provided east and west of James Drive, which would provide an area for vehicles that are entering or existing to accelerate or decelerate. Construction of the widening and tapers would disturb approximately 4,000 square feet, and create approximately 4,000 square feet of pavement. Minimum sight distance would be 440 feet in each direction.

A pipeline would be installed along the James Drive alignment from the project site to Rocklin Road. The pipeline would connect to a PCWA water main in Rocklin Road. A trench would be

5 Casey Feickert, PE, TSD Engineering, Inc., *Preliminary Drainage & Stormwater Quality Report*, March 13, 2018, page 2.

excavated for the pipeline, and then covered. The area to be disturbed would be minimal, and there would be no increase in impervious surface.

PROJECT REVIEW AND APPROVAL

Lead Agency

In conformance with Sections 15050 and 15367 of the CEQA Guidelines, the Town of Loomis is the 'lead agency' for the Proposed Project, which is defined as the "public agency which has the principal responsibility for carrying out or disapproving a project."

CEQA Actions

Prior to approving the Proposed Project, the Town must undertake CEQA review including:

- **Adoption of the Mitigated Negative Declaration** - pursuant to CEQA and the CEQA Guidelines; and

- **Mitigation Monitoring** – Adoption of a Mitigation Monitoring and Reporting Program to reflect the measures required to mitigate significant impacts, if any, of the project.

The Mitigated Negative Declaration and Initial Study are intended to provide the CEQA documentation for approval of the Proposed Project.

Town Approvals

The following additional actions would be taken by the Town in order to approve the Proposed Project:

- **Conditional Use Permit** to allow development of the Proposed Project.

No General Plan Amendment or rezoning would be required, because the proposed uses are consistent with the existing General Plan designation and zoning.

Prior to construction, the following approvals would be required:

- Improvement plans,
- Staff review of design, as conditioned by the permit,
- Building permits, and
- Encroachment permit for any improvements on Rocklin Road.

Other Agency Actions

The IS/MND prepared for the Proposed Project would be used by Responsible Agencies and Trustee Agencies that may have some approval authority of the Proposed Project. The project applicant would obtain all permits, as required by law. The following agencies, which may be considered Responsible Agencies, have discretionary authority over approval of certain project elements, or alternatively, may serve in a ministerial capacity:

- **U.S. Fish and Wildlife Service**: Section 7 or Section 10 Consultation if any federally-listed plant or wildlife species could be adversely affected by the Proposed Project.

- **US Army Corps of Engineers:** 404 permit if any waters of the US would be filled.
- **Regional Water Quality Control Board:** Section 401 certification if a federal 404 permit is issued, and/or National Pollutant Discharge Elimination Permit (NPDES) if discharge to surface waters would be necessary.
- **State Water Quality Control Board: State General Construction Activity Storm Water Permit** if grading would exceed one acre.
- **Placer County Air Pollution Control District** for compliance with various rules.
- **Placer County Environmental Health Division** for new and/or expanded septic system.
- **Placer County Water Agency** will-serve letter for provision of potable water.

3. ENVIRONMENTAL CHECKLIST

INTRODUCTION

The following Checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the Proposed Project. For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified and no mitigation is available to reduce the impact to a less-than-significant level, an Environmental Impact Report (EIR) must be prepared.

Less-than-Significant Impact with Mitigation Incorporated: Impacts that would be reduced to a less-than-significant level by feasible mitigation measures identified in this Environmental Checklist.

Less-than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
1.	**AESTHETICS.** *Would the project:*				
	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 scenic highway?	☐	☐	☐	■
	c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	■	☐
	d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	■	☐

Discussion

a., b. The project site is not part of a designated scenic view shed, and is not visible from a designated scenic highway. There are no State scenic highways in or near the project site[1]. Therefore, ***no impact*** would occur.

c. The Proposed Project would alter the visual character of the project site, but the changes would be in character with a rural landscape.

The project site is a rural agricultural parcel, with one home and out buildings on 40 acres. The Proposed Project would occupy approximately 11 acres in the northwest quadrant of the project site. The portion of the project site is relatively flat, with oak woodland around the perimeter (see Figure 3-1).

At present, the project site is surrounded by undeveloped land. Views of the site are obscured by topography and oak woodlands. The only views of the project site are from several homes along Barton Road, which are located at slightly higher elevations.

The areas to the immediate east and south are unoccupied. There are several homes and a church located along the southern portion of James Drive and Rocklin Road. Views of the project site from these areas are blocked by topography and trees. A residential development is planned to the southeast (the Poppy Ridge 1 development)

1 Caltrans, California Scenic Highway Mapping System, Placer County, http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm , accessed January 2, 2018.

Figure 3-1: View Looking North from Proposed Parking Area, Toward Proposed Main Barn and Outdoor Jump Arena Sites.

and to the south, on 20 acres adjacent to the project site. Some residents of Poppy Ridge 1 will likely have partial views of the project site. The northern border of the site is heavily vegetated, which limits views to and from the site. The area to the northeast is planned for development, however.

The Croftwood residential subdivision borders the project site to the north, in the City of Rocklin (see Figure 2-3 in Chapter 2). This project would develop single-family homes to the northeast and northwest of the project site. Immediately north of the project site is designated open space, including a large pond that receives water from the pond on the project site. Once developed, some Croftwood residences would have partial views of the project site.

Sierra College owns the land immediately west of the project site, and has partnered with a development company on an application to develop the parcel west of the project site with a 107-acre Planned Development in the City of Rocklin. The "North Village" of this project would be located immediately west of the project site, and would include residential and mixed uses (e.g., residential, institutional, medical, retail, office) along the project's western boundary. The northern most edge of the North Village would be designated for parks and/or open space.[2]

2 Sierra Villages Preliminary Project Description and Application Packet, received January 9, 2017, accessed at

Most of the project facilities would be located in the northwest corner of the project site, including the indoor arena and barn (see Figure 2-4 in Chapter 2). The indoor arena would be approximately 23-feet tall and the main barn would be approximately 15-feet tall, which is consistent with the height limit of 35 feet based on the project site zoning. As shown in Figure 2-3, a fairly dense line of trees is located on the western and northern boundaries of the project site. No trees are proposed to be removed from the project site, but it is not known at this time if the trees on the Sierra College property would be removed. These trees, if they are retained, would block most views of the indoor arena and barn from the Sierra College future residences. However, the roofs of the barn and arena may be visible through the tree canopy and/or from upper stories of adjacent homes.

Most of the Croftwood development would be separated from the project site by a roadway, vegetation along the property line, and open space on that site. Three Croftwood lots do abut the northeastern edge of the project site. If the vegetation along the property line were removed, the three Croftwood lots might be able to see the indoor arena and/or stables, but the views would be intermittent due to onsite vegetation, topography and distance.

The indoor arena and barn would likely not be visible from the south and east due to the tree canopy and distance. At most, the roofs may be visible in the distance through the tree canopy.

Other facilities, such as the outdoor arena, dressage arena, round pens, and paddocks, would be at grade with fencing up to 4-feet tall. The existing mare motel would also include a shelter structure approximately 16-feet tall. Views of these low-level facilities would be largely obscured from surrounding areas by trees and, from the west, by the indoor arena and barn.

Building designs would be subject to review by the Planning Commission, and must be generally consistent with the rural character of the project site and vicinity.

The widening of the southern portion of James Drive and the associated intersection improvements would not substantially alter the visual character of the road. It would be paved, rather than gravel, but would still be flat, with intermittent traffic. No visual elements (e.g., light poles) would be constructed, except perhaps a stop sign. This would be in keeping with the visual character of a rural roadway. The pipeline would be buried, and would therefore not be visible.

In summary, the project site is a rural agricultural parcel, with one home and out buildings on 40 acres. The Proposed Project would add equestrian facilities, which are consistent with a rural, agricultural setting. Future residents of adjacent development might be able to see portions of the project facilities, particularly the indoor arena and barn, but these views would be largely blocked by trees and topography, and would be in keeping with the rural visual character of project site and surrounding area, including much of the Town of Loomis. For these reasons, the impact on visual character would be ***less than significant***.

https://www.rocklin.ca.us/post/sierra-villages, October 13, 2017.

d. Glare is caused by light reflections from pavement, vehicles, and building materials, such as reflective glass, polished surfaces, or metallic architectural features. During daylight hours, the amount of glare depends on the intensity and direction of sunlight. The Proposed Project would not have any large, reflective surfaces, so it would not generate substantial glare.

The Proposed Project would introduce new sources of artificial lighting into the project site. The indoor arena will be lit with lights suspended from the arena roof. These lights would not be visible from outside of the arena, but lighting would be visible to someone looking directly at the open ends of the arena. The indoor arena would be over 75 feet from the western property line and over 200 feet from the northern property line. In both cases, trees on the property would obscure views of the arena interior. Therefore, arena lighting would not spill over onto adjacent properties or be a disturbance for future nearby residences. The outdoor arenas would be fenced but not covered, and will not have artificial lighting. Consistent with the Town's Municipal Code, the larger outdoor arena would be 25 feet from the northern property line and over 130 feet from the western property line (the minimum required setback is 25 feet). Security lighting will be provided for ingress/egress and at the trailer parking area. The barn itself would be separated from the property to the west by the indoor arena, and from the northern boundary by the outdoor arena.

No lighting would be installed along James Drive or at the intersection with Rocklin Road.

Because of the distance of those project elements that would have lighting from the property lines, security lighting in these areas is unlikely to "spill over" onto adjacent properties and/or disturb adjacent future residences. Furthermore, the Loomis Municipal Code regulates outdoor lighting (Section 13.30.080). Lighting fixtures are limited to a maximum height of 20 feet or the height of the nearest building. The indoor arena would be 23-feet tall, so that would be the tallest possible outdoor light fixture. The Code also requires that lighting be shielded or recessed so that the light source is not visible from offsite, and that fixtures be directed downward and away from adjoining properties. The Proposed Project must comply with the Town's Municipal Code, including these measures, which would further ensure that lighting would not be obtrusive at nearby properties. Therefore, this impact would be ***less than significant***.

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
2.	**AGRICULTURE AND FORESTRY RESOURCES:** Would the project:				
	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 in the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
	b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	■
	c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	■
	d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
	e. 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 conversion of forest land to non-forest use?	☐	☐	☐	■

Discussion

a. The project site is designated Grazing Land on the Placer County Important Farmland Map.[3] Therefore, there would be no loss of Important Farmland (Prime Farmland, Unique Farmland, or Farmland of Statewide Importance), and ***no impact*** would occur.

b. The project site is not under a Williamson Act contract. There are no Williamson Act contracts or land zoned for agricultural use adjacent to or near the project site.[4] Therefore, ***no impact*** would occur.

3 California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, *Placer County Important Farmland 2016*, November 2017.

4 California Department of Conservation, Division of Land Resource Protection, Conservation Program Support, *California Williamson Act Contract Land*, 2017.

c., d. The project site does not contain any forest, so there would be ***no impact*** on forest lands.

e. The Proposed Project site is currently used as a rural residence and for seasonal cattle grazing. As stated above, the Department of Conservation does not classify the site as Important Farmland, and the site is not intensively farmed. The Proposed Project would shift the use of the project site from seasonal cattle grazing to an equestrian facility. There are no ongoing agricultural operations surrounding the project site at present, but such activities could occur in the future. An equestrian facility would be compatible with most agricultural uses, particularly livestock grazing, so the Proposed Project would not create conflicts with future agricultural activities, if any, or impede the viability of agricultural operations as the result of nuisance complaints. Therefore, the Proposed Project would not contribute to the conversion of surrounding agricultural land to non-agricultural uses. For these reasons, ***no impact*** would occur.

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
3.	**AIR QUALITY** *Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations:* *Would the project:*				
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.	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
e.	Create objectionable odors affecting a substantial number of people?	☐	■	☐	☐

Discussion

Air quality is monitored, evaluated and regulated by federal, State, regional, and local regulatory agencies and jurisdictions, including the United States Environmental Protection Agency (USEPA), the California Air Resources Board (CARB), and the Placer County Air Pollution Control District (PCAPCD). The EPA, CARB and the PCAPCD develop rules and/or regulations to attain the goals or directives imposed by legislation. Both State and regional regulations may be more, but not less, stringent than federal regulations

Air Pollutants of Concern

Air quality in the project vicinity is influenced by vehicle emissions on Interstate 80 and other regional roadways, agricultural activities, landscaping and building maintenance equipment, and stationary sources, such as residential woodstoves. Air pollutants from south Placer County, Sacramento and the Bay Area are also transported to west Placer County, influencing the air quality.

To protect human health and the environment, the USEPA has set "primary" and "secondary" maximum ambient limits for each of the criteria pollutants. Primary standards were set to protect human health, particularly sensitive receptors such as children, the elderly, and individuals suffering from chronic lung conditions such as asthma and emphysema. Secondary standards were set to protect the natural environment and prevent damage to animals, crops, vegetation, and buildings. Ozone (O_3) and nitrogen dioxide (NO_2) are considered regional pollutants because they (and their precursors) affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), sulfur dioxide (SO_2), and lead (Pb) are considered local pollutants that tend to accumulate in the air locally. Particulate matter (PM) is both a local and regional pollutant.[5]

The primary pollutants of concern in Placer County are O_3 [including oxides of nitrogen (NO_X) and reactive organic gases (ROG)], CO, and PM. Principal characteristics surrounding these pollutants are discussed below. Toxic Air Contaminants (TACs) also are discussed, although no air quality standards exist for these pollutants.

Ozone

Ozone, or smog, is photochemical oxidant that is formed when ROG and NO_X (both by-products of the internal combustion engine) react with sunlight. Ozone poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Ozone is a respiratory irritant that can cause severe ear, nose, and throat irritation and increased susceptibility to respiratory infections. Additionally, ozone has been tied to crop damage, typically in the form of stunted growth and premature death. Ozone also can act as a corrosive, resulting in property damage such as the degradation of rubber products, and is also an oxidant that causes extensive damage to plants through leaf discoloration and cell damage.[6]

Reactive Organic Gases

ROG are compounds made up primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of ROG are emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. Adverse effects on human health are not caused directly by ROG but rather by reactions of ROG that form secondary pollutants such as ozone.[7]

Nitrogen Oxides

Nitrogen oxides are a family of highly reactive gases that are a primary precursor to the formation of ground-level ozone, and react in the atmosphere to form acid rain. The two major forms of NO_X are nitric oxide (NO) and nitrogen oxide (NO_2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO_2 is a reddish-brown gas formed by the combination of NO and oxygen. NO_X acts as an acute respiratory irritant and increases susceptibility to respiratory pathogens.[8]

5 United States Environmental Protection Agency, *Criteria Air Pollutants,* accessed at https://www.epa.gov/criteria-air-pollutants, August 9, 2016.
6 Center for Disease Control (CDC), *Air Pollutants,* November 24, 2014. Accessed at http://www.cdc.gov/air/pollutants.htm, August 9, 2016.
7 Center for Disease Control (CDC), *Air Pollutants,* November 24, 2014. Accessed at http://www.cdc.gov/air/pollutants.htm, August 9, 2016.
8 Center for Disease Control (CDC), *Air Pollutants,* November 24, 2014. Accessed at http://www.cdc.gov/air/pollutants.htm, August 9, 2016.

Carbon Monoxide

Carbon monoxide is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. In the Sacramento Valley, high CO levels are of greatest concern during the winter, when periods of light winds combine with the formation of ground-level temperature inversions from evening through early morning. These conditions trap pollutants near the ground, reducing the dispersion of vehicle emissions. Moreover, motor vehicles exhibit increased CO emission rates at low air temperatures. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which can result in tissue oxygen deprivation.[9]

Particulate Matter

Particulate matter consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates now are recognized: inhalable course particles of 10 microns or smaller (PM_{10}), and inhalable fine particles of 2.5 microns or less ($PM_{2.5}$). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind on arid landscapes also contributes substantially to local particulate loading. Both PM_{10} and $PM_{2.5}$ can adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems.[10]

Toxic Air Contaminants

In addition to the criteria air pollutants, another group of airborne substances, called toxic air contaminants (TACs), are known to be highly hazardous to health, even in small quantities. TACs are airborne substances capable of causing short-term (acute) and/or long-term (chronic or carcinogenic) adverse human health effects (i.e., injury or illness). TACs can be emitted from a variety of common sources, including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. There are almost 200 compounds that have been designated as TACs in California. The ten TACs posing the greatest known health risk in California, based primarily on ambient air quality data, are acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter.[11, 12]

Regional Air Quality Conditions

Air pollutant concentrations are monitored at sites throughout the state. The closest station to the project site is in Roseville. If a pollutant concentration is lower than the State or federal standard, the area is classified as being in attainment for that pollutant. If a pollutant violates the standard, the area is considered a nonattainment area. If data are insufficient to determine whether a pollutant is violating the standard, the area is designated unclassified. As shown in Table 3-1, the greater Sacramento area, including western Placer County, is designated as a non-attainment area for State ozone and PM_{10} standards. The U.S. EPA has designated the Sacramento area, including western Placer County, as being a severe non-attainment area for

9 Center for Disease Control (CDC), *Air Pollutants,* November 24, 2014. Accessed at http://www.cdc.gov/air/pollutants.htm, August 9, 2016.
10 Center for Disease Control (CDC), *Air Pollutants,* November 24, 2014. Accessed at http://www.cdc.gov/air/pollutants.htm, August 9, 2016.
11 California Air Resources Board, *ARB Almanac 2009*, Chapter 5.
12 California Air Resources Board, *Reducing Toxic Air Pollutants in California's Communities,* n.d.

TABLE 3-1
Regional Attainment Status

	Attainment Status	
Pollutant	**California Standards**	**Federal Standards**
Ozone	Nonattainment	Extreme Nonattainment
CO	Unclassified	Unclassified/Attainment
NO_x	Attainment	Unclassified/Attainment
SO_x	Attainment	Unclassified/Attainment
PM_{10}	Nonattainment	Unclassified
$PM_{2.5}$	Unclassified	Nonattainment
Lead	Attainment	Unclassified/Attainment

SOURCE: Town of Loomis, Environmental Impact Report for the Village at Loomis, July 2017, Table 4.8-3.

ozone and a nonattainment area for $PM_{2.5}$. The PCAPCD is in attainment for the state and federal CO standards.[13]

Local Air Quality Conditions

Local emission sources in the project vicinity include area sources, such as space and water heating, landscape maintenance equipment from lawn mowers and leaf blowers, consumer products, and mobile sources, primarily automobile traffic. Motor vehicles are the dominant source of pollutants in the project vicinity.

