State Route 35
Distributed Antenna System Project

San Mateo County, California

Draft Initial Study/Mitigated Negative Declaration

September 2011

Prepared for:

California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

Prepared by:

RMT, Inc.
4 West Fourth Avenue, Suite 303
San Mateo, California 94402

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PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

MITIGATED NEGATIVE DECLARATION

EXTENET SYSTEMS (CALIFORNIA) LLC (EXTENET) APPLICATION

A. 10-06-004 Installation of Fiber Optic Cable and Related Facilities

INTRODUCTION

Pursuant to Public Utilities Code Section 1001 and Decision No. 06-04-063, ExteNet Systems (California) LLC (ExteNet) has filed an Application with the California Public Utilities Commission (CPUC) for authority to engage in ground-disturbing outside plant construction related to the installation of fiber optic cable and related node facilities (collectively, "Distributed Antenna System" or "DAS"), primarily within the right-of-way along a portion of State Route 35 (SR 35) in San Mateo County, California. The Application was filed on June 7, 2010, and includes the Proponent's Environmental Assessment (PEA) prepared by ExteNet and required fee pursuant to Rules 2.4 and 2.5 of the CPUC's Rules of Practice and Procedure. Under the CPUC's Rules, approval of this project must comply with the California Environmental Quality Act (CEQA), including an assessment of the potential environmental impacts of the proposed project. This Mitigated Negative Declaration has been prepared based upon the assessment of potential environmental impacts outlined in the attached Initial Study.

Pursuant to CEQA, the CPUC must prepare an "Initial Study" for discretionary projects such as the proposed project to determine whether the project may have a significant adverse effect on the environment. If an Initial Study prepared for a project indicates that such an impact could occur, the CPUC would be required to prepare an Environmental Impact Report (EIR). If the Initial Study does not reveal substantial evidence of such an effect, or if the potential effect can be reduced to a level of insignificance through project revisions, then a Mitigated Negative Declaration can be adopted (Section 21080; CEQA Public Resources Code). This Mitigated Negative Declaration has been prepared based on the assessment of the Initial Study prepared for the ExteNet SR 35 DAS Project.

PROJECT DESCRIPTION

This Mitigated Negative Declaration analyzes ExteNet's proposed Distributed Antenna System Project located within Caltrans and San Mateo County Right-of-Ways along SR 35 and other local roadways, San Mateo County, California. The proposed project would consist of the following four phases:

- Phase 1: Installation of 1,187 linear feet (0.23 miles) of fiber-optic PVC conduit and hand holes. Installation would occur via trenching, excavation, and boring;
- Phase 2: Installation of 17 fiber-fed antenna nodes with associated fiber-optic communications equipment. The nodes will be placed on either existing, newly-installed, or replaced wooden utility poles;

- Phase 3: Installation and splicing of 66,898 feet (12.67 miles) of fiber-optic cable in existing conduit, in newly installed conduit, and on existing and newly installed utility poles. Installation of new wooden utility service poles at specific node locations to bring fiber-optic cable and electricity to node locations; and
- Phase 4: Connection of the DAS system to an existing cell site base station south of Node # 52.

PURPOSE AND NEED

The proposed project is needed to provide added diversity within the existing telecommunications system, and would ensure that existing systems remain compatible with future technology advances in fiber optic equipment. The proposed project would provide greater bandwidth, multiple modes of communication compatible with existing and evolving systems, more predictable delivery of bandwidth, and greater control over the ordering, provisioning, and management of this bandwidth to better meet the growing bandwidth needs of customers. Finally, the communications system would provide wireless phone coverage in an area that currently does not have any such coverage. This new coverage will enhance public safety, as the network may carry 911 traffic.

The system will be capable of carrying traffic that is classified as broadband, thereby enhancing the development of an advanced telecommunications infrastructure in California. Additionally, the proposed project would expand and enhance California's national and international telecommunications access and the nation's existing and future demands for telecommunications services by enabling more networks to exchange traffic across California and enhancing the reliability thereof using high-quality, state-of-the-art fiber optic technology. The proposed project would increase competitive pressures among existing telecommunications carriers, and promote opportunities for economic growth in California as businesses shift their focus to information services and technology.