Traffic-congested roadways and intersections have the potential to generate localized levels of CO. Areas where ambient concentrations exceed the federal or state CO standards are called CO hotspots. The PCAPCD considers CO a localized problem requiring additional analysis when a project is likely to subject sensitive receptors to elevated CO concentrations. As discussed under Item 16, Transportation/Traffic, there are no intersections at present in the project vicinity that are congested enough (LOS E or F) to generate high levels of CO.

Existing Project Site Emissions

Because the existing project site has only one home, and no intensive agricultural operations (e.g., orchard, dairy), it generates a negligible amount of emissions.

Sensitive Land Uses

Land uses such as schools, children's daycare centers, hospitals, and convalescent homes are considered to be more sensitive to poor air quality than the general public because the population groups associated with these uses have increased susceptibility to respiratory distress. In addition, residential uses are considered more sensitive to air quality conditions than commercial and industrial uses because people generally spend longer periods of time at their residences, resulting in greater exposure to ambient air quality conditions. Recreational land uses are considered moderately sensitive to air pollution. Exercise places a high demand on respiratory functions, which can be impaired by air pollution, even though exposure periods

13 Town of Loomis, *Environmental Impact Report for the Village at Loomis*, July 2017, pages 4.8-6 and 4.8-7.

during exercise are generally short. In addition, noticeable air pollution can detract from the enjoyment of recreation.[14] Sensitive receptors in the project vicinity include the existing residences and the State preschool located southeast of the project site at 5400 Barton Road.

Air Pollutant Emissions Thresholds

The PCAPCD has established thresholds to determine whether a project would have a significant impact on air quality and/or contribute considerably to cumulative air quality degradation. The significance thresholds for project-specific and cumulative conditions are shown in Table 3-2.

TABLE 3-2
PCAPCD Significance Thresholds for Criteria Pollutants
(lbs/day)

Construction Phase Project-Level			Operational Phase Project-Level			Operational Phase Cumulative-Level		
ROG	NO_x	PM_{10}	ROG	NO_x	PM_{10}	ROG	NO_x	PM_{10}
82	82	82	55	55	82	55	55	82

Source: PCAPCD, *CEQA Handbook*, August 2017, page 21.

In addition, the PCAPCD has identified the size of a project that would be expected to generate 55 lbs/day of NO_x emissions. Projects that are smaller than those in Table 3-3 would not be expected to exceed the NO_x standard.

TABLE 3-3
Corresponding Size of a Project for 55 lbs/day of NO_x Emissions

Residential (# of units)			Commercial/Industrial (sf)		
Single Family	Condo	Apartment	General Commercial	General Office	General Industrial
617	868	911	249,099	648,661	894,262

PCAPCD, *CEQA Handbook*, August 2017, page 21.

a.-c. Construction

Construction activities associated with the Proposed Project would generate particulate matter from grading and earthmoving activities. NO_x and ROGs would be generated from diesel fumes associated with the operation of construction equipment. Because of the project's small size, these emissions levels would not be expected to exceed PCAPCD standards. For example, the Proposed Project would disturb a total of approximately 5.3 acres. An air quality study for a project in nearby Rocklin that would grade approximately 7 acres of land and construct a total of 64 homes would generate a

14 California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, April 2005.

maximum of 39.39 lbs/day of ROG, 81.48 lbs/day of NO_x and 24.73 lbs/day of PM_{10}[15]. A recent project in the Town of Loomis on a 10-acre parcel to be developed with 22 homes was estimated to generate construction emissions of 54.71 lbs/day of ROG, 52.35 lbs/day of NO_x and 21.09 lbs/day of PM_{10} during construction.[16] All of these levels would be below the PCAPCD thresholds. The Proposed Project would generate substantially less ROG, NO_x and PM_{10} emissions due to the smaller area to be graded and because the only structures to be built would be the barn, the covered arena, the manure garage and the fodder building.

Although project construction emissions would not exceed PCAPCD thresholds, construction dust and diesel emissions could annoy neighbors for short periods of time, which could be a significant impact. The Proposed Project would be required to implement the following measures, which would protect neighbors by minimizing dust generation and reduce construction emissions. With this mitigation, construction activities would have a ***less-than-significant impact*** on air quality.

Mitigation Measures

1. *Prior to issuance of a grading permit, the contractor shall submit a dust control plan to the Town and the PCAPCD for review and approval. The plan shall insure that adequate dust controls are implemented during all phases of construction through the use of the following or equally effective measures. These measures shall be included as a standard note on all grading and improvement plans:*

    - *Construction equipment exhaust emissions shall not exceed PCAPCD Rule 202 Visible Emission limitations.*
    - *The prime contractor shall submit to the Air District a comprehensive inventory (i.e. make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower or greater) that will be used an aggregate of 40 or more hours for the construction project. The inventory shall demonstrate that the off-road vehicles to be used during excavation, construction, and grading activities, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet average 20 percent NOx reduction and 45 percent particulate matter reduction compared to the most recent CARB average and shall include enforcement measures to ensure that the reductions are achieved. The PCAPCD shall be contacted for average fleet emission data. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the District with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreperson.*
    - *An enforcement plan shall be established to weekly evaluate project-related on-and-off-road heavy-duty vehicle engine emission opacities, using standards as defined in California Code of Regulations, Title 13, Sections*

15 City of Rocklin, *Initial Study and Environmental Checklist, Quarry Row Subdivision,* March 9, 2017, page 17.
16 Town of Loomis, *Initial Study/Mitigated Negative Declaration for The Grove*, December 22, 2016, page 24.

2180-2194. An Environmental Coordinator, CARB-certified to perform Visible Emissions Evaluations (VEE), shall routinely evaluate project related off-road and heavy-duty on-road equipment emissions for compliance with this requirement. Operators of vehicles and equipment found to exceed opacity limits will be notified and the equipment must be repaired within 72 hours.

- *No open burning of removed vegetation shall be conducted during infrastructure improvements. Vegetative material shall be chipped or delivered to waste to energy facilities.*
- *During construction the contractor shall use existing power sources (e.g., power poles) or clean fuel (e.g., gasoline, biodiesel, natural gas) generators rather than temporary diesel power generators to the extent feasible.*
- *Diesel-power equipment shall not be allowed to idle within 1,000 feet of any sensitive receptors.*
- *Diesel-power equipment shall not be allowed to idle for more than 5 minutes at any time.*
- *Earth moving construction equipment shall be cleaned with water once per day.*
- *An operational water truck shall be onsite at all times. Water to control dust shall be applied as needed to prevent dust impacts offsite for active and inactive construction areas. Pursuant to District Rule 228, Section 304, streets shall be wet broomed or washed of any silt carried over to adjacent public thoroughfares during construction activities.*
- *Earth-moving contractors shall not operate pre-1996 heavy-duty diesel equipment on forecast Spare the Air Days.*
- *To the extent feasible, construction activities shall use existing power sources (e.g., power poles) or clean fuel generators rather than temporary diesel power generators.*
- *Traffic speeds on all unpaved surfaces shall be limited to a maximum speed of 15 miles per hour or less.*
- *Construction activity management techniques shall be employed, such as extending the construction period outside the ozone season of May through October; reducing the number of pieces of equipment used simultaneously; increasing the distance between emission sources; reducing or changing the hours of construction; and scheduling activity during off-peak hours.*
- *Contractors shall use low VOC architectural coatings per PCAPCD Rule 218.*

Operational Emissions

The primary operational emissions associated with new development projects include CO, PM_{10}, and ozone precursors (ROG, NO_x) emitted as vehicle exhaust. Most development projects also generate “area source” emissions. Area sources individually emit small quantities of air pollutants that cumulatively can represent significant quantities of emissions. Natural gas combustion resulting from water and space heating and gasoline combustion from landscape maintenance equipment are examples of area source emissions.

The Proposed Project would generate motor vehicle trips that would increase

operational air emissions. As discussed in Item 16, Transportation/Traffic, below, the Proposed Project would generate approximately 139 vehicle trips per day. This is equivalent to the number of trips that would be associated with approximately 14 single family homes, well below the 617 homes identified in Table 3-3. Emissions related to other aspects of a home, such as electricity use, would similarly be lower than a small residential project, because most activity would occur during the day, when lighting is not required, and there would be only one bathroom and minimal landscaping. For these reasons, project-specific and cumulative impacts on ROG, NO_x and PM_{10} emissions would be ***less than significant.***

d. **CO Hotspots**

Localized areas where ambient concentrations of CO exceed State and/or federal standards are termed CO hotspots. Emissions of CO are produced in greatest quantities from motor vehicle combustion and are usually concentrated at or near ground level, because they do not readily disperse into the atmosphere, particularly under cool, stable (i.e., low or no wind) atmospheric conditions. Carbon monoxide decreased dramatically in California with the introduction of the catalytic converter in 1975. No violations of CO standards have been recorded at the monitoring station nearest the project site for over 5 years and all of Placer County is currently designated as a CO attainment area.[17]

CO emissions are concentrated at congested intersections. Intersections that operate at level of service (LOS) D or better would not be expected to experience high concentrations of CO. As discussed in Item 16, Transportation/Traffic, the Proposed Project would generate no more than 139 trips per day. These trips would be dispersed throughout the Town, the City of Rocklin and Placer County. The intersections closest to the project site (and therefore most affected by project traffic) would operate at LOS D or better under both existing conditions and with the addition of both the Proposed Project and other approved or pending projects (See Item 16a). Under cumulative conditions, study area intersections would operate at LOS E or F. Only one of these intersections, Sierra College Boulevard/Rocklin Road, carries a substantial amount of traffic (2,950 vehicles in the a.m. peak hour and 3,419 in the p.m. peak hour). Even with these volumes, this intersection would not be expected to exceed CO standards in the future.[18] By comparison, the intersection of Pleasant Grove Boulevard/Roseville Parkway, with a volume of 6,986 vehicles per hour, was modeled for an EIR analysis in 2016, and was estimated to have CO concentrations of 13.3 ppm for 1 hour and 6.6 ppm for 8 hours, well below the State and federal standards.[19] The intersection of Sierra College Boulevard/Rocklin Road would likely have lower CO levels due to the lower traffic volumes. In addition, the Proposed Project would contribute only 6 vehicles in the a.m. peak and 16 vehicles in the p.m., or less than 0.33% of vehicles to this intersection, which would not substantially increase CO levels. For these reasons, this impact would be ***less than significant***.

e. Perception of odors varies from person to person. The impact of an odor is also dependent upon wind direction and the intensity of the odor.

17 Town of Loomis, *Environmental Impact Report for the Village at Loomis*, July 2017, page 4.8-8.

18 The federal standards are 25 ppm for 1-hour and 9 ppm for 8 hours. The State standards are 20 ppm for 1-hour and 9 ppm for 8-hours under State standards

19 City of Roseville, *Amoruso Ranch Specific Plan Final EIR,* May 2016, page 4.4-32.

During construction, exhaust from equipment could produce discernible odors typical of most construction sites. Such odors could be a temporary nuisance to adjacent uses, but would be intermittent and would not affect a substantial number of people. Additionally, odors dissipate with distance. Therefore these emissions would be minimal.

The Proposed Project would be the source of odors associated with animal waste, specifically horse manure. There are no sensitive receptors close enough to the project site at present to be affected by such odors, with the possible exception of the existing home. However, under the Proposed Project, the home would be occupied by project staff, who would not be considered a sensitive receptor for this analysis. There is a pending proposal to develop residential uses immediately west of the project site, within the City of Rocklin. The site plan for that project is not available at this time, but homes could abut the project boundary. The area to the north and northwest of the project boundaries is also zoned for development, with the exception of the pond and its immediate environs. These future development areas could contain populations that would be sensitive to odors.

The Loomis Municipal Code requires that horses kept within the Residential Estate zone be kept 25 feet from the side and rear property lines and 50 feet from residences (Code Section 13.42.060). Under the Proposed Project, the main barn, where the largest number of horses would spend most of their time, would be over 200 feet from the side and rear property lines. Horses would not be housed in the indoor or outdoor arena, but one or more horses could occupy the arenas throughout the day. The outdoor arena would be located 25 feet from the rear property line, and over 130 feet from the side property line. The indoor arena would be located over 75 feet from the side property line and over 250 feet from the rear property line. The only home within 50 feet of any of the project facilities is the existing house within the project site, which would be located over 100 feet from the main barn. Based on the distances of the project facilities from the property line and existing house, the Proposed Project is consistent with the Code's standards for keeping horses on the project site.

As discussed in Chapter 2, manure and soiled bedding would be removed from stalls and common areas once or twice a day, and stored in a covered bin within a "manure garage". Therefore, there would not be an accumulation of manure within the stalls to generate substantial odors. The most likely source of odors would be the manure disposal bin, because of the amount and concentration of manure and soiled bedding that would be stored there. Keeping the bin closed would capture most of the odor. The distance between the manure garage and surrounding properties would also minimize the likelihood that odor from manure would be discernable offsite. As shown in Figure 2-4 in Chapter 2, the manure bins would be located approximately 158 feet from the property line to the north and over 300 feet from the property line to the west. The bin would be emptied by a commercial hauler, and the waste disposed of offsite. These provisions should ensure that unpleasant odors do not reach the property line. Mitigation Measure 2 provides additional safeguards, and would reduce the impact to a ***less-than-significant level*** by minimizing the potential for odors to become a nuisance at nearby properties. In addition, this measure would ensure that flies, which would be attracted by odors, would be kept to a minimum.

Mitigation Measure

2. (a) *The project applicant shall maintain adequate facilities (e.g., covered bins within an enclosure, such as a shed or barn with roof and doors) to contain all manure*

and associated waste removed from stalls and paddocks.

(b) *Manure disposal bins shall be located a minimum of 120 feet from the northern property line and 300 feet from the western property line.*

(c) *Manure and waste pick up shall be scheduled often enough to empty bins before they reach full capacity, and a minimum of once per week.*

(d) *The automated fly spray system shall be maintained, and if it fails during fly season (generally May through October), the system shall be repaired or replaced within one week*.

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
4.	**BIOLOGICAL RESOURCES.** *Would the project:*				
	a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	■	☐	☐
	b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	■	☐	☐
	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 removal, 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 Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■

Discussion

Biological resources on the project site were characterized in a Wetlands Delineation[20] and a Biological Assessment[21], prepared in 2004. These studies were conducted for 60 acres, including the 40-acre project site. The findings for the project site are summarized here, based on these studies, which are available from the Town of Loomis.

A California Diversity Data Base (CNDDB) search reported 18 special-status species and 14 special-status wildlife species known to occur in the region surrounding the project site. The U.S. Fish and Wildlife Service (USFWS) provided a list of wildlife that could occur in the area. Of the 32 identified species, Northfork Associates found that three special-status plant species and six special-status animal species could occur on the project site. These species are shown in Table 3-4.

A field assessment was conducted on April 16, 2004. The wetland delineation and additional vegetation surveys were conducted on April 30, 2004. A wildlife survey was conducted on May 14, 2004. The project site has not been altered since the biological resource studies were conducted in 2004. Further, review of a recent biological resource evaluation for a nearby project (the Village at Loomis) indicates that the special-status species and sensitive habitats with potential to occur on the project site have not changed since 2004.[22]

Habitat on the 40-acre project site is composed of approximately 17.2 acres of annual grassland, 24 acres of oak woodland, and 0.18 acres of seasonal pond. The oak woodland is dominated by blue and interior live oaks. The understory of the oak woodland is composed primarily of grasslands, lacking woody vegetation. The annual grassland is dominated by non-native grasses.

The project site provides habitat for several special-status species. Two of the plant species, Sanford's arrowhead and Big-scale balsam-root, are California Native Plant Society (CNPS)-ranked 1.B2, rare or endangered in California and elsewhere. These plants were not observed in 2004 even though the survey was conducted during the appropriate time for identification. Members of the *clarkia* genus were observed, but it could not be determined at the time of the survey whether these plants were the listed Brandegee's clarkia. At the time of the 2004 study, the Brandegee's clarkia was ranked CNPS 3. Since that time, it has been re-ranked 4.2, and so it is no longer of concern.[23]

An elderberry shrub is located near the western border of the project site. Elderberry shrubs can provide habitat for the Valley elderberry longhorn beetle, which is a Federal threatened species. This shrub did not appear to have any exit holes for VELB during the 2004 survey. Although they were not observed during field surveys, both California red-legged frog and Northwestern pond turtle could occur in the onsite pond. However, the pond is outside of the area to be disturbed by the Proposed Project. Three special-status raptors listed in Table 3-4 were observed on or over the project site during surveys. The project site could provide foraging opportunities for these species as well as other raptors or migratory birds, such as purple martin. Migratory birds, including non-listed raptors, are protected from killing,

20 North Fork Associates, *Wetland Delineation for the +/-60-Acre Hartwick Property*, May 27, 2004.
21 North Fork Associates, *Biological Assessment for the +/-60-acre Hartwick-Loomis Properties*, July 6, 2004.
22 Adrienne Graham, AICP, memorandum to Bob King, Town Planner, May 14, 2018.
23 California Native Plant Society, Rare Plant Program, 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org (accessed 15 February 2018).

TABLE 3-4

Special-Status Species that Could Occur on the Project Site

Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence within Project Site
PLANTS				
Balsamorhiza macrolepis var. *macrolepis*	Big-scale balsam-root	FSC/none/CNPS 1.B2	Woodlands and grasslands	Moderate. The site has suitable habitat for this species. Not observed during 2004 survey.
Clarkia biloba ssp. *Brandegeeae*	Brandegee's clarkia	None/none/CNPS 4.2	Chaparral and woodlands	Moderate. The site has suitable habitat for this species. Members of clarkia genus observed during 2004 survey. Had been rated CNPS 3 in 2004; now rated 4.2, and no longer of concern.
Sagittaria sanfordii	Sanford's arrowhead	FSC/none/CNPS 1.B2	Marshes and swamps.	Low. Could occur in ponds. Not observed during 2004 survey.
INVERTEBRATES				
Desmocerus californicus dimorphus	Valley elderberry longhorn beetle	FT/none/none	Elderberry shrubs in woodland and riparian habitats	Low. Elderberry shrubs do occur on site. No exit holes were observed during 2004 survey.
AMPHIBIANS				
Rana aurora draytoni	California red-legged frog	FT/none/none	Ponds and streams	Low. Prefers pools over 0.5 meter deep with fringing vegetation.

TABLE 3-4

Special-Status Species that Could Occur on the Project Site

Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence within Project Site
REPTILES				
Clemmys mamorata marmorata	Northwestern pond turtle	FSC/CSC/none	Permanent water, basking sites, uplands for nesting	High. Suitable aquatic and upland habitat are present.
BIRDS				
Accipiter cooperii	Cooper's hawk	none/CSC/none	Open woodlands and riparian deciduous	High. One individual observed during 2004 survey. Suitable nesting and foraging habitat is present.
Circus cyaneus	Northern harrier	none/CSC/none	Marshes, grasslands and farmland	Moderate. Individual observed during 2004 survey. Suitable foraging habitat on site.
Elanus leucurus	White-tailed kite	MNBMC/CFP/none	Open fields, marshes with nearby trees	High. Two individuals observed during 2004 survey. Suitable nesting and foraging habitat is present.

TABLE 3-4

Special-Status Species that Could Occur on the Project Site

Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence within Project Site
FEDERAL				
	FE	Federally listed as Endangered		
	FT	Federally listed as Threatened		
	FPE	Federally proposed as Endangered		
	FPT	Federally proposed as Threatened		
	FC	Federal Candidate Species (former Category 1 candidates)		
	FSC	U.S. Fish and Wildlife Service designated “Species of Concern” (former Category 2 Candidates for listing)		
	MNBMC	U.S. Fish and Wildlife Service designated “Migratory Non-game Bird of Management Concern”		
STATE				
	SE	State listed as Endangered		
	ST	State listed as Threatened		
	SR	State listed as Rare		
	CFP	California Department of Fish and Game designated “Fully Protected”		
	CSC	California Department of Fish and Game designated “Species of Special Concern”		
	SA	California Department of Fish and Game designated “Special Animal”		
OTHER				
	CNPS List 1a	Plants presumed extinct in California		
	CNPS List 1b	Plants that are rare, threatened, or endangered in California and elsewhere		
	CNPS List 2	Plants that are rare, threatened, or endangered in California, but are more common elsewhere		
	CNPS List 3	Plants about which we need more information – a review list		
	CNPS List 4	Plants of limited distribution – a watch list		

possession and/or harm by the Migratory Bird Treaty Act (16 U.S.C., Section 703, Supplement I, 1989) and California Fish and Game Code Section 3503.

A wetland delineation was prepared in June 2004 and verified by the U.S. Army Corps of Engineers (Corps). The verified delineation identified a total of 1.72 acres of jurisdictional wetlands on the 40-acre project site, including a seasonal pond, wetland swales, seeps, fringe wetlands and an isolated wetland. All of the wetlands appeared to be seasonal, and are typically dormant and dry by September or October. The seasonal pond is an extension of a larger pond on the Croftwood project to the north of the project site. This pond dries out substantially during the dry season, and the portion of the pond on the project site is completely dry by summer. With the exception of one isolated seep, the wetlands on the project site are considered tributary to Secret Ravine, and ultimately the Sacramento River, a navigable waterway. None of these wetlands are located in the areas that would be disturbed by the Proposed Project.

An arborist report was also prepared for the entire project site. Every tree meeting the Town's criteria for protected trees was tagged, evaluated for structural condition and vigor and inventoried. The resulting Master Inventory documented 1,174 trees meeting the ordinance criteria. The combined diameter of these trees is 19,817. Of the total, 140 trees were recommended for removal due to compromised health and/or structural stability.[24] Another arborist report was prepared in April 2017, and focused on the area in which the Proposed Project would be constructed. The 2017 arborist report found 54 oak trees measuring 4 inches in diameter at breast height (dbh) within and/or overhanging the area to be developed.[25] Of these, five were recommended to be removed due to the nature and extent of defects, compromised health and/or structural instability.[26] The 2017 report also provides general guidelines for the protection of trees that will remain in place.

The site of the off-site intersection improvements is largely disturbed, composed of low grasses. There are two oak trees west of James Drive that are within the area to be disturbed.

a. The Proposed Project would result in conversion of approximately 1.84 acres of grassland to roads, barns and riding facilities, including the intersection improvements at James Drive and Rocklin Road and installation of the water line. This would also bring increased activity to the project site.

   Special-Status Plant Species

   Habitat for two special-status plant species occurs within the project site—big-scale balsam-root and Sanford's arrowhead. Neither plant was observed during surveys in 2004, which were conducted during the appropriate season. However, the potential exists for these plants to have migrated to the site since 2004. Habitat for Sanford's arrowhead would be associated with the pond, which would not be affected by the Proposed Project. Big-scale balsam-root occurs in woodlands and grasslands, so there is suitable habitat for this plant that would be disturbed by the Proposed Project. The loss of individual plants, if present, would be a significant impact.

24 Sierra Nevada Arborists, *Poppy Ridge 2 Project Site, Initial Arborist Report and Inventory Summaries*, June 27, 2005, page 4.

25 Sierra Nevada Arborists, *Arborist Report and Tree Inventory Summary*, *Aerometals Project 3 Project Site*, April 19, 2017, page 2.

26 Sierra Nevada Arborists, *Arborist Report and Tree Inventory Summary*, *Aerometals Project 3 Project Site*, April 19, 2017, page 3.

Valley Elderberry Longhorn Beetle

An elderberry shrub was observed near the western edge of the project site during the 2004 survey. Elderberry shrubs can provide habitat for the Valley elderberry beetle (VELB), a federally listed threatened insect species. The elderberry shrub did not have evidence of the VELB (exit holes) at that time of the 2004 survey. If VELB had since occupied the elderberry shrub, removal or trimming of the shrub would be a significant impact.

California Red-legged Frog and Northwestern Pond Turtle

These two species could occur in the pond at the northern end of the project site. The Proposed Project would not alter the pond or area immediately surrounding the pond. With the exception of a bioswale that would connect to the pond, the site plan shows that grading and other construction activities would be a minimum of 50 feet from the edge of the pond. Therefore, there would be no impact on red-legged frog or pond turtle.

Raptors and Migratory Birds

The project site provides foraging habitat for three raptors observed during the field survey—northern harrier, white-tailed kite and Cooper's hawk. Other raptors and/or migratory birds could also use the site for foraging and nesting. The loss of foraging habitat for these raptors would not be a significant impact, because in part of the relatively small size of the project site. Only 1.75 acres of new impervious surface would be created, with an additional approximately 1.5 acres of pervious surface such as arena footing that would not support grasslands. The remaining 36.75 acres of the project site would be retained in its current condition, which would provide suitable foraging habitat for raptors. In addition, there is similar habitat surrounding the project site. The areas to the south, east and northeast are zoned Residential Agricultural, which would develop at very low densities, thereby retaining much of the existing habitat value, including raptor foraging. However, construction activities near nesting trees could disrupt raptor and/or migratory bird nesting behavior. In addition, up to two trees could be removed to accommodate intersection improvements. Disturbance to raptors or migratory birds during the nesting season could result in the abandonment of a nest, with the consequence that young would be lost. This would be a significant impact.

Implementation of the following mitigation measure would reduce impacts on special-status plants by identifying any new plants that occur within the construction area, and avoiding or moving them. Impacts on VELB would be reduced by avoiding the shrub, or, if it would be removed or altered during construction, by compensating for its loss if it shows evidence of VELB presence. The impact on nesting raptors and/or migratory birds would be reduced by ensuring that nest are located and left undisturbed during the nesting season. These measures would reduce impacts on special-status species to a ***less-than-significant***.

Mitigation Measures

3. *Preconstruction surveys shall be conducted in the same year as the onset of grading, as specified below*:

(a) *Prior to approval of Improvement Plans, the Project Applicant shall retain a qualified botanist to conduct confirmation plant survey(s) for Boggs Lake hedge hyssop within the areas to be disturbed, including the area where intersection improvements would occur. The survey(s) shall be conducted during the appropriate blooming period. These plants have not been observed on the project site through previous surveys; however, appropriate habitat for these species is present. If plants are present, but are in areas where soil disturbance is not necessary, the plants shall be flagged and avoided during grading and construction. If avoidance of the plants is not feasible, then the botanist shall notify the Town and the appropriate regulatory agency and Identify measures to fully offset the loss of the plant, including relocation and transplanting of the plant population and/or off-site replacement planting at a 2:1 or higher ratio and/or equally effective measures. If the confirmation survey(s) do not reveal the presence of these plants, then no further action is required.*

(b)i. *The site to be disturbed shall be surveyed for the presence of the valley elderberry longhorn beetle and its elderberry host plant by a qualified biologist in accordance with current USFWS protocols. If elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level occur on or adjacent to the disturbance site, or are otherwise located where they could be directly or indirectly disturbed, minimization and compensation measures shall be implemented so that there is no net loss of VELB habitat. These measures shall include transplanting existing shrubs and planting replacement habitat (conservation plantings) and/or equally effective measures at the ratios identified in the protocols. Surveys are valid for a period of two years. Elderberry plants with no stems measuring 1.0 inch or greater in diameter at ground level are unlikely to be habitat for the beetle because of their small size and/or immaturity. Therefore, no minimization measures are required for removal of elderberry plants with all stems measuring 1.0 inch or less in diameter at ground level.*

ii. *For elderberry plants with stems measuring 1.0 inch or greater, any elderberry plant within 100 feet of the area to be disturbed shall be protected and/or compensated for in accordance with the USFWS Conservation Guidelines for the Valley Elderberry Longhorn Beetle and the Programmatic Formal Consultation Permitting Projects with Relatively Small Effects on the Valley Elderberry Longhorn Beetle Within the Jurisdiction of the Sacramento Field Office."*

(c) *Should construction activities occur during the breeding season (February 15 through August 31), a pre-construction survey for raptor and/or nesting birds protected under the Migratory Bird Treaty Act shall be conducted by a qualified biologist to identify the location of nests in active use that were established prior to the start of project implementation activities. The pre-construction survey shall take place no more than 14 days prior to initiation of construction. All trees and shrubs within 500 feet of the area of disturbance shall be surveyed, with particular attention to any trees or shrubs that would be removed or directly disturbed. If an active nest of a protected bird is found on site or in the vicinity of off-site improvements at any time, the biologist shall, in consultation with the California Department of Fish and Wildlife (CDFW), determine whether construction work would*

affect the active nest or disrupt reproductive behavior. Criteria used for this evaluation shall include presence of visual screening between the nest and construction activities, and behavior of adult raptors in response to the surveyors or other ambient human activity. If construction could affect the nest or disrupt reproductive behavior, the biologist shall, in consultation with CDFW, determine an appropriate construction-free buffer zone around the nest to remain in place until the young have fledged or other appropriate protective measures to ensure no take of protected species occurs. The buffer shall be sufficient to ensure that the nesting birds are not disturbed by construction activities to the extent that they might abandon the next prematurely.

b., c. The project site does not contain creeks or riparian habitat. However, grasslands can support wetlands, such as seasonal swales. Based on the 2004 wetland delineation, the 40-acre project site contains 1.72 acres of jurisdictional Waters of the U.S. The jurisdictional wetlands include the seasonal pond in the northern portion of the project site and a seep/swale system located primarily in the northeast quadrant of the 40-acre site. None of the project features would encroach on these wetlands. The intersection improvement site is heavily disturbed, and is not expected to contain wetlands.

Although the jurisdictional wetlands would be avoided, they could be adversely affected by nearby activities, such as grading for construction, and vegetation maintenance. The following measures would ensure that jurisdictional wetlands are protected from fill or degradation. With these measures, this impact would be ***less than significant.*** Wetlands within pastures would not be adversely affected by grazing, so no restrictions on allowing horses in pastures are required.

Mitigation Measure

4(a) Prior to issuance of Improvement Plans or building permits, the project applicant shall provide to the Town confirmation from a qualified biologist that the 2004 wetland delineation within the areas to be disturbed and adjacent areas is accurate, and that no wetlands are present in the area where intersection improvements would occur. The wetland delineation for the area to be affected by the Proposed Project shall be updated if needed. (This provision may be met through the 404 permit process.) If an updated wetland delineation indicates that the Proposed Project would result in fill of jurisdictional wetlands, the project applicant shall carry out on-site replacement or off-site banking to mitigate for impacts to wetlands to ensure no net loss of wetlands, consistent with Loomis Municipal Code Section 13.58. Minimum replacement ratios shall be 1:1 for wetland habitat. If off-site mitigation is chosen, the project applicant shall provide written evidence that compensatory habitat has been established through the purchase of mitigation credits at an approved wetlands mitigation bank. The amount of money required to purchase these credits shall be equal to the amount necessary to replace wetland or habitat acreage and value, including compensation for temporal loss. Evidence of payment, which describes the amount and type of habitat purchased at the bank site, shall be provided to the Town prior to the issuance of grading permits.

(b) No grading or other disturbance shall occur and no structures shall be constructed, within 25 feet from the edge of jurisdictional wetlands, or a lesser amount determined to be adequately protective by a qualified biologist. During

construction, temporary fencing shall be placed around the wetlands that are in proximity to construction areas.

d. The Proposed Project would not impede the migration of wildlife. Depending on the species, any wildlife that travels through the project site could continue to do so, because the majority of the 40-acre site will be left undisturbed. Therefore, this impact would be ***less than significant***.

e. As stated above, 54 oak trees with a diameter of 6 inches or more at breast height were identified in the area to be developed by the Proposed Project. In addition, two oak trees are located in the area where the intersection improvement would occur. Chapter 13.54 of the Municipal Code for the Town of Loomis protects native oak trees with a diameter of six or more inches at dbh, defined as 54 inches above the ground. Blue oaks that have a diameter of 4 inches dbh are also protected, along with any other tree specifically identified by Town Council resolution. A tree permit must be obtained prior to removing, relocating, cutting-down or undertaking any other action that would destroy a protected tree. Dead and dying trees are exempted from the requirement for a tree permit. Section 13.54.050 provides standard procedures for the treatment of trees to be preserved. Trenching, cutting roots, irrigation, fencing, retaining walls, grading and other aspects of development that could harm trees are addressed.

As shown in Figure 2-4 in Chapter 2, project facilities, including the access road, water line, parking and structures, have been sited so that the oak trees need not be removed. However, portions of some elements of the project, such as the access road, would be located under the tree canopy, and therefore could disturb the critical root zone. Grading, excavation, compaction and application of materials (e.g., asphalt) in these areas could result in damage to the root zone, with an adverse effect on one or more protected oak trees. In addition, if final design requires that the planned facilities be shifted closer to one or more protected trees, those trees may need to be removed.

The potential loss of and/or damage to protected trees would be a ***less-than-significant*** impact with implementation of the following mitigation measure.

Mitigation Measure

5(a) *If the removal of one or more protected trees is required for project implementation, the project applicant shall implement one or a combination of the following measures:*

(i) pay an in lieu fee for removal of trees, as calculated according to the Town Tree Ordinance (Section 13.54 of the Municipal Code). The fee shall be paid at the time that Improvement Plans are approved.

Or

(ii) Prepare a Tree Planting and Maintenance Plan that provides for the planting of trees on site or at another location within the town where maintenance to ensure survival of the trees will be guaranteed. If trees are to be planted on site, they shall be located in easements that can be protected and reviewed annually for a period of five years.

Trees planted to meet the provisions of this measure shall be the same species

as the tree(s) that are removed. The selected method shall be adequate to ensure the long-term viability of new plantings at a level that meets or exceeds the level of tree removal, as measured at diameter at breast height.

(b) *All construction shall be conducted in accordance with Section 13.54.070 of the Municipal Code and the April 2017 Sierra Nevada Arborist report with respect to protected trees within 50 feet of any area to be disturbed by the Proposed Project.*

The above mitigation measure would ensure that the loss of oak trees, if any, due to project construction would be fully offset by the planting and monitoring of same species of trees that are removed at a level that would ensure that a comparable number of inches would be replaced.

The ordinance also regulates certain activities during construction in order to protect trees that are not being removed. A tree permit is required for trenching, grading, paving or otherwise disturbing exposed roots within a critical root zone. A utility and/or irrigation "Trenching-Pathway" plan must be submitted to the Town, showing accurately the proposed location for underground utility lines and the critical root zones (CRZ) of each protected tree within 50 feet of soil disturbance activity. The Trenching-Pathway plan must avoid the CRZs unless encroachment is unavoidable. In that case, a supplemental arborist report must be submitted, and any trenching within a CRZ must be done with hand tools, air spades or other acceptable methods. The 2017 arborist report also provides additional protective measures. These measures will ensure that trees within 50 feet of construction activities are not harmed by excavation or grading.

f. No adopted Habitat Conservation Plans, Natural Conservation Community Plans, or other approved local, regional, or state Habitat Conservation Plans have been adopted that cover the project site or immediate vicinity. Therefore, the Proposed Project would not conflict with such plans and there would be ***no impact.***

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
5.	**CULTURAL RESOURCES.** *Would the project:*				
a.	Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?	☐	■	☐	☐
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	☐	■	☐	☐
c.	Directly or indirectly destroy a unique paleontological resource or unique geologic feature?	☐	■	☐	☐
d.	Disturb any human remains, including those interred outside of formal cemeteries.	☐	■	☐	☐

Discussion

A Cultural Resources Assessment was prepared by Peak and Associates for the 60-acre Summerstone-Bertoni parcel, which included the 40-acre Poppy Ridge 2 project site (which, in turn, includes the Proposed Project) in November 2004.[27] In preparation for the assessment, a records search was performed at the North Central Information Center of the California Historical Resources Information System to identify cultural resources that had been reported in or near the project site. The sacred lands file was checked, but no sites were listed in the project site. Native Americans with knowledge of the area were contacted. A field inspection was conducted in October 2004 using 15-meter transects, and a test excavation was conducted at one site that appeared to have potential for historic archaeology. Five cultural resources were recorded and evaluated in 2004.

Previous surveys identified a prehistoric food processing loci and evidence of mining activity north of the project site, along Secret Ravine. However, the 2004 field survey found no evidence of prehistoric occupation or use of the project site.

In October 2017, Peak and Associates updated the 2004 study. A records check was performed, which found that no subsequent surveys of the project site had been conducted. A pedestrian field inspection was conducted. There was good soil visibility throughout the project site. Evidence of a recent fire was observed, and there was heavy ground squirrel activity, which provided for ample visual access to subsurface soils. The five historic resources were still present, although one, a cistern, had been repaired and altered since 2004. There was no evidence of other historic resources or prehistoric occupation or use of the project site.[28]

27 Peak & Associates, Inc., *Cultural Resources Assessment of the Proposed Summerstone-Bertoni Subdivision*, November 19, 2004.