NEGATIVE DECLARATION MITIGATION MEASURES

The following mitigation measures are recommended to reduce project-related impacts to a less than significant level.

Aesthetics

Applicant Proposed Measure (APM) Aesthetics-2: Existing wood utility poles, or replacement wood poles at the same locations, will be used for all aerial cable conduit. New poles associated with the project will be limited to the 17 communication node locations.

APM Aesthetics-4: Wood poles will be used for all new poles to blend with surrounding trees. Node equipment, including galvanized risers, electrical meters, repeaters, and fiber optic splice boxes, will be painted brown in color to help them blend into the surrounding natural environment. With the exception of Node #8, antennae around each new utility pole will be positioned in a single circle to minimize the visual presence of the nodes.

Mitigation Measure Aesthetics-1: To maintain the visual integrity of the Skeggs Point scenic vista area, all equipment associated with construction of Node #8 shall be removed from the site daily.

Mitigation Measure Aesthetics-2: All construction activities associated with Node #8 shall occur during weekdays with no construction activities occurring during weekends or holidays.

Mitigation Measure Aesthetics-3: The antenna array on Node #8 shall be positioned in a circle close

to the utility pole to conform to the design of other communication nodes that are part of the project.

Mitigation Measure Aesthetics-4: All communication node features will include integral non-reflective coloring or be painted to be a non-reflective brown color in order to minimize glare created by these facilities.

Air Quality

Mitigation Measure Air Quality-1: The following Best Management Practices shall be implemented to reduce construction air quality impacts:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours to any complaint. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Biological Resources

APM Biology-1: A pre-construction nesting survey by a qualified biologist shall be conducted for nesting birds and special-status bird species in the project alignment and buffer area. If no nesting birds or special-status bird species are found, project activities will proceed and no further mitigation measures will be required. If active nests are identified in these areas, the qualified biologist will determine the appropriate avoidance buffer taking into consideration existing noise of the roadway and proximity of work to the roadway. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site.

Mitigation Measure Biology-1. Prior to project construction **and in the appropriate blooming period**, a qualified botanist shall perform a botanical survey to determine the presence of any special-status plant species within the project alignment. If any special status plant species are determined to be present within the alignment, one of the following mitigation measures shall be implemented:

- The project alignment will be modified to completely avoid biologically sensitive areas; or
- The areas surrounding the special-status plants shall be avoided and protected by the installation of high-visibility construction fencing and signage designating the environmentally sensitive area; plywood or silt fences may also be installed as needed to further protect the special-status plants from sediment-laded stormwater or fill dirt. Worker-awareness tailgate training shall be implemented to inform all workers of this sensitive area.
- Where impacts to sensitive plants cannot be avoided, a plan shall be prepared by a qualified biologist for restoration (as well as an attempt at relocation of the individual plant) and seeds of the plant shall be collected. The plan shall include at a minimum (a) the location of where the plant shall be seeded or replanted, with preference for on-site replacement such as over the pipeline route; (b) the plant species and seeding rate; (c) a schematic depicting the replanting or seeding area; (d) the planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on-site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. The plan shall be prepared and implemented prior to allowing disturbance within 100 feet of the plant.
- Five federally and/or state listed threatened or endangered plant species have a low potential for occurrence. If one of these species is identified and cannot be avoided, CDFG and USFWS shall be consulted, and the restoration plan or equivalent measures shall be approved by the agencies prior to allowing any disturbance within 100 feet of the plant.