28 Peak & Associates, Inc., *Cultural Resource Assessment of the Proposed Flying Change Farms Project*, October

The five cultural resources that were recorded during the original field survey and confirmed in the second survey are:

James #1: (P-31-006109) Two segments of a very small miners ditch. The ditch has washed out at a drainage, but a portion still exists for 165 feet west of the drainage and 100 feet to the east. The ditch is, on average, approximately three feet wide, and is shallow.[29]

James #2: (P-31-006110) A segment of a small miners ditch. Approximately 190 feet of this ditch survives within the project site, and extends offsite for an unknown distance. The ditch is approximately 10 inches deep and two feet wide, on average. It may be part of the ditch system recorded to the north of the project area, but the connection is not obvious.[30]

James #3: (P-31-006111) A rectangular excavation about three feet deep, lined with dressed granitic rock approximately 2.5 feet in width. The outer dimensions are approximately 17 feet by 15 feet, with a gap for a door. The feature could be the remains of a smoke house.[31]

During the 2004 study, this site was selected for further field work to determine if it had importance and significance in providing information on past historic period activities in the area. In May 2006, overgrown grass and weeds were removed from the interior and exterior of the rock-walled remnant. A metal detector was used to identify objects within the walls and across the mowed areas. Exposed metal objects were examined but not saved, because it was determined that none were of analytical use.[32]

Consultation with the property owners at the time indicated that the structure had been described as a spring house possibly dating to the late 1880s. The structural remnant was in poor condition, and the metal items found during the survey appeared to be discards when no longer of use or value.[33]

James #4: (P-31-006112) A square concrete foundation for a tank house. This feature consists of an eight-inch-wide curb, with dimensions of 12.5 by 12.5 feet. There are nine concrete footings in the form of squared blocks in the interior of the foundation. There is no sign of the superstructure for the tank house.[34]

James #5: (P-31-006113) Small farm headquarters complex, including a residence, garage,

31, 2017, page 11.

29 Peak & Associates, Inc., *Cultural Resource Assessment of the Proposed Flying Change Farms Project*, October 31, 2017, page 7.

30 Peak & Associates, Inc., *Cultural Resource Assessment of the Proposed Flying Change Farms Project*, October 31, 2017, page 8.

31 Peak & Associates, Inc., *Cultural Resource Assessment of the Proposed Flying Change Farms Project*, October 31, 2017, page 8.

32 Peak & Associates, Inc., *Cultural Resource Assessment of the Proposed Flying Change Farms Project*, October 31, 2017, page 8.

33 Peak & Associates, Inc., *Cultural Resource Assessment of the Proposed Flying Change Farms Project*, October 31, 2017, page 9.

34 Peak & Associates, Inc., *Cultural Resource Assessment of the Proposed Flying Change Farms Project*, October 31, 2017, page 9.

wood shed and barn. The residence is a Craftsman bungalow, with many additions and modifications. An original section appears to remain as a rectangular side-gabled (at a steep pitch), one-story frame structure with brick chimney. The two-thirds width front porch is covered by a cross gable that appears to be a later addition, designed to be consistent with the Craftsman style. Other additions include sky lights, aluminum framed windows, solar panels on the roof and stucco wall finish. The outbuildings are simple and utilitarian. The wood shed is small, with a gabled roof and flush board siding missing several boards. The barn is one-story, with four bays open on one long site, and a metal roof and siding. The garage is modern, with aluminum roof, siding and roll-up doors.[35]

Consistent with the 2004 report, the 2017 report concluded that none of the five recorded resources would be considered historically significant. No events of unusual historic significance have occurred on the project site, nor have there been historically significant persons associated with the site. The ditch remnants (James #1 and #2) could be related to historic mining, but are small sections disconnected from other mining features, and therefore lack the integrity needed to be considered eligible for the California Register of Historical Resources (CRHR). The residence is over 50 years of age, but does not have any unusual or characteristic architectural traits that would indicate historic significance. None of the five resources has the potential to return significant data through application of archaeological techniques. For these reasons, the Cultural Resource Assessment did not find that any of these resources met criteria for listing on the National Register of Historic Places (NRHP) or the CRHR.[36]

Cultural resources have been recorded near the project site. For example, surveys of the Croftwood project north of the project site found evidence of mining activity. A prehistoric food processing loci was discovered north of the project site, on the eastern bank of Secret Ravine.[37]

a., b.,
d. As discussed above, the Cultural Resource Assessments did not identify any significant historic or prehistoric resources within the project site. Of the five resources identified within the 40-acre site, only one, the foundation for the tank house (James #4), is in the area that would be disturbed by the Proposed Project. Because it is not eligible for listing on the CRHR or NHRP, the loss of this feature would not be a significant impact. The house and associated buildings (James #5) would be retained, although it should be noted that because they are not eligible for listing, their removal or alteration would not be considered a significant impact. The remaining resources, none of which is considered historically significant, are not in proximity to Proposed Project construction areas.

Although the Proposed Project would not affect any known historically significant resources, the potential exists for such resources to be located below the surface, where they would not have been discovered during the field surveys. The area where intersection improvements and pipeline installation would occur is heavily disturbed and does not contain any structures. However, subsurface cultural resources could be

35 Peak & Associates, Inc., *Cultural Resource Assessment of the Proposed Flying Change Farms Project*, October 31, 2017, page 10.
36 Peak & Associates, Inc., *Cultural Resource Assessment of the Proposed Flying Change Farms Project*, October 31, 2017, page 12.
37 Peak & Associates, Inc., *Cultural Resource Assessment of the Proposed Flying Change Farms Project*, October 31, 2017, page 7.

present. If such resources are present, they could be damaged during grading and/or excavation. This would be a significant impact.

The following mitigation measure would reduce this impact to a ***less-than-significant*** level by ensuring that buried cultural resources, if present, would be identified, protected and treated appropriately.

Mitigation Measure

6(a) *If any cultural resources, such as structural features, unusual amounts of bone or shell artifacts, or architectural remains, are encountered during any construction activities, the contractor shall implement measures deemed necessary and feasible to avoid or minimize significant effects on the cultural resources including the following:*

- *Suspend work within 100 feet of the find;*
- *Immediately notify the Town's Planning Director and coordinate any necessary investigation of the site with a qualified archaeologist as needed to assess the resources (i.e., whether it is a "historical resource" or a "unique archaeological resource");*
- *Provide management recommendations should the finding be historically significant or a unique archaeological resource Possible management recommendations for historical or unique archaeological resources could include resource avoidance or data recovery excavations, where avoidance is infeasible in light of project design or layout, or is unnecessary to avoid significant effects; and*
- *As warranted by any cultural resources found on site, prepare reports for resources identified as potentially eligible for listing in the California Register of Historical Resources in consultation with the State Historic Preservation Officer, and if applicable, tribal representatives.*

(b) *If human remains are discovered during any phase of construction, all ground-disturbing activity within 100 feet of the remains shall be halted immediately, and the Town's Planning Department and the County Coroner shall be notified immediately. If the remains are determined by the County Coroner to be Native American, the Native American Heritage Commission shall be notified within 24 hours to request the names of the most likely descendent(s), and Public Resources Code Section 5097.98 shall be adhered to in the treatment and disposition of the remains. The Planning Department staff shall be responsible for approval of recommended mitigation as it deems appropriate, taking account of the provisions of state law, as set forth in California Environmental Quality Act Guidelines, Section 15064.5(e), and Public Resources Code, Section 5097.98. The project applicant shall implement approved mitigation, to be verified by the Planning Department, before resuming ground-disturbing activities within 100 feet of where the remains were discovered.*

c. There are no known paleontological resources or unique geologic features on the project site. However, the project site is located on the Riverbank Formation geologic unit.[38]

38 California Department of Conservation, Division of Mines and Geology, *Open File Report 95-10, Geology, Plate*

Although the Riverbank Formation in the Loomis area has not been comprehensively surveyed for paleontological resources, construction activities in areas containing Riverbank Formation in the Sacramento area (e.g., during the construction of ARCO Arena) have yielded a number of important vertebrate animal fossils.[39] These fossils included ground sloth, bison, horse, camel, antelope or deer, and mammoth, which were found about 13 to 30 feet below the surface. Plant fossils have also been found. While all of the animals were widely distributed in North America during the Plio-Pleistocene, this discovery in the Riverbank Formation is important in that it is one of a small number of sites in northern California that helps expand scientific knowledge about the range of animals and the general paleoecology of the Sacramento Valley. This formation, which consists of alluvial materials (gravel, sand, and silt) derived from older granitic and volcanic rocks in the Sierra Nevada to the east, could contain substantial numbers or unique types of invertebrate (marine), plant, or vertebrate fossils or other resources of paleontological value.

In areas like the project site where the geologic formations are not exposed, paleontological resources would typically not be visible where the ground has not been disturbed. If present, such resources could be damaged or destroyed during site preparation, similar to archaeological resources, which would be a significant impact. Implementation of the following mitigation measure would reduce this impact to a ***less-than-significant*** level by ensuring that any paleontological resources encountered during construction would be treated appropriately.

Mitigation Measure

7. *The project applicant shall inform heavy equipment operators and workers involved with initial site development of the potential for paleontological resources to be present. Workers shall be instructed as to the indicators of paleontological remains.*

   If any evidence of fossils is discovered during excavation or grading, all work within 50 feet of the find shall be suspended, and the Town of Loomis shall be notified. The Town shall coordinate investigation of the site with a qualified paleontologist as needed to assess the resource and provide proper management recommendations, such as avoiding the resource and/or excavating and recording data on the resources. The contractor shall implement any measures deemed necessary for the protection of paleontological resources. All significant paleontological resources recovered shall be subject to scientific analysis and professional curation. A report of these activities shall be prepared for the Town by the paleontologist according to current professional standards.

1, 1995.

39 City of Lincoln, *Village 1 Specific Plan Draft Environmental Impact Report*, May 2012, page 4.5-12.

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
6.	**GEOLOGY AND SOILS.** *Would the project:*				
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?	☐	☐	☐	■
b.	Result in substantial soil erosion, or the loss of topsoil?	☐	☐	■	☐
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 spreading, subsidence, liquefaction or collapse?	☐	☐	■	☐
d.	Be located on expansive soils, as defined in Table 18-1-13 of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	■	☐	☐
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	■	☐	☐

Discussion

a.i. The Proposed Project is not located in an Alquist-Priolo Earthquake Fault Zone.[40] There are no known active faults in south Placer County, so there would be ***no impact*** from exposure of people or structures to ground rupture or seismic ground shaking.

a.ii-iii, c. The Town of Loomis is not in an area subject to severe seismic events. The fault system nearest to Loomis is the Foothill Fault System, which traverses Amador, El Dorado and Placer counties for over 200 miles. Two segments of this system are relatively close to Loomis—the Bear Mountain Fault Zone (Spencerville Fault) between Folsom and Auburn, and the Melones Fault Zone, about 15 miles to the east. These faults have not ruptured in the last 200 years, but are considered potentially active.[41]

The active fault nearest to the project site is the Dunnigan Hills fault, approximately 40 miles to the northwest.[42]

The maximum anticipated probable groundshaking in Loomis would be VI on the Modified Mercalli Scale.[43] Typical effects from this level of groundshaking would be cracked chimneys, moved furniture and broken glassware inside structures. Structural damage would be minimal for buildings constructed according to Building Code standards.

Other potential hazards associated with seismic events include liquefaction, subsidence, lurch cracking and lateral spreading.

Due to the presence of active and potentially active faults, all areas within the state are exposed to some degree of seismic ground-shaking and associated seismic hazards, such as liquefaction. Although the Central Valley is generally considered less seismically active than other areas of California, the project site is nevertheless susceptible to seismic ground-shaking due to earthquakes on faults associated with the Foothills/Bear Mountains System, Coast Range-Sierran block boundary, San Andreas, and others.

The Proposed Project would not construct buildings used for long-term human occupation (e.g., residences, offices), and most boarders would be onsite for short periods of time (and often outside). The design and construction of the Proposed Project would comply with the Town's Construction Codes (Chapter 11.04 of the Loomis Municipal Code), which incorporate the International Building Code, as amended. The IBC, which is used widely throughout the U.S., has been modified for California conditions with numerous more detailed and/or stringent regulations. Specific minimum seismic safety requirements are set forth in Chapter 16 of the IBC. Prior to construction of structures, the IBC requires that geotechnical investigations be conducted to determine the site-specific soil conditions that could possibly constrain building designs, such as soils susceptible to liquefaction or landslides. In addition, the State earthquake protection law (California Health and Safety Code 191000 et seq.) requires that buildings

40 California Department of Conservation, CGIS Information Warehouse: Regulatory Maps, accessed via internet, http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps, January 26, 2018.
41 Town of Loomis, *Town of Loomis General Plan*, July 2001, page 124.
42 Town of Loomis, *Town of Loomis General Plan*, July 2001, page 124.
43 Town of Loomis, *Town of Loomis General Plan*, July 2001, page 125.

be designed to resist stresses produced by lateral forces caused by earthquakes. Earthquake-resistant design and materials are required to meet or exceed the current seismic engineering standards of the California Building Code Seismic Zone 3 improvements. For these reasons, the Proposed Project would not result in a substantial risk of exposure to injury, loss or death due to ground failure and ground shaking, and this would be a ***less-than-significant impact***.

a.iv. Earthquake-induced landslides on steep slopes can occur in either bedrock or unconsolidated deposits. The project site does not have any steep slopes, so development on the site would not result in exposure of people or structures to landslides. Therefore, there would be ***no impact***.

b. There is a potential for grading and construction activities to increase erosion. Because the project site is larger than one acre, the project applicant would be required to apply for and comply with the General Construction Activity Stormwater Permit. Permit applicants are required to prepare and retain at the construction site a stormwater pollution prevention plan (SWPPP) that includes erosion-control measures. The SWPPP would address project construction and would specify control measures and Best Management Practices (BMPs) designed to minimize erosion during construction.

Because the Proposed Project would disturb over 50 cubic yards of soil, a grading permit would be required, as set forth in Chapter 12.04 of the Municipal Code. Section 12.04.580 provides specifications for grading and long term erosion and sediment control, including limitation of grading operations during the rainy season, installation of vegetation and structures for erosion control, and control of runoff.

In addition, the Proposed Project has identified measures that will be used to protect stormwater quality, including a 125-foot setback and buffer from the nearest creek and use of silt fence, bio-filter bags and/or fiber rolls along the perimeter of the project site and below the tow or down slope of exposed or erodible slopes[44]. These measures would prevent erosive materials from the project site from entering drainages.

Compliance with the SWPPP and Chapter 12.04 of the Municipal Code, and implementation of project water quality measures would ensure that substantial erosion and/or loss of topsoil would not occur during project construction or operation. Therefore, this impact would be ***less than significant***.

d. Soils on the project site are predominately Andregg coarse sandy loam, 2 to 9 percent slopes, and the entire area that would be developed is composed of these soils.[45] Andregg soil types are moderately deep, gently rolling well-drained soils underlain by weathered granitic bedrock. These soils can pose constraints to development. The primary limitation is due to slopes. This soil type exhibits moderately rapid permeability, medium surface runoff, and moderate erosion hazard, although exposed soils erode rapidly. This soil type does not exhibit expansive characteristics. If proper site preparation construction techniques are not used, buildings, the driveway and parking area, and pipelines could be subject to settling and other damage, which would be a significant impact. This would be a ***less-than-significant impact*** with incorporation of the following mitigation measure, which would ensure that appropriate measures to

44 Casey Feickert, TSD Engineering, Inc., *Preliminary Drainage & Stormwater Quality Report*, March 13, 2018, page 2.

45 Natural Resources Conservation Service, Web Soil Survey, National Cooperative Soil Survey, January 28, 2018.

address site constraints are incorporated into project design and construction.

Mitigation Measure

8. *Prior to approval of Improvement Plans, a geotechnical report shall be prepared to characterize the soils and geologic constraints of the project site. The recommendations of the geotechnical report shall be incorporated into the design and construction of buildings, roads, parking areas and pipelines.*

e. The Proposed Project would add a single restroom, and a new leach field would be used for the restroom. The septic system and leach field would be retained for separate use by the existing residence. Depending on design, capacity and operation, septic systems can release contaminants into the surrounding soil and groundwater. In addition, the septic system's leach field could be compromised by activities in the leach field area. The potential release of contaminants from the septic system would be a significant impact. The following measure would ensure that the septic systems would not result in soil or groundwater contamination, and that the leach filed would be protected.

Mitigation Measure

9*(a)* *Prior to approval of Improvement Plans, the project applicant shall provide documentation demonstrating that the project septic system and leach field have capacity to accept the flows from the new restroom, and will comply with Placer County Sewage Ordinance, Article 8.24.*

(b) *The leach field shall be protected so that no activities, including horses grazing or being ridden, occur over the leach field.*

Placer County Department of Health and Human Services, Division of Environmental Health regulates septic systems in the county. Placer County has extensive requirements for the design and construction of septic systems[46], which are intended to protect groundwater, soils, the environment and human health. Compliance with County regulations and the above mitigation measure would protect water quality and human health, so use of septic systems would be a ***less-than-significant impact***.

46 Placer County, Placer County Code, Article 8.24.

Issues	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
7. GREENHOUSE GAS EMISSIONS. Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	■	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	■	☐

Discussion

Gases that trap heat in the atmosphere are called green house gasses (GHGs). The main concern with GHGs is that increases in GHG concentrations in the Earth's atmosphere is causing global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature.

The principal GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different Global Warming Potentials (GWPs) and CO_2 is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO_2 equivalents (CO_2e). For example, SF_6 is a GHG commonly used in the utility industry as an insulating gas in circuit breakers and other electronic equipment. SF_6, while comprising a small fraction of the total GHGs emitted annually world-wide, is a very potent GHG with 22,800 times the GWP as CO_2. Therefore, an emission of one metric ton (MT) of SF_6 could be reported as an emission of 22,800 MT of CO_2e (MT CO_2e).[47] Large emission sources are reported in million metric tons (MMT) of CO_2e.[48]

Global warming can affect California by reducing snow pack, and increasing sea level rise, the number of extreme heat days per year, high ozone days, wildfires, and drought years. Globally, climate change has the potential to affect numerous environmental resources through changes related to future air and ocean temperatures and precipitation patterns. The anticipated effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects[49]:

- Higher maximum temperatures and more hot days over nearly all land areas;

47 Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)], 2007.

48 A metric ton is 1,000 kilograms; it is equal to approximately 1.1 U.S. tons and approximately 2,204.6 pounds.

49 Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2001: Working Group I: The Scientific Basis*, 2001.

- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, ocean acidification, impacts on agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term could be great.

California produced 459 gross MMTCO$_2$e in 2012.[50] This is an increase from levels between 2009 and 2011 (458.44, 453.06, and 450.94 MMTCO$_2$e respectively) but a decrease from levels between 2000 and 2008 when emissions ranged from a low of 466.32 in 2000 to a high of 492.86 in 2004.[51] Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2012, accounting for 36 percent of total GHG emissions in the state.[52] This sector was followed by the electric power sector (including both in-state and out-of-state sources) (21 percent) and the industrial sector (19 percent).[53]

a.,b. The Proposed Project would generate GHG emissions from the construction and operation of the equestrian facility. Construction sources of GHGs associated with the Proposed Project would consist of mobile sources from onsite construction equipment, haul trucks, and delivery and worker vehicle trips. Once operational, GHGs would be generated primarily by vehicle trips to and from the facility, electrical use, and the horses themselves.

The PCAPCD has adopted a threshold of 1,100 MT CO$_2$e/year as a De Minimis level of GHG emissions. Projects that generate less than 1,100 MT CO2e/year are excluded from GHG impact analysis, because GHG emissions below this level would not contribute considerably to GHG levels.[54] PCAPCD also identifies projects that would be expected to fall below the De Minimis level, including single-family residential projects of fewer than 71 dwelling units.[55] Vehicle emissions are usually the largest single source of GHG for a typical residential subdivision. As discussed in Item 16, Traffic/Transportation, the Proposed Project would generate 139 vehicle trips per day, which is equivalent to approximately 15 single-family dwelling units. The Proposed Project would not increase the number of residences on the project site, so house-related GHG emissions would not change. There would be some electrical use,

50 California Air Resources Board, *California Greenhouse Gas Inventory for 2000-2012 — by Category as Defined in the 2008 Scoping Plan*, March 24, 2014.
51 California Air Resources Board, *California Greenhouse Gas Inventory for 2000-2012 — by Category as Defined in the 2008 Scoping Plan*, March 24, 2014.
52 California Air Resources Board, *California Greenhouse Gas Inventory for 2000-2012 — by Category as Defined in the 2008 Scoping Plan*, March 24, 2014.
53 California Air Resources Board, *California Greenhouse Gas Inventory for 2000-2012 — by Category as Defined in the 2008 Scoping Plan*, March 24, 2014.
54 PCAPCD, *CEQA Handbook*, August 2017, page 24.
55 PCAPCD, *CEQA Handbook*, August 2017, Table 2-6.

primarily for lighting of the restroom, barn and arena, but this would be limited because most activities would occur during the day. One source of GHG under the Proposed Project that would not occur with a typical residential development is methane produced by the horses. Methane is a particularly potent GHG, 25 times greater than CO. A typical horse is estimated to generate approximately 45.5 lbs/year of methane[56], so 55 horses would generate approximately 2,502.5 lbs/year of methane or approximately 28.4 MT CO_2e. Given that the Proposed Project would generate far less traffic than a 71-dwelling unit project, and that the GHG emissions from project electrical use and the horses to be housed on the project site would be minimal, the combined annual GHG emissions attributable to the Proposed Project would be well below 1,100 MT CO_2e De Minimis level. Therefore, this impact would be ***less than significant.***

56 Christa Lesté-Lasserre, *Does Horses' Waste Help or Hinder the Environment*, in the Horse, Your Guide to Equine Health Care, July 25, 2013, page 2.

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
8.	**HAZARDS AND HAZARDOUS MATERIALS.** *Would the project:*				
	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?	☐	☐	■	☐
	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 in 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?	☐	☐	☐	■

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
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?	☐	■	☐	☐

Discussion

a., b. Implementation of the Proposed Project would involve construction of several buildings and facilities, including a paved driveway and parking. Construction would require site preparation activities, such as excavation and grading at the project site. During construction, oil, diesel fuel, gasoline, hydraulic fluid, and other liquid hazardous materials would be used. If spilled, these substances could pose a risk to the environment or human health.

Once constructed, the Proposed Project would use some hazardous materials, primarily for landscaping. The barn would have an Automatic Fly Control System, which would provide timed release of fly repellent. Most fly repellents for horses are based on pyrethrins or synthetic pyrethroid compounds.[57] These compounds can be toxic if inhaled in high doses[58], which would not occur with an automatic fly spray system, and are considered to be of low chronic toxicity for humans and other mammals.[59] The fly spray would be confined to the barn, and not expected to travel to adjacent properties. Furthermore, pyrethrins are inactivated and decomposed by exposure to light and air, so any spray that migrated outside of the barn would break down. For these reasons, the use of fly spray would not pose a risk to the public.

The design and construction of the Proposed Project would comply with the Town's Construction Codes (Chapter 11.04 of the Loomis Municipal Code), which incorporates the International Building Code, as amended, and the 2016 California Fire Code (CFC), as amended. Other laws and regulations that govern the use and storage of hazardous materials include, but are not limited to, Chapter 6.95 of the California Health and Safety Code (inventory and emergency response), Title 8 of the Code of California Regulations (CCR) (workplace safety), and Titles 22 and 26 of the CCR (hazardous waste). Delivery of hazardous materials to the site and along public roadways would be required to comply with Title 49 of the Federal Code of Federal Regulations (CFR), as monitored and enforced by the California Highway Patrol (CHP) and California Department of Transportation (Caltrans). Storage of all flammable materials at construction sites would

57 Karen Briggs, *Fly Protection Uncovered,* published in the Horse, September 17, 2001, page 1.
58 Pesticide Information Project, Extension Toxicology Network, *Pyrethrins*, March 1994, page 2.
59 Bond, C.; Buhl, K.; Stone, D. 2014. *Pyrethrins General Fact Sheet*; National Pesticide Information Center, Oregon State University Extension Services. http://npic.orst.edu/factsheets/pyrethrins.html, November 2014.

be subject to the regulations of Title 19 of the CCR and the Uniform Fire Code. In addition, as discussed in Item 9(a)(c)(f), the contractor would have to prepare a Stormwater Pollution Prevention Plan (SWPPP), which would ensure that soil and contaminants do not enter surface waters. Assuming compliance with these regulations, potential exposure of people or the environment to hazardous materials associated with the Proposed Project would be a ***less-than-significant impact***.

c. No schools are located within ¼ mile of the project site. Therefore, there would be ***no impact.***

d. No properties in the vicinity of the project site are on the Cortese List. An Environmental Research Report was prepared for the project site in April 2005. To prepare the report, federal, State and regional databases were searched for records of hazards on or within a mile of the project site. In a recent database search, the closest site records were for properties located over 2,000 feet from the project site, both of which had been cleaned up.[60]

The Environmental Research Report found that the project site was not identified as generating hazardous wastes or having posted violations for hazardous materials use. The only site record was for a 500-gallon waste-oil storage tank, located on the project site adjacent to the existing house.[61] According to the then property owner, the tank was used for diesel fuel, was last filled in 1979, and was removed in the mid-1980s.[62] Nonetheless, if the tank had leaked, groundwater and soils in the vicinity of the tank could be contaminated. As shown in Figure 2-4 in Chapter 2, no construction is planned in the vicinity of the existing house. The nearest facility would be the outdoor dressage court, which would require grading, but not excavation, to construct. Therefore, the Proposed Project is not expected to encounter soils or groundwater that could have been contaminated by the fuel tank.

Although no contaminated sites are listed in State or federal databases, prior activities at the project site, including the waste oil tank, could have released hazardous materials into the soil. If present, such contamination could appear as darkened soil, or abandoned containers. Exposure to contaminated soils, if present, could harm construction workers, which would be a significant impact. Implementation of the following mitigation measure would reduce the potential risk of exposure to a ***less-than-significant*** level by ensuring that contaminated groundwater or soils, if present, are identified and remediated promptly.

Mitigation Measure

10. *In the event previously unidentified hazardous materials contamination is discovered or believed to be present, work shall stop immediately and the site shall be investigated by a qualified professional. If contaminated, the area shall be remediated by a qualified professional, in consultation with Placer County*

60 California Department of Toxic Substances Control, *Enviorstor,* James Drive, Loomis, CA, accessed via internet at http://www.envirostor.dtsc.ca.gov/?surl=vot5m, January 15, 2018.
61 DCI Services, *Environmental Research Report, Vacant Land, 5145 James Drive,* April 5, 2005, page 7.
62 Jim Bertoni, former property owner, personal communication, December 1, 2005.

Environmental Health Division, the Regional Water Quality Control Board and/or the California Department of Toxics Substances Control, as appropriate. Work shall not resume until potential hazards have been identified and managed.

e,f. No airports are located in the Town of Loomis. The nearest airports are in Lincoln and Auburn. The project site is not located in an airport land use plan or in the vicinity of a private airstrip. Therefore, there would be ***no impact*** from aircraft.

g. Access to the project site would be from James Drive, an existing road. The road would be widened to accommodate increased traffic and horse trailers. No barriers or other impediments to emergency response would be constructed. Therefore, there would be ***no impact***.

h. Within Placer County, the most severe wildfire risks occur east of Auburn. Western Placer County, including the Town of Loomis, is not defined as a very high fire hazard area by CalFire.[63] Nonetheless, wildfires can occur within the grasslands, oak woodlands and riparian areas of the county. The project site is composed of grasslands and oak woodlands, so there is some risk of wildfire, and there is still evidence of a fire in the northern portion of the project site. However, the risk of a severe wildfire is low on the project site, because it is located in a community that is largely developed, particularly to the west and north.

As discussed in Item 14a, below, the South Placer Fire Department (SPFD), which maintains a station within 3.8 miles of the project site, will continue to provide service to the project site. The SPFD provided an initial assessment of the Proposed Project, and provided several recommendations, including:

- Specifications for posting and design of the address to ensure that is visible from the roadway fronting the project access;
- Specifications for entry gates;
- Prohibiting parking on fire lanes and posting notices stating “No Parking Fire Lane”;
- Paving specifications;
- Access road widths and vertical clearance;
- Placement of fire extinguishers; and
- Fire flow requirements.

The Proposed Project would not substantially increase the risk of fire on the project site. Approximately 1.84 acres of grassland would be replaced by buildings, arenas and paddocks with non-vegetative footing, and paved areas, reducing the fuel load for wildfire. The Proposed Project would not use propane, natural gas or other fuels. Hay bales can ignite if baled and/or stored improperly, but usually only within the first six weeks of baling[64], so it is more likely to occur before being sold to a horse stable.

63 California Department of Forestry and Fire Protection, Fire Resource Assessment Program, *Fire Hazard Severity Zones in SRA*, Placer County, November 7, 2007; California Department of Forestry and Fire Protection, Fire Resource Assessment Program, *Draft Fire Hazard Severity Zones in LRA*, Placer County, November 24, 2008.

64 University of Tennessee Agricultural Extension Service, Agricultural Engineering Department, *Hay Fires: Prevention and Control*, October 1988.

Standard horse-keeping practices would minimize the risk of fire. For example, as shown in Figure 2-4 in Chapter 2, hay storage would be separated from the barn and other facilities and activities. In addition, smoking is typically not allowed in proximity to stables. Nonetheless, the increase in activity on the project site would increase the potential for wildland fires, which is considered a significant impact. Implementation of the following mitigation measure would ensure that appropriate steps are taken to minimize the risk of fire, reducing the impact to a ***less-than-significant level***.

Mitigation Measure

11. *In order to minimize the potential for wildland or structure fires, and to ensure that the fire department can respond quickly and effectively to any onsite fires, the site plan shall be reviewed by the South Placer Fire Department, and all measures recommended by the SPFD shall be implemented.*

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
9.	**HYDROLOGY AND WATER QUALITY** *Would the project:*				
	a. Violate any water quality standards or waste discharge requirements?	☐	■	☐	☐
	b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., 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 of a 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 water quality?	☐	■	☐	☐
	g. Place housing within a 100-year flood hazard area, as mapped on a	☐	☐	☐	■

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
	federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
h.	Place within a 100-year floodplain 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?	☐	☐	☐	■
j.	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	■

Discussion

The approximately 11-acre portion of the project site that would be developed drains from south to north. Stormwater runoff sheet-flows across natural open space and low-lying areas. There are two main drainage shed areas in the area to be developed.[65]

Surface water quality is regulated by Section 303 of the federal Clean Water Act, through the National Pollutant Discharge Elimination System (NPDES) program. In the State of California, the NPDES program is implemented by each Regional Water Quality Control Board (RWQCB); the Central Valley RWQCB covers the Town of Loomis. The NPDES program is applicable to all discharges to waters of the United States, including stormwater discharges associated with municipal drainage systems, construction activities, industrial operations, and "point sources" (such as wastewater treatment plant discharges and other direct discharges to water bodies). In April 2003, the SWRCB adopted an NPDES Phase II General Permit for the Discharge of Storm Water from small municipal separate storm sewer systems (MS4s) to provide NPDES permit coverage to municipalities that were not covered under the NPDES Phase I Rule for municipalities serving more than 100,000 people. The Town is a regulated Small MS4 under the State's NPDES permit, and is subject to the provisions of the NPDES Phase II General Permit. Under this permit, stormwater discharges must not cause or contribute to a violation of water quality standards contained in a Statewide Water Quality Control Plan, the California Toxics Rule, or the applicable RWQCB Basin Plan. For the Town, the applicable basin plan is the Water Quality Control Plan for the Sacramento River and the San Joaquin River Basins. The Basin Plan establishes water quality objectives and implementation programs to meet stated objectives and to protect the beneficial uses of water in the basin, in compliance with the federal Clean Water Act and the state Porter-Cologne Water Quality Control Act.

65 Casey Feickert, PE, TSD Engineering, Inc., *Preliminary Drainage & Stormwater Quality Report*, March 13, 2018, page 2.

To facilitate compliance with the MS4 permit, the *West Placer Storm Water Quality Design Manual* was prepared collaboratively by Placer County, the Town of Loomis, the City of Lincoln, the City of Auburn and the City of Roseville, all of which have lands within the boundaries of the MS4 permit. The Manual applies to development and redevelopment projects approved after July 1, 2015, and provides a consistent approach to addressing stormwater management within the West Placer region. The Manual is intended, among other things, to minimize the adverse affects of storm water runoff on water quality, minimize the percentage of impervious surfaces on land development projects, preserve the overall pre-development water balance, and guide proper selection, design and maintenance of storm water BMPs to address pollutants generated by land development.[66] The Manual provides specific guidance on the development of a Storm Water Quality Plan (SWQP) for post-project conditions, and provides a template for the SWQP.

a.,c., d.,
e.,f. Construction

Construction of the Proposed Project would involve earth-disturbing and building activities that could result in the discharge of sediment or other pollutants (e.g., petroleum products or building materials such as paints and cement) to Secret Ravine via runoff from the construction site. Because activities associated with project development would disturb more than one acre of land, the applicant would be required to obtain and comply with the State General Construction Activity Stormwater Permit. The General Permit is intended to ensure compliance with state water quality objectives and water protection laws and regulations, including those related to waste discharges. General Permit applicants are required to prepare a stormwater pollution prevention plan (SWPPP) and retain it at the construction site. The stormwater quality management program addresses project construction and specifies control measures and BMPs designed to minimize sedimentation and release of products used during construction into local swales and the pond, and ultimately, to Secret Ravine. The SWPPP must include the following elements:

1. Identify pollutant sources, including sources of sediment, which may affect the quality of stormwater discharges from the construction site.
2. Identify non-stormwater discharges.
3. Identify, construct, implement in accordance with a time schedule, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction.
4. Identify, construct, implement in accordance with a time schedule, and assign maintenance responsibilities for post-construction BMPs to be installed during construction that are intended to reduce or eliminate pollutants after construction is completed.

Typical BMPs can include scheduling or limiting activities to certain times of year,

66 Placer County, City of Roseville, City of Lincoln, Town of Loomis, City of Auburn, *West Placer Storm Water Quality Design Manual*, April 2016, page 1-2.

implementing dust control measures, stabilizing cut and fill slopes as soon as possible, using mulch and compost blankets, riprap, and sediment retention structures to control sediment, vegetated buffers, fiber rolls and berms, and straw or hay bales.

As discussed in Item 6b, project construction must also comply with the Town's Grading, Erosion and Sediment Control Ordinance (Chapter 12.04 of the Municipal Code), which requires preparation of an erosion and sediment control plan that complies with the Town's stormwater management plan and the California Stormwater Quality Association Stormwater Best Management Practice Handbook. The Town's Grading Ordinance specifies that the erosion and sediment control plan prevent discharge through all stages of project construction and that the plan include measures to ensure permanent site stabilization. The Grading Ordinance also requires that all construction equipment and maintenance and construction materials storage areas be located within designated areas protected with a berm to contain any loose materials, and all that disturbed areas be protected through revegetation or a protective cover.

A Preliminary Drainage and Storm Water Quality Report has been prepared for the Proposed Project, and includes a Stormwater Quality Plan as required under the MS4 permit. The Report identifies BMPs that would be used during construction, including sediment controls, paving and grading measures, and waste management.[67]

Compliance with the Town's Grading Ordinance and the General Construction permit, including preparation of a SWPPP approved by the RWQCB would reduce potential impacts on water quality due to construction activities to a ***less-than-significant level*** by ensuring that all appropriate and necessary BMPs are implemented to avoid or minimize the discharge of pollutants and sediment to surface water.

Operation

The Proposed Project would result in approximately 1.84 acres of new impervious surfaces. This will result in an increase in stormwater runoff, which could alter downstream flood conditions, which would be a significant impact. Furthermore, urban contaminants could be released into surface waters, which would be a significant impact on water quality.

The Preliminary Drainage and Stormwater Quality Report for the project states that stormwater would be collected from roof drains in trenches, which would drain to an approximately 4,400 square foot bioretention area. The bioretention areas would provide water quality treatment and hydromodification. According to the Preliminary Report, these measures would be sufficient to capture and treat the runoff from the project's new impervious surfaces.[68] No underground drainage system would be installed. The project site will continue to discharge stormwater to Secret Ravine, and

67 Casey Feickert, PE, TSD Engineering, Inc., *Preliminary Drainage & Stormwater Quality Report*, March 13, 2018, page 3.

68 Casey Feickert, PE, TSD Engineering, Inc., *Preliminary Drainage & Stormwater Quality Report*, March 13, 2018, page 2.

ultimately into the American River.[69]

The Preliminary Drainage and Stormwater Quality Report identifies a number of measures that will be used to protect stormwater quality, including:

- A 125-foot setback and buffer from the nearest creek;
- Permeable pavement in the parking area,
- The following best management practices (BMPs):
    - To prevent accidental spills or leaks, materials will be stored indoors away from storm drains or sensitive areas.
    - For parking/storage areas and maintenance, trash receptacles will be provided, "No Litter" signs posted and surface sweeping shall be conducted regularly.
    - Indoor and structural pest control: Federal, State and local laws and regulations for the use, storage and disposal of pesticides shall be followed.
    - Landscape/outdoor pesticide use: Federal, State and local laws and regulations for the use, storage and disposal of pesticides shall be followed.
    - Outdoor storage of equipment or materials: Limit exposure to rainfall whenever possible
    - Building and grounds maintenance: Encourage proper lawn management and landscaping.[70]

The Report identifies the following BMP's that would be used to protect water quality during construction:

A. SEDIMENT CONTROL

1. Implement the use of silt fence, bio-filter bags, and/or fiber rolls along the perimeter of the project and below the toe or down slope of exposed and erodible slopes. (SE-1, SE-5, and SE-14 of the CASQA Stormwater BMP Handbook).

2. This project will implement the use of porous paving for the ±8,465-SF parking lot.

B. PAVING & GRINDING OPERATIONS (CASQA Stormwater BMP Handbook NS-3)

1. For paving involving asphaltic cement concrete, do not allow sand or gravel placed over new asphalt to wash into storm drains, streets, or creeks. Vacuum or sweep loose sand and gravel and properly dispose of this waste by referring to WM-5, Solid Waste Management.

69 Casey Feickert, PE, TSD Engineering, Inc., *Preliminary Drainage & Stormwater Quality Report*, March 13, 2018, page 2.

70 Casey Feickert, PE, TSD Engineering, Inc., *Preliminary Drainage & Stormwater Quality Report*, March 13, 2018, page 2.

2. Leaks and spills from paving equipment can contain toxic levels of heavy metals and oil and grease. Place drip pans or absorbent materials under paving equipment when not in use. Clean up spills with absorbent materials and dispose of in accordance with the applicable regulations. See NS-10, Vehicle and Equipment Maintenance, WM-4, Spill Prevention and Control, and WM-10, Liquid Waste Management.

3. Substances used to coat asphalt transport trucks and asphalt spreading equipment should not contain soap and should be non-foaming and non-toxic.

4. Paving equipment parked onsite should be parked over plastic to prevent soil contamination.

5. Clean asphalt coated equipment offsite whenever possible. When cleaning dry, hardened asphalt from equipment, manage hardened asphalt debris as described in WM-5, Solid Waste Management. Any cleaning onsite should follow NS-8, Vehicle and Equipment Cleaning.

C. WASTE MANAGEMENT

The following steps will help keep a clean site and reduce storm water pollution (CASQA Stormwater BMP Handbook WM-5, WM-9):

1. Select designated waste collection areas onsite. Inspect dumpsters for leaks and repair any dumpster that is not watertight. Locate containers in a covered area or in a secondary containment. Provide an adequate number of containers with lids or covers that can be placed over the container to keep rain out or to prevent loss of wastes when it is windy.

2. Collect site trash daily, especially during rainy and windy conditions. Remove this solid waste promptly since erosion and sediment control devices tend to collect litter. Make sure that toxic liquid wastes (used oils, solvents, and paints) and chemicals (acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for construction debris. Do not hose out dumpsters on the construction site. Leave dumpster cleaning to the trash hauling contractor. Arrange for regular waste collection before containers overflow.

3. Clean up immediately if a container does spill. Make sure that construction waste is collected, removed, and disposed of only at authorized disposal areas.

4. Proper sanitary and septic waste management prevent the discharge of pollutants to stormwater from sanitary and septic waste by providing convenient, well-maintained facilities, and arranging for regular service and disposal.

The Preliminary Report also includes a Post-Construction Storm Water Quality Plan (SWQP), based on the template provided in the *West Placer Storm Water Quality Design Manual,* which includes calculations for project runoff and the reductions in runoff that would be achieved by the water quality measures.

The following mitigation measure would further ensure that the measures that are ultimately implemented are adequate to offset project increases in runoff and to protect water quality. With mitigation, this impact would be ***less than significant***.

Mitigation Measure

12. (a) *Prior to approval of Improvement Plans, the Town Engineer shall confirm that proposed on-site features will provide enough detention to reduce project-generated peak flows to pre-development levels for the 2-year 10-year and 100-year storm event. The selected features and the final Drainage and Stormwater Quality Report and SWQP shall be consistent with the West Placer Stormwater Quality Design Manual.*

(b) *The project applicant shall incorporate Best Management Practices (BMPs) to control erosion and sedimentation during grading and installation of infrastructure, during all construction activities, and during project operation. The final drainage report (prepared consistent with Town requirements, including Chapter 12.04 of the Municipal Code, and the Placer County Storm Drainage Manual) shall include descriptions and/or plan drawings demonstrating the use of BMPs. BMPs for this project shall include the following measures, and/or equally effective measures as determined appropriate and as approved by the Town of Loomis:*

i. An Erosion and Sediment Control Plan shall be submitted for review and approval to the Town of Loomis prior to the issuance of any grading permits. The plan shall comply with Town standards and must be implemented for any construction to take place between October 15 and May 15 of any 12-month period. This plan may be included as a subsection of the Construction Emission/Dust Control Plan required by PCAPCD.

ii. Grading activities shall be timed to minimize the amount of exposed areas during the wet season. By mid-October, all areas that have been graded and that will remain undeveloped during the rainy season shall be revegetated with compatible native vegetation and secured from the possibility of erosion.

iii. Streets adjacent to each construction and demolition site shall be kept clean of project dirt, mud, materials, and debris during the construction and demolition periods.

iv. The final landscaping and irrigation plans shall include landscaping treatment for any cut and fill banks to minimize soil erosion in these areas. Landscaping materials shall include drought-tolerant ground cover as well as a variety of trees and shrubs.

v. Infrastructure shall be designed to minimize drainage concentration from impervious surfaces.

b. Water for the Proposed Project would be provided by Placer County Water Agency (PCWA), which purveys surface water for domestic use. Therefore, the Proposed Project would not rely on groundwater. Although the Proposed Project would increase impervious surface slightly, which could reduce recharge, the project site is not an important recharge area. Therefore, the Proposed Project would not adversely affect

groundwater supplies or aquifer characteristics, and the impact would be ***less than significant***.

g-i. The Proposed Project is not located within the 100-year floodplain. Therefore, there would be ***no impact.***

j. Due to the flat topography in the project site, there is little or no possibility of a mudslide. A seiche is a periodic oscillation of a body of water typically brought about by an earthquake) that results in flooding. There are no large water bodies near the project site that could be subject to a seiche. The project site is not located in an area in which a tsunami or mudflow could directly or indirectly affect project site development. For these reasons, ***no impact*** would occur.

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
10.	**LAND USE AND PLANNING.** *Would the project:*				
	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?	☐	☐	☐	■
	c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	■

Discussion

a. The project site is located near the Loomis/Rocklin border, in an area that is presently not developed, so it would not divide an established community. The Proposed Project would not construct any buildings or roadways that would interrupt existing circulation or access. For these reasons, ***no impact*** would occur.

b. The project site is designated and zoned Residential Estate, which allows for development of equestrian facilities. The Proposed Project would not alter the land use designation or zoning. No inconsistencies with General Plan or its policies have been identified. For these reasons, ***no impact*** would occur.

c. There are no habitat conservation plans or natural community conservation plans within or adjacent to the project site. Therefore, there would be ***no impact***.

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
11.	**MINERAL RESOURCES.** *Would the project:*				
a.	Result in the loss of availability of a known mineral resource 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?	☐	☐	☐	■

Discussion

a. Tailings from mines and quarries are located in some areas of Loomis, particularly along Secret Ravine and Antelope Creek. However, these tailings are not suitable for construction use, due to their age.[71]

The project site is not known to contain mineral or other natural resources. No tailings have been reported on the project site. The project site is not located within a Mineral Resource Zone, as defined by the California Geological Survey.[72] Therefore, the Proposed Project would not result in the loss of availability of a known mineral resource and ***no impact*** would occur.

b. The County General Plan does not identify locally-important mineral resource recovery sites.[73] Therefore, ***no impact*** would occur.

71 Town of Loomis, *Taylor Road Mixed-Use Project*, *Initial Study/Mitigated Negative Declaration*, May 2005, page 3-56.
72 California Department of Mines and Geology, Mineral Land Classification of Placer County, California. DMG, Open File Report 95-10, Plate 5 (Areas Classified MRZ-2a and MRZ-2b for all minerals), 1995.
73 Placer County, *Placer County General Plan*, May 21, 2013, page 38.

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
12.	**NOISE.** *Would the project result in:*				
	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 groundborne vibration or groundborne 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?	☐	☐	☐	■

Discussion

a., c. The Loomis General Plan establishes standards for acceptable noise levels at different land uses[74]. For example, the exterior standard is 65 dBA Ldn[75] at outdoor gathering

74 Town of Loomis, *Loomis General Plan*, July 2001, Table 8-3.

75 DBA refers to an "A-weighted" sound level that reflects that human hearing is less sensitive at low and extremely high frequencies. Ldn is an A-weighted average sound level for a 24-hour day, which includes a 10 dBA penalty

areas, and the interior noise standard is 45 dBA Ldn. The General Plan does not specify maximum noise levels for recreational facilities other than playgrounds and neighborhood parks, so the project site would not be subject to 24-hour noise standards, except for the existing house. However, the Proposed Project would be subject to restrictions on noise created by project activities that could affect surrounding sensitive land uses. The General Plan standards for short-duration noise levels are shown in Table 3-5.

TABLE 3-5
Maximum Allowable Noise Exposure Levels (Ldn)

Noise Sensitive Land Use	Outdoor Activity Areas[1,]	Interior Spaces	
	dBA Ldn	*dBA Ldn*	*dBA Leq*
Residential	65	45	—
Transient lodging	65	45	—
Hospitals and nursing homes	65	45	—
Theaters, auditoriums, music halls	—	—	35
Churches, meeting halls	65	—	40
Office buildings	—	—	45
Schools, libraries, museums	—	—	45
Playgrounds, neighborhood parks	70	—	—

1 Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.
2 Where it is not possible to reduce noise in outdoor activity areas to 65 dBA Ldn/Community Noise Equivalent Level (CNEL) or less using practical application of the best available noise reduction measures, an exterior noise level of up to 70 dBA Ldn/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Source: Town of Loomis General Plan, July 2001, Table 8-3.

Noise levels in rural areas tend to be relatively low. Primary sources of noise are typically vehicular traffic and machinery associated with agricultural activities, such as crop dusters and tractors. There are no active agricultural operations in the project vicinity that would generate substantial noise levels. The project site is outside of the 65 dBA contour for Interstate 80. The existing house on the project site is located approximately 3,500 feet from Interstate 80, and the 60 dBA contour occurs at 1,397 feet from the freeway[76] (so the 65 dBA contour would be even closer to the freeway). The nearest roadways that would produce relatively high levels of noise are Sierra College Boulevard and Rocklin Road. These roadways are over one-quarter mile from the home on the project site, and their 65 dBA Ldn contours fall approximately 54 to 149 feet from

for night-time sound levels. The Town of Loomis uses dBA Ldn levels to define acceptable levels of noise for different land uses and activities.

76 Town of Loomis, *Environmental Impact Report for the Village at Loomis,* July 2017, Table 4.7-4, page 4.12-8; City of Rocklin, *Rocklin 60 Project DEIR,* May 2009, Table 4.4-4, page 4.4-8.

the roadway centerline. These data demonstrate that traffic noise levels on the project site are well below the 65 dBA Ldn standard for residential development.

The Proposed Project would increase traffic levels slightly in the project vicinity, although not enough to create noticeable increases in noise. In order to be noticeable, traffic typically has to double (which would result in an approximate increase of 3 dBA, the lowest change generally noticeable to human beings).

The Proposed Project would generate approximately 139 new vehicle trips per day. These trips would all use James Drive to access the project site. While this would represent an increase in daily traffic on James Drive, the total number of trips would not be substantial enough to exceed the Town's noise standards. There are two existing homes on James Drive, and the outdoor gathering areas are over 75 feet from the centerline of James Drive.

As discussed in Item 16, current daily levels of traffic on Rocklin Road are approximately 11,700. The 139 trips attributable to the Proposed Project would increase traffic on Rocklin Road by only 1.2 percent. Increases on other area roadways would be less than 139 vehicles, as project traffic would be distributed in different directions. Even if all project traffic used Barton Road only or Sierra College Boulevard only, the increase in trips would be well below one percent, and therefore well below 1 dBA.

The noises generated by the Proposed Project would be consistent with the existing rural environment. Onsite activities would not exceed the 24-average or short-duration noise standards identified in the General Plan, because there would be no permanent sources of excessive noise (see Item d., below, for a discussion of construction noise). Further, there are no existing sensitive receptors in proximity to the portion of the project site that would be developed. In the future, there could be residences located north and west of the project site. These would be considered sensitive receptors. They would be able to hear some noise at times. For example, small tractors could be used for maintenance activities, such as dragging the arenas. However, the indoor arena and barn walls would dampen noise from within or south or west of those buildings. The outdoor arena would be 25 feet from the northern property line, so future residents might hear some tractor noise, but it would be of short duration). There would be no amplified sound. Because the barn would be closed from 8:30pm to 7am, there would be little or no discernable noise at night.

Because the Proposed Project would not subject existing or future sensitive receptors to unacceptable noise levels, or noticeably increase noise on local roadways, this would be a ***less-than significant-impact.***

b. Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. The ground motion caused by vibration is measured as particle velocity in inches per second and in the U.S. is referenced as vibration decibels (VdB).

Construction activities that would occur with the Proposed Project have the potential to generate low levels of groundborne vibration. However, given the distance to existing residences and buildings, existing sensitive receptors would not experience severe

vibration. Project construction is expected to be complete before future residences are constructed north and west of the project site. In addition, construction would occur only during the day, when vibration would be less disruptive. Therefore, this impact is considered ***less than significant***.

d. Activities associated with project construction elevate noise levels in the area surrounding the project site. Activities involved in construction will typically generate maximum noise levels ranging from 55 to 90 dB L_{max} at a distance of 50 feet, as shown in Table 3-6. Construction activities are temporary in nature and typically occur during normal daytime working hours. However, when construction occurs in areas proximate to sensitive uses, such as residences, the noise can be disruptive to daily activities. As shown in Figure 2-3 in Chapter 2, Project Description, there are no existing residences in close proximity to the project site, except the onsite residence. There are two homes adjacent to James Drive in proximity to the area where the off-site intersection improvements would be constructed.

The Federal Highway Administration (FHA) has compiled data regarding the noise generating characteristics of specific types of construction equipment and typical construction activities. Typical noise levels for the types of equipment that could be used to construct the Proposed Project are shown in Table 3-6. These noise levels diminish rapidly with distance from the construction site at a rate of approximately 6 to 7.5 dBA per doubling of distance. For example, a noise level of 84 dBA measured at 50 feet from the noise source to the receptor would drop to 78 dBA at 100 feet from the source to the receptor, and drop by another 6 dBA to 72 dBA at 200 feet from the source to the receptor.

As shown in Table 3-6, construction equipment could temporarily reach up to 90 dBA during the daytime at 50 feet from the source. The nearest existing homes are located approximately 1,000 feet from the project site, so even the loudest construction equipment would result in noise levels below 65 dBA at local residences. The exception would be the two homes adjacent to James Drive, which would experience higher noise levels during construction of intersection improvements, paving of James Drive and installation of the water line. These activities would be of short duration. Nonetheless, construction noise levels could result in a substantial temporary or periodic increases in ambient noise levels above existing noise levels, which would be considered a significant impact.

The following mitigation measure would reduce the above impact to a ***less-than-significant*** level by reducing construction noise and restricting it to daytime, when noise is less distracting.

Mitigation Measure

13. *The project applicant shall ensure that all contractors implement the following measures during construction of the Proposed Project:*

TABLE 3-6
Typical Construction Equipment Noise

Equipment Description	Maximum Noise Level at 50 feet, dBA
Auger drill rig	85
Backhoe	80
Bar bender	80
Chain saw	85
Compactor (ground)	80
Compressor (air)	80
Concrete mixer truck	85
Concrete pump truck	82
Concrete saw	90
Crane (mobile or stationary)	85
Dozer	85
Dump truck	84
Excavator	85
Flat bed truck	84
Front end loader	80
Generator (25 kilovolt-amperes [kVA] or less)	70
Generator (more than 25 kVA)	82
Grader	85
Hydra break ram	90
Jackhammer	85
Mounted impact hammer (hoe ram)	90
Paver	85
Pickup truck	55
Pneumatic tools	85
Pumps	77
Rock drill	85
Scraper	85
Soil mix drill rig	80
Tractor	84
Vacuum street sweeper	80
Vibratory concrete mixer	80

SOURCE: Federal Highway Administration, 2006.

- *Project construction activities shall be limited to daytime hours of 7:00 a.m. to 7:00 p.m. Monday through Friday, and 8:00 a.m. to 7:00 p.m. on Saturdays unless conditions warrant that certain construction activities occur during evening or early morning hours (e.g., extreme heat).*
- *All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory*

specifications. Mobile or fixed "package" equipment (e.g., arc welders, air compressors) shall be equipped with shrouds and noise-control features that are readily available for that type of equipment.

- *All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.*
- *Electrically powered equipment shall be used instead of pneumatic or internal combustion-powered equipment, where feasible.*
- *Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.*
- *Material stockpiles and staging areas shall be indicated on project plans prior to issuance of grading and building permits.*
- *Construction site and access road speed limits shall be established and enforced during the construction period. Speed limits shall be noted on project plans prior to issuance of grading and building permits.*
- *The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. This prohibition shall be noted on project plans prior to issuance of grading and building permits.*
- *No project-related public address or music system shall be audible at any adjacent receptor. This prohibition shall be noted on project plans prior to issuance of grading and building permits.*

There is generally an increase in ambient noise during the day. By limiting the hours of construction to these hours, the potential for nuisance noise is reduced because project construction-related noise increases would be less noticeable due to background noise levels. The use of mufflers on construction equipment would decrease the overall noise generated during construction. Because sound diminishes with distance, locating noise-generating equipment away from noise sensitive uses would reduce overall noise impacts associated with project construction. Limiting the speed limit on James Drive would reduce traffic noise levels at the two adjacent residences. The restriction on noise-producing signals, public address systems and music would also ensure that nearby residents are not subjected to disruptive noises.

e, f. The Proposed Project site is not located within an airport land use plan area or within two miles of an airport or private airstrip. Therefore, the project would not be exposed to, or affected by, excessive aircraft noise levels. ***No impact*** would occur.

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
13.	**POPULATION AND HOUSING.** *Would the project:*				
a.	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	■	☐
b.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	■	☐
c.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	■	☐

Discussion

a. The Proposed Project would develop a boarding and training stable. No new housing would be constructed as part of the project. The existing house on the project site would be retained, and would be occupied by the stable manager. Two additional employees would live offsite. The addition of three employees would not substantially increase the employment base in Loomis or Placer County. The Proposed Project would generate additional economic activity due to the services it requires, such as delivery of feed and bedding and solid waste disposal. However, deliveries are expected only once every 4 to 6 months, and solid waste would be removed on a regular schedule. Farriers and veterinarians would also provide services intermittently, and various supplies would be needed (e.g., tack, fly spray, supplements). It is anticipated that supplies and services would be obtained locally for the most part. With 55 horses, the Proposed Project would not generate enough demand to employ a full time farrier or veterinarian, or substantial expansion of local or regional tack or feed stores. Therefore, the Proposed Project would not substantially induce growth in employment or related demand for increased housing. Furthermore, at least a portion of the horses boarded at the project stable would be relocating from other facilities in the area, and so would already be using area farriers, veterinarians and supplies. For these reasons, the Proposed Project would not induce substantial growth.

The Proposed Project would connect to an existing waterline, but not sewer or drainage facilities. No water, wastewater or storm drainage facilities would be extended to serve the project site, beyond a project-specific connection to the existing water line in Rocklin Road. The new water line would serve only the project site. The Proposed Project includes onsite drainage swales and similar facilities to capture runoff from the relatively

small increase in impervious surfaces. Therefore, the Proposed Project would not induce growth through the extension of infrastructure.

Because the Proposed Project would not induce substantial unplanned growth, this impact is considered ***less than significant***.

b,c. Most of the project site is presently undeveloped. One home is located within the project site. That home would be retained. The existing tenants would need to relocate to accommodate the stable manager, who would live onsite. The relocation of one tenant would not necessitate the construction of replacement housing, so this impact would be ***less than significant***.

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
14.	**PUBLIC SERVICES** *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*				
a.	Fire protection?	☐	■	☐	☐
b.	Police protection?	☐	☐	■	☐
c.	Schools?	☐	☐	■	☐
d.	Parks?	☐	☐	■	☐
e.	Other public facilities?	☐	☐	■	☐

Discussion

a. The South Placer Fire District (SPFD) serves the project site. The SPFD was formed in 1952 and consolidated with the Loomis Fire Protection District merged in July 2017. The SPFD serves several communities in unincorporated Placer County, including Granite Bay, Loomis, Penryn and Newcastle, covering 55 square miles and a population of approximately 42,000[77]. In addition to fire suppression and emergency medical services (including ambulance), services include code enforcement, plan checks, business inspections, public education. and provides fire suppression, advance life support and various fire prevention programs, including business safety inspections, community safety education, plan checking, code enforcement and fire investigation. The SPFD staffs five full-time fire stations, one volunteer station and one storage facility/station.[78] The SPFD has 54 full-time employees, one part-time employee, five volunteers, and six intern firefighters.[79]

The closest fire stations to the project site are Station 16 at 5300 Olive Ranch Road and Station 19 at 7070 Auburn Folsom Road. Both stations are approximately 3.8 miles from the project site.

77 South Placer Fire District, *Consolidation Service Plan, South Placer Fire Protection District and Loomis Fire Protection District*, February 1, 2017, page 7.

78 South Placer Fire District, *Consolidation Service Plan, South Placer Fire Protection District and Loomis Fire Protection District*, February 1, 2017, page 7.

79 South Placer Fire District, *Consolidation Service Plan, South Placer Fire Protection District and Loomis Fire Protection District*, February 1, 2017, page 5.

The project site is already in the SPFD service area, so the Proposed Project would not extend the area requiring fire protection or emergency medical services. Most of the project site would not be altered by the Proposed Project, so the risk of fire in those areas would remain the same as existing conditions. While the Proposed Project would not increase the residential population within the SFPD service area, there is the possibility that fire suppression and/or emergency medical services could be required at some point by the Proposed Project.

Standard horse-keeping practices, such as keeping hay storage separated from the barns and prohibiting smoking, would minimize the potential for fires to occur. In addition, the project applicant would pay the applicable SPFD fire fee, which funds facilities improvements, and property taxes, a portion of which would be used to fund fire protection services.

Building design and construction must comply with the 2016 California Fire Code, which includes construction techniques that minimize fire risk. As discussed in Item 8h, above, he SPFD provided an initial assessment of the Proposed Project, and provided several recommendations. The SPFD would also conduct a plan check prior to approval of the building permit, the following measure would ensure that appropriate steps are taken to minimize the risk of fire, by requiring that recommendations of the SPFD are implemented, reducing the potential for a fire on the project site.

Payment of the fire fee and property taxes, and implementation of the following mitigation measure would insure that fire protection services could be provided to the Proposed Project without diminishing service to others within the SPFD's service area. While the Proposed Project would pay the fire fee, the project would not generate enough increased demand to result in the need for fire protection staff or facilities beyond those currently planned for. For these reasons, the impact would be ***less than significant*** with mitigation***.***

Mitigation Measure

14. *Implement Mitigation Measure 11.*

b. Law enforcement services are provided by the Placer County Sheriff's Department, which has a substation located in Loomis, at Horseshoe Bar Road and Interstate 80. This 24-hour station serves west and south Placer County. Approximately 50 officers are housed at this substation, including 33 patrol positions, 3 detectives, 4 patrol sergeants, 1 Community Services/School Safety sergeant, 4 Drug Abuse Resistance Education (DARE) officers, 4 school resource officers, 1 community services officer, and several reserve deputies.[80]

The project site is already in the service area for the Sheriff's Department. The Proposed Project would not increase the residential population of the County, and would not result in activities that typically require the Sheriff's Department to respond. While unlikely, there is the possibility that a crime could occur within the project area, requiring

80 Town of Loomis, *Environmental Impact Report for the Village at Loomis,* July 2017, page 4.12-8.

a response from the Sheriff's Department. The project applicant would pay property taxes, which are used to fund a variety of services, including law enforcement. Because the project site is in the existing service area, and the project applicant would pay taxes that could be used to fund the Sheriff's Department, the slight potential for there to be a need for law enforcement services would be a ***less-than-significant impact.***

c. The Proposed Project would not increase the number of residential units in the Town of Loomis or Placer County, so the demand for population-related services, such as schools, libraries and social services, would be unaffected. The Proposed Project would require planning and related Town and County services during permitting and construction, but these would be within the day-to-day operations of these jurisdictions. In addition, the project applicant would pay directly for most of these services through fees. For these reasons, the impact on public services would be ***less than significant***.

d. The Proposed Project would not increase the number of residences in the Town of Loomis, so it would not generate a demand for parks and related recreational services. The project site is not adjacent to existing or planned bridle trails. Some boarders may choose to trailer their horses to trails, but because the focus would be on dressage and hunter/jumper training, rather than trail riding, there would not be a large number of boarders using local or regional trails at any one time. Therefore, there would be no impact on parks, and the impact on public recreation facilities (e.g., trails) would be ***less than significant***.

e. The Proposed Project would not substantially increase demand for other public services. However, the Placer Mosquito & Vector Control District has communicated to the Town a concern that drainage areas, catch basins, stormwater structures or other depressions that hold water for as little as 72 to 96 hours could be a source of mosquitos, which can be a threat to public health by transmitting West Nile virus to people.[81] Horses can be vaccinated against the West Nile virus, but no vaccine is available for people. Therefore, the potential increase in mosquito activity is considered a significant impact. The following mitigation measure would minimize the risk of increased mosquito populations by managing sources of standing water. With mitigation, this would be a ***less-than-significant impact.***

Mitigation Measure

15(a) *Construction and maintenance of drainage facilities shall implement BMPs to minimize the potential for mosquito breeding within those facilities in accordance with the recommendations of the Best Management Practices for Mosquito Control in California: Recommendations of the California Department of Public Health and Mosquito and Vector Control Association of California (Mosquito BMPs Handbook; CDPH and MVCAC 2010). The BMPs shall be identified in a Mosquito Control Plan subject to approval of the Town. The following measures, or others that are equally effective, shall be included at a minimum:*

81 Angella Falco, Field Station Manager, Placer Mosquito & Vector Control District, written communication to Robert King, Town Planner, Town of Loomis, May 12, 2017, page 1.

- *Construct or improve large ditches to a slope of at least 2:1 (vertical: horizontal) and a minimum 4-foot wide bottom. Consider a 3:1 slope or greater to discourage burrowing animal damage, potential seepage problems, and prevent unwanted vegetation growth.*
- *Keep ditches clean and well-maintained. Periodically remove accumulated sediment and vegetation. Maintain ditch grade and prevent areas of standing water.*
- *Routinely inspect, maintain, and repair irrigation system components; check and repair leaky outdoor faucets.*
- *Manage sprinkler and irrigation systems to minimize pooling.*
- *Design and operate wash racks to minimize water from pooling for extended periods of time.*
- *Remove emergent vegetation and debris from gutters and channels that accumulate water.*
- *During summer months, maintain water levels in troughs and buckets that minimize the likelihood of mosquito breeding.*
- *Regularly inspect areas and items that could retain water (e.g., buckets, troughs, barrels).*
- *Irrigate only as frequently as is needed to maintain proper soil moisture. Check soil moisture regularly.*
- *Do not over fertilize. Over-fertilization can leach into irrigation run-off making mosquito production more likely in ditches or further downstream.*
- *When possible, use sprinklers or drip systems rather than flood irrigation.*
- *Keep animals off the pasture while the soil is soft. Mosquito habitat is created in irrigated pastures when water collects in hoof prints.*

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
15.	**RECREATION.**				
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?	☐	☐	■	☐

Discussion

a,b. Please see Item 14d.

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
16.	**TRANSPORTATION/ TRAFFIC** *Would the project:*				
	a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	■	☐
	b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	■	☐
	c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	■
	d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	■	☐
	e. Result in inadequate emergency access?	☐	☐	■	☐
	f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such	☐	☐	■	☐

Issues	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
facilities?				

Discussion

a,b. A traffic study was prepared for the Proposed Project, and is attached as Appendix A. The traffic study describes the roadway, transit, bicycle and pedestrian facilities in the project vicinity, and evaluates the effects of the Proposed Project on these facilities.

The findings of the traffic study are summarized below. For a complete description of these facilities, including the existing and cumulative volumes and levels of service on study area roadways and intersections, please see Appendix A. The methods used to calculate the number of vehicle trips that would be generated by the Proposed Project and the impacts of these trips on study area facilities are also described.

Roadway Impacts

Existing Conditions

The traffic study focuses on the roadways and intersections in the vicinity of the project site. The roadways that are closest to the project site are:

- **Interstate 80**, the primary east-west arterial across Placer County and Northern California. Near the project site, Interstate 80 is a 6-lane, controlled-access freeway. The interchanges nearest the project site are Rocklin Road interchange to the west and Sierra College Boulevard to the north.
- **Sierra College Boulevard**, a north-south arterial road that connects State Route 193 (SR 193) north of Penryn to Interstate 80, and then continues southerly through Rocklin and Roseville before becoming Hazel Avenue in Sacramento County.
- **Rocklin Road**, an east-west arterial street that links Rocklin with Interstate 80. Rocklin Road continues easterly beyond Sierra College Blvd through the Town of Loomis to Barton Road, and this portion of Rocklin Road provides freeway access to the unincorporated portion of Placer County near Granite Bay. Rocklin Road is the public road closest to the project site. This roadway is a 4-lane arterial street between Interstate 80 and Sierra College Boulevard; this portion of Rocklin Road is located in the City of Rocklin. East of Sierra College Boulevard, it is a two-lane, rural road. A middle lane is provided between Sierra College Boulevard and James Drive. Just west of James Drive, Rocklin Road enters the Town of Loomis. Rocklin Road terminates to the east at Barton Road. The speed limit on Rocklin Road is 40 miles per hour (mph) where it is in the Town of Loomis. Portions of Rocklin Road have sidewalks, but there are no sidewalks where it intersects with James Drive.
- Barton Road, a two lane north-south minor arterial that extends from its northern terminus at Brace Road in the Town of Loomis, continues southerly into the

Granite Bay Community Plan area and extends across Douglas Blvd through Granite Bay to the Sacramento County line. The speed limit is 35 mph north of Douglas Boulevard and 40 mph in the vicinity of the project site.

- **James Drive**, a private road that extends north from Rocklin Road to provide access to the project site. There are no shoulders or sidewalks on James Drive.
- **Monte Claire Drive**, a private two-lane street that extends south from a point on Rocklin Road opposite James Drive to provide access to an existing residential subdivision. Monte Claire Drive is generally a 22-foot-wide road.
- **Sierra College Blvd/Rocklin Road intersection**, a signalized intersection located west of the project site, within the City of Rocklin. Two through lanes are provided in each direction on Rocklin Road, and three through lanes are provided on Sierra College Blvd. Separate left-turn lanes are provided on each approach, and dual left-turn lanes are available on the northbound Sierra College Blvd approach. Separate right-turn lanes are provided on the northbound, southbound and eastbound approaches. Crosswalks are striped across the western and southern legs of the intersection.
- **Rocklin Road/James Drive/Monte Claire Drive intersection,** a stop sign-controlled intersection (on the Monte Claire Drive approach only) located in the Town of Loomis. Rocklin Road transitions from two eastbound travel lanes to a single eastbound through lane and a separate right-turn lane. A continuous Two-Way Left-Turn (TWLT) lane is available on Rocklin Road, and it is striped as a dedicated westbound left-turn lane approaching Monte Claire Drive. The southbound James Drive approach has a single lane, while the two-lane northbound Monte Claire Drive approach is striped as separate left turn and right-turn lanes.
- **Rocklin Road/Barton Road intersection,** a "tee" intersection controlled by an all-way stop located in the Town of Loomis. A separate left-turn lane is provided on the northbound approach, but the other approaches are single lanes. The Town of Loomis Circulation Element indicates that a roundabout intersection will be installed at this location in the future.

Levels of Service

The operating conditions experienced by motorists are described as "levels of service" (LOS). Level of service is a qualitative measure of how traffic operations affect several 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 could occur. Levels of service "A" through "E" generally represent traffic volumes at less than roadway capacity, while LOS "F" represents over capacity or forced-flow conditions. The Town of Loomis considers LOS A through LOS C to be acceptable on roadways and intersections within the Town limits. LOS D is allowed at several intersections under specified conditions.

Within the City of Rocklin, LOS C is the minimum standard for roadways and intersections, although LOS D may be acceptable during peak periods under specific circumstances.

All of the facilities in the study area operate at acceptable levels of service (LOS C or better), as shown in Tables 3-7 and 3-8.

Project Impacts

Traffic impacts are evaluated under three scenarios—existing conditions, existing plus approved/pending projects (EPAP) and cumulative. In each case, the trips generated by the Proposed Project are added to the roadway network to determine whether the Proposed Project would result in an unacceptable level of service (LOS D or worse for the study area facilities), or, if a roadway or intersection is already projected to operate at LOS D or worse, whether the Proposed Project would increase congestion by a substantial amount. For the traffic study, when an intersection or roadway in the study area would exceed LOS C without the addition of project traffic, the project impact is considered significant if the project traffic would increase the total roadway or intersection volume by 5% or more.[82]

The Proposed Project is estimated to generate 139 new vehicle trips per day, with 6 of those trips occurring during the weekday a.m. peak hour and 16 trips occurring in the weekday p.m. peak hour.[83] As shown in Tables 3-7 and 3-8, the study area intersections and roadway segments would operate at LOS C or better under both existing and existing plus project conditions. Therefore, the increase in traffic under Existing plus Project conditions would be less-than-significant.

The traffic study also considered traffic levels under "Existing plus Approved Projects" (EPAP) conditions. For this analysis, projects that had been approved in the vicinity of the project site, in both the City of Rocklin and the Town of Loomis were identified, including the number of residential units and the amount of non-residential development that could occur under each project. The number of vehicle trips generated by each project in the a.m. and p.m. peak hour was then determined and added to the traffic volumes identified in the Existing scenario. Approved roadway improvements are also taken into consideration. Finally, project trips were added to determine if the Proposed Project would have an adverse impact under the EPAP scenario.

As shown in Tables 3-9 and 3-10, one intersection, Rocklin Road/Sierra College Boulevard, would operate at LOS D with or without the Proposed Project. However, the Proposed Project would increase traffic volumes at this intersection by only 0.02%, which, because it would be less than 5%, would not be considered substantial. Therefore, the impact of the Proposed Project would be less than significant under this scenario.

The Proposed Project would also contribute to cumulative traffic congestion. The project contribution would be relatively small, because of the number of trips that would be generated.

82 KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018, page 12.
83 KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018, page 16.

TABLE 3-7
Existing Plus Project Intersection Level of Service

Intersection	Control	AM Peak Hour				PM Peak Hour			
		Existing		EX Plus Project		Existing		EX Plus Project	
		Vol/Cap or Ave Delay (sec/veh)	LOS	Vol/Cap or Ave Delay (sec/veh)	LOS	Vol/Cap or Ave Delay (sec/veh)	LOS	Vol/Cap or Ave Delay (sec/veh)	LOS
Rocklin Road/Sierra College Blvd	Signal	0.530	A	0.530	A	0.700	C	0.704	C
Rocklin Road/James Drive/ Monte Claire Drive	NB / SB Stop								
Northbound Approach		17.2	C	17.5	C	16.8	A	17.2	C
Southbound Approach		-	-	11.5	B	10.4	B	12.5	B
Rocklin Road/Barton Road	All-Way Stop	18.2	C	18.4	C	14.9	B	15.0	C

Source: KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018.

TABLE 3-8
Existing Plus Project Daily Traffic Volumes and Levels of Service

Roadway	Segment	# of Lanes	Existing			Existing Plus Project			
			Average Daily Traffic	Vol/Cap Ratio*	LOS	Average Daily Traffic		Vol/Cap Ratio	LOS
						Project Only	Total		
Rocklin Road	Sierra College Blvd to Project (Rocklin)	2	11,694	0.780	C	90	11,784	0.786	C
	Project to Barton Road (Loomis)	2	11,694	0.780	C	49	11,743	0.783	C

Notes: (*) based on General Plan threshold capacity of 15,000 ADT for two lane road
Souce: KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018.

TABLE 3-9
Existing Plus Approved/Pending Projects Intersection Level of Service

Intersection	Control	AM Peak Hour				PM Peak Hour			
		EPAP		EPAP Plus Project		EPAP		EPAP Plus Project	
		Vol/Cap or Ave Delay (sec/veh)	LOS	Vol/Cap or Ave Delay (sec/veh)	LOS	Vol/Cap or Ave Delay (sec/veh)	LOS	Vol/Cap or Ave Delay (sec/veh)	LOS
Rocklin Road/Sierra College Blvd	Signal	0.597	A	0.597	A	**0.840**	**D**	**0.842**	**D**
Rocklin Road/James Drive/ Monte Claire Drive	NB / SB Stop			19.9.5	C				
Northbound Approach		19.7.3	C	11.9	B	19.0	C	20.2	C
Southbound Approach		-	-			10.9	B	13.6	B
Rocklin Road/Barton Road	All-Way Stop	22.0	C	22.3	C	20.4	C	20.8	C

Notes: **BOLD** values exceed the minimum LOS standard
Souce: KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018.

TABLE 3-10
Existing Plus Approved/Pending Project Daily Traffic Volumes And Levels of Service

Roadway	Segment	# of Lanes	Existing Plus Approved Projects				EPAP Plus Project			
			Average Daily Traffic				Average Daily Traffic			
			Growth	Total	V / C*	LOS	Project Only	Total	V / C	LOS
Rocklin Road	Sierra College Blvd to Project (Rocklin)	2	1,129	**12,823**	**0.855**	**D**	90	**12,913**	**0.861**	**D**
	Project to Barton Road (Loomis)	2	1,097	**12,791**	**0.853**	**D**	49	**12,840**	**0.856**	**D**

Notes:
(*) based on General Plan threshold capacity of 15,000 ADT for two lane road
BOLD values exceed the minimum LOS standard
Source: KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018.

For example, Rocklin Road is projected to carry an average 18,675 to 18,725 vehicles per day (see Table 3-12). With only two lanes, Rocklin Road would operate at LOS F. When a third lane is added, the roadway would operate at LOS D. The Proposed Project would increase the volumes on this roadway by 49 cars from James Drive to Barton Road (in the Town of Loomis) and by 90 vehicles from James Drive to Sierra College Boulevard, an increase of less than 1%, and therefore not substantial.

Similarly, the Rocklin Road intersections would operate at LOS D or worse (see Table 13-11), but the project contribution would be far below the 5% threshold. At the intersections of Rocklin Road/Sierra College Boulevard and Rocklin Road/Barton Road, the project increment would be 0.2% and 0.3% respectively. At the intersection of Rocklin Road/James Drive/Monte Claire Drive, the Proposed Project would add 6 vehicles in the a.m. peak hour and 16 vehicles in the p.m. peak hour, representing 0.5% and 1.1% increases, respectively.[84] In addition, the Proposed Project would contribute its fair share to roadway improvements through the payment of the Town's traffic fee. Those improvements include a roundabout at the Rocklin Road/Barton Road intersection, which would result in LOS C at this intersection.

Because the Proposed Project would not result in a substantial increase of traffic on study area roadway segments or intersections, the increase in project traffic would be a ***less-than-significant impact.***

c. The Proposed Project site is not located within an airport land use plan area or within two miles of an airport or private airstrip. Construction of residential uses would not result in a change in air traffic patterns, and ***no impact*** would occur.

d. An equestrian center is compatible with rural residential uses, such as those located in the vicinity of the project site. For the most part, vehicles entering and leaving the project site would be similar to those using any commercial facility, such as personal automobiles and trucks, delivery trucks, and waste removal vehicles. Trucks with horse trailers would also enter and exit the site. Some farm equipment, such as a tractor, would be used onsite, but would not travel on public roads.

The existing Rocklin Road/James Drive intersection is not designed to current Town standards. Therefore, there could be conflicts with entering and exiting vehicles that are using James Drive at the same time.[85] The Proposed Project includes improvements to James Drive and its intersection with Rocklin Road in order to better accommodate entering and exiting vehicles, including those with horse trailers. James Drive would be widened to 20 feet within approximately 100 feet of Rocklin Road. As shown in Figure 2-5 (in Chapter 2), tapers would be provided east and west of James Drive, which would provide an area for vehicles that are entering or existing to accelerate or decelerate. and Minimum sight distance would be 440 feet in each direction. In addition, the intersection configuration and improvements will be subject to review and approval by the Town Engineer during the Improvement Plan process to ensure that Town standards met.

84 KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018, page 38.
85 KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018, page 22.

TABLE 3-11
Cumulative – Year 2030 Plus Project Intersection Level of Service

Intersection	Control	AM Peak Hour				PM Peak Hour			
		Cumulative		Cumulative Plus Project		Cumulative		Cumulative Plus Project	
		Vol/Cap or Ave Delay (sec/veh)	LOS	Vol/Cap or Ave Delay (sec/veh)	LOS	Vol/Cap or Ave Delay (sec/veh)	LOS	Vol/Cap or Ave Delay (sec/veh)	LOS
Rocklin Road/ Sierra College Blvd	Signal	**0.884**	**D**	**0.886**	**D**	**1.371**	**F**	**1.375**	**F**
	Improved	0.769	C	0.769	C	0.794	C	0.796	C
Rocklin Road/James Drive/ Monte Claire Drive	NB/SB Stop								
Northbound Approach		**34.6**	**D**	**35.1**	**E**	**45.6**	**E**	**47.6**	**E**
Southbound Approach		**-**	**-**	15.4	C	11.4	B	20.6	C
Rocklin Road/Barton Road	All-Way Stop	**133.3**	**F**	**134.4**	**F**	**199.5**	**F**	**201.5**	**F**
	Roundabout	15.0	B	15.1	C	23.4	C	23.7	C

Notes: **BOLD** values exceed the minimum LOS standard
Source: KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018.

TABLE 3-12
Cumulative – Year 2030 Plus Project Daily Traffic Volumes and Levels of Service

Roadway	Segment	# of Lanes	Cumulative			Cumulative Plus Project			
						Average Daily Traffic			
			Average Daily Traffic	Vol/Cap Ratio*	LOS	Project Only	Total	Vol/Cap ratio	LOS
Rocklin Road	Sierra College Blvd to Project (Rocklin)	2	18,675	**1.245**	**F**	90	18,765	**1.251**	**F**
	Project to Barton Road (Loomis)	2	18,725	**1.248**	**F**	49	18,774	**1.252**	**F**
	Improved per Circulation Element	3**		**0.832**	**D**			**0.834**	**D**

Notes:
(*) based on General Plan threshold capacity of 15,000 ADT for two lane road
(**) based on capacity of three-lane roadway with roundabouts and moderate access controls
Source: KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018.

With the proposed intersection improvements, vehicular access to the project site would have a ***less-than-significant impact*** related to road hazards.[86]

e. Access to the project site is planned via James Drive, which would also serve as an Emergency Vehicle Access. As discussed in Item 16d, above, the intersection at James Drive and Rocklin Road would be widened and improved to accommodate horse trailers, which are of similar length to emergency vehicles Therefore, the project site would be easily accessed by emergency equipment.

The Proposed Project would not include any uses that could result in a substantial hazard. However, during construction of the water connection and intersection improvements, Rocklin Road could be partially or fully blocked for short periods of time, which could impede the efficient movement of emergency vehicles. This would be a significant impact.

The following mitigation measure would reduce the potential impact on emergency services to a ***less-than-significant level*** by ensuring that emergency vehicles can travel on Rocklin Road during construction.

Mitigation Measure

16. *Prior to issuance of a grading permit, the applicant shall prepare a Construction Traffic Management Plan that includes methods for street closure (e.g., timing, signage, location and duration restrictions), criteria for flaggers and/or other traffic controls, and maintenance of access for residents of James Drive and Monte Claire Drive, and that emergency vehicles will be able to travel on Rocklin Road.*

f. Transit

Bus service to the Rocklin - Loomis area is provided by Placer County Transit. The *Taylor Road Shuttle* links Loomis, Penryn, Auburn and Sierra College in Rocklin. Service is provided between 6:30 a.m. and 4:15 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, and *Placer County Transit Dial-a-Ride*.[87]

Project employees and clients would be able to take advantage of the existing Placer Transit services available along Rocklin Road and Sierra College Blvd. While existing stops are not particularly close to the site, the number of additional riders generated by the project is unlikely to be large enough to justify changes to existing routes or modification of existing schedules. The existing transit service has the capacity to accommodate any riders originating in the project. Thus the project's impact is not significant and mitigation is not required.[88]

86 KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018, page 22.
87 KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018, page 6.
88 KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018, page 22.

Bicycle Facilities

The existing bicycle system in the Town of Loomis consists of a series of Class II (on-street lanes) facilities on major arterials. There are Class II lanes on Sierra College Boulevard and on the south side of Rocklin Road from Sierra College Boulevard to Monte Claire Drive. Class III (routes) are proposed on Barton Road and Rocklin Road in Loomis. The Bicycle Plan indicates that Barton Road from Rocklin Road south to the Town limits and Rocklin Road west of Barton Road are planned to be Class III – Level A bicycle routes. This level of improvement would be characterized by shared use with motor vehicle traffic and is identified by Bike Route signs. These routes are intended to have a minimum amount of paving (at least 2-ft) beyond the travel lane to provide more room for bicyclists.[89] The Proposed Project would not affect the installation of this bike lane. The Proposed Project would be unlikely to generate substantial bicycle traffic given the location of project client's residences.[90] Therefore, the Proposed Project would not interfere with existing or planned bicycle facilities.

Pedestrian Facilities

The *Town of Loomis Trails Master Plan (2010)* identifies the location of existing and planned sidewalks and trails. Sidewalks are currently provided on major downtown area streets and in developed residential subdivisions. However, there are many gaps in the sidewalk system. There are sidewalks on the south side of Rocklin Road from Sierra College Blvd to Monte Claire Drive (in Rocklin). There are no sidewalks east of Monte Claire Drive nor on the north side of Rocklin Road. The Town's Trails Master Plan does not indicate that sidewalks will be constructed on Rocklin Road or Barton Road.[91]

The Proposed Project is not expected to generate pedestrian activity due to the regional distribution of its clients' residences, so few if any pedestrians are anticipated.[92] Therefore, there would not be a demand for additional pedestrian improvements as a result of the Proposed Project.

Because the Proposed Project would not substantially increase use of or demand for bicycle, pedestrian or transit facilities, and would not interfere with the operation or safety of and/or planning for such facilities, this impact would be ***less than significant***.

89 KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018, page 6.
90 KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018, page 22.
91 KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018, page 6.
92 KD Anderson & Associates, Inc., *Traffic Impact Analysis for the Flying Change Farms*, April 6, 2018, page 22.

Issues	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
17. TRIBAL CULTURAL RESOURCES Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	■	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set for in subdivision (c) of Public Resource Code section 5024.1 the lead agency shall consider the significance of the resource to a California Native American tribe.?	☐	☐	■	☐

Discussion

a., b. No tribal cultural resources as defined in Public Resources Code section 21074 have been identified in the project area. The project site was subjected to a complete cultural resource field survey in November 2017. Soil visibility was good throughout the project site. Rock outcrops were examined for evidence of modification, such as artwork, grinding surfaces, or other cultural uses. No signs of human association were observed. Nor was there tool stone material, even in the exposed bed of drainages.[93] For these reasons, it is not anticipated that tribal cultural resources are present on the project site, and the impact would be ***less than significant***.

93 Peak and Associates, Inc., *Cultural Resource Assessment of Proposed Flying Change Farms Project,* October 31, 2017, page 11.

The Town has received a request from the United Auburn Indian Community (UAIC) for consultation, pursuant to AB 52 (Public Resources Code Section 21080.3), and has begun consultation consistent with statutory requirements.

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
18.	**UTILITIES AND SERVICE SYSTEMS.** *Would the project:*				
	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 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 of which could cause significant environmental effects?	☐	☐	■	☐
	d. Have sufficient water supplies 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?	☐	☐	■	☐
	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?	☐	☐	■	☐

Discussion

a., e. The Proposed Project would be served by a septic system, so there would not be any project wastewater conveyed to a wastewater treatment facility. Therefore, ***no impact*** would occur.

b., d. The existing residence on the project site obtains its water from a single groundwater well. The Proposed Project would obtain water from the Placer County Water Agency (PCWA). A water line would be extended from the project site to an existing 14-inch water line in Rocklin Road, approximately 300 feet south of the project site. The Proposed Project is estimated to generate an average water demand of 7,100 gallons per day (gpd), or approximately 8 acre-feet per year (AFY), and a maximum daily demand of 11,400 gpd.[94]

Most of the Town of Loomis obtains water from the PCWA, and is within PCWA's Zone 1 service area. Some rural parcels use groundwater wells. PCWA has rights to water to serve Zone 1 from a number of sources, including 155,000 AFY from the American River and 100,400 AFY from the Yuba and Bear rivers (through an agreement with PG&E).[95] The PCWA potable water delivery system includes eight water treatment plants and over 30 storage tanks.[96]

PCWA's Urban Water Management Plan (UWMP) projects future demand from its service area, and evaluates its ability to meet that demand. The UWMP also identifies water conservation measures that would be implemetned during certain conditions. The UWMP concludes that PCWA will have adequate supplies to meet water demand in its service area under normal, single-dry and multiple-dry years.[97]. It was assumed that there would be 3,187 single family homes in Loomis at buildout, with a demand for 3,065 acre-feet per year (system demand).[98] This represents approximately 1.1 percent of PCWA's total water demand at buildout (post 2045).[99] Under existing zoning, buildout of the Town of Loomis would include up to 17 single family homes on 2.3-acre lots within the project site. Assuming 0.644 AFY per unit[100], development of the project site under the existing zoning would generate a demand of 10.85 AFY. Because the Proposed Project would use less water than anticipated in the UWMP, PCWA would have sufficient supplies to meet project demand even with buildout of the Town and other PCWA customers.

While PCWA has the water supply needed to meet project demand, additional infrastructure would be required. As stated above, the Proposed Project would connect to the water main in Rocklin Road, 300 feet from the project site. According to PCWA, because there is no water main fronting the project site, a variance in the Agency's main line extension policy is required. A private pipeline would then need to be installed in an

94 TSD Engineering, Inc., *FCF Water Consumption Estimates—CEQA Application*, October 18, 2017.
95 Placer County Water Agency, *2015 Urban Water Management Plan*, June 2, 2016, Table 3-1, page 3-2.
96 Placer County Water Agency, *2015 Urban Water Management Plan*, June 2, 2016, page 2-14.
97 Placer County Water Agency, *2015 Urban Water Management Plan*, June 2, 2016, Table 3-1, page 3-2.
98 Placer County Water Agency, *2015 Urban Water Management Plan*, June 2, 2016, page 7-3.
99 Placer County Water Agency, *2015 Urban Water Management Plan*, June 2, 2016, Table 4-16, page 4-29.
100 Tully & Young, *Water Supply Analysis for the Village at Loomis*, September 9, 2015, page 2.

easement from the meter location to the parcel. The Proposed Project would also need to pay the applicable water connection charges and installation costs.[101]

PCWA has the ability to provide potable water to the Proposed Project without expanding its current water supplies and/or treatment or conveyance facilities. The only improvement required to convey water to the project site would be the connection to the water line in Rocklin Road, and the water line in James Drive, which would be installed as part of the project. For this reasons, the impact on water supply and treatment would be ***less than significant***.

c. Please see Item 8d, e.

f., g. The Proposed Project would generate waste, primarily manure and bedding. As discussed in Chapter 2, manure and bedding would be stored on site, and emptied and hauled offsite by a manure removal service. This waste would be taken to a local composting facility, rather than a landfill. Therefore, the Proposed Project would not adversely affect the regional landfill. Therefore this impact would be ***less than significant***.

101 Josh Lelko, Engineering Technician, Placer County Water Agency, written communication to Grace Kamphefner, February 9, 2018.

Issues		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than Significant Impact	No Impact
19.	**MANDATORY FINDINGS OF SIGNIFICANCE.**				
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 impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that 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?	☐	■	☐	☐

Discussion

a. As discussed in Item 4, the project site provides habitat for several listed species, as well as wetlands. The Proposed Project would not adversely affect most of those resources. The jurisdictional wetlands would be avoided. Habitat for one plant species, Sanford's arrowhead, Northwestern pond turtle and California red-legged frog, which is tied to the wetlands and pond, would similarly be avoided. The habitat and species that could be affected by project development, such as the elderberry shrub, a CNPS 1.2b plant, nesting raptors and migratory birds and oak trees would be protected from disturbance by Mitigation Measures 3 and 4. For these reasons, the Proposed Project would not

reduce any species below self-sustaining levels or eliminate a plant or animal community. No historic buildings would be removed, but unknown subsurface historic or prehistoric resources, if any are present, could be disturbed by project construction. However, with implementation of mitigation measures identified in Item 5, impacts on cultural resources would be ***less than significant*.**

b. The Proposed Project would contribute to cumulative traffic congestion, air quality degradation, noise and demand for fire protection services and water supply. As discussed throughout this Initial Study, the Proposed Project's contribution to cumulative impacts would not be considerable, so the cumulative impacts of the project would be ***less than significant***.

c. As discussed throughout this Checklist, potential impacts on human beings that could occur as a result of the Proposed Project are less than significant or could be reduced to ***less-than-significant*** levels with mitigation.

4. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

4. Environmental Factors Potentially Affected

Those factors checked below involve impacts that are “Potentially Significant”:

[ ] Aesthetics	[ ] Agriculture Resources	[ ] Air Quality
[ ] Biological Resources	[ ] Cultural Resources	[ ] Geology/Soils
[ ] Greenhouse Gas Emissions	[ ] Hazards & Hazardous Materials	[ ] Hydrology/Water Quality
[ ] Land Use/Planning	[ ] Mineral Resources	[ ] Noise
[ ] Population/Housing	[ ] Public Services	[ ] Recreation
[ ] Transportation/Traffic	[ ] Tribal Cultural Resources	[ ] Utility/Service Systems
[ ] Mandatory Findings of Sig.	[X] None After Mitigation	

5. DETERMINATION

5. Determination

On the basis of this Initial Study:

☐ I find that the proposed project WILL NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that as originally submitted, the proposed project could have a significant effect on the environment; however, revisions in the project have been made by or agreed to by the project proponent which will avoid these effects or mitigate these effects to a point where clearly no significant effect will occur. 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.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on the attached Environmental Checklist. An ENVIRONMENTAL IMPACT REPORT is required, to analyze the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or (MITIGATED) NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or (MITIGATED) NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Robert King
Town Planner
Town of Loomis

May 21, 2018
Date

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7. REPORT PREPARERS

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APPENDIX

TRAFFIC IMPACT ANALYSIS AND APPENDICES

ON DISK