Mitigation Measure Biology-2. Prior to project construction each morning, a qualified biologist shall perform daily sweeps for the presence of any special-status animal species within the project alignment or within 50 feet of construction activities. If any special status animal species are determined to be present within the alignment, the following mitigation measures shall be implemented, as appropriate:

- The biologist shall identify any potential kangaroo rat or badger burrows within 50 feet of construction activities. The burrow shall be marked and avoided and any work that must be performed in proximity of the burrow (within 50 feet) shall be performed in the presence of the biological monitor. The biological monitor shall have the authority to stop work and implement new buffers if the animal is showing signs of distress.
- The biologist shall identify any woodrat nests. Woodrat nests shall be avoided and any work that must be performed in proximity of the nest (within 50 feet) shall be performed in the presence of the biological monitor. The biological monitor shall have the authority to stop work and implement new buffers if the animal is showing signs of distress.
- Trees within 50 feet of the work area shall be checked for bats. If bats are found, the trees shall be avoided and any work that must be performed in proximity of the tree shall be performed in the presence of the biological monitor. The biological monitor shall have the authority to stop work and implement new buffers if the animal is showing signs of distress.
- A biological monitor shall be present during project construction. If a special status animal species is found foraging or traveling through the project construction alignment, construction shall be halted in the area of the animal until the animal moves out of harms way on its own.

- Exclusion fencing can be installed at the recommendation of the biologist and in accordance with CDFG and/or USFWS regulations and recommendations
- If special status invertebrates are found within the project areas, they will be avoided or relocated by the qualified biologist.
- No work shall commence if California red-legged frogs, San Bruno elfins, or unsilvered fritillarys are found during the morning sweep until USFWS and/or CDFG is contacted and recommended measures are implemented.

Mitigation Measure Biology-3: Construction best management practices shall be implemented during project construction to minimize impacts to wildlife in the project area, and will include the following:

- Any holes, trenches, pits, and tanks that are still open at the end of the construction work day shall either be covered or fenced temporarily to prevent entry.
- Any holes, trenches, pits, and tanks that are still open at the end of the construction work day shall be monitored and inspected by construction personnel at the end of the construction day to determine whether trapped wildlife are present before hole closure.
- The project route shall be restored to its original condition upon completion of construction activities. This restoration shall include re-vegetation where necessary. Re-vegetation shall use plant materials native to the area.
- No pets shall be allowed on the project site.
- No animals shall be deliberately injured or killed during construction activities.

Mitigation Measure Biology-4: Pre-construction nesting surveys shall be conducted not more than 30 days prior to construction if construction occurs in the nesting season (March 1 through August 31), and shall be repeated if no work occurs within 30 days. Pre-construction nesting surveys will not be required if construction occurs outside the nesting season. The surveys shall be conducted for areas within 500 feet of the project alignment. If during the surveys, marbled murrelet nests are identified, no work within 500 feet of such nests shall commence until USFWS and CDFG are consulted. Work within 500 feet of a nest shall be avoided until a qualified biologist has determined the young have fledged and are independent of the nest site. Other equivalent measures approved by USFWS and CDFG can be implemented in lieu of the buffer.

Cultural Resources

APM Cultural Resources-1: Should any signs of historic or archeological resources be observed during excavation or ground-disturbing activities, the following measures shall be implemented:

- If archeological resources are discovered during excavation or ground disturbing activities, a certified archeologist shall be retained by the applicant to monitor construction excavations and to produce a mitigation plan for the proposed project. Archeological monitoring shall include inspection of exposed materials to determine if artifacts are present. The monitor shall have authority to temporarily divert grading away from exposed resources in order to recover specimens.
- The certified archeologist shall record all details of the find on field data forms, and shall prepare monthly progress reports to be filed with the applicant and the CPUC.

- Recovered artifacts shall be prepared to the point of curation, identified by qualified experts, listed in a database to allow analysis, and deposited in a designated repository.
- The certified archeologist shall prepare a final mitigation report to be filed with the applicant, the CPUC, and the repository.
- If human remains are encountered during the course of excavation, all construction activities in the vicinity of the find shall cease, and the San Mateo County coroner and Native American representatives (if appropriate) shall be contacted to identify the find and determine the proper course of action.

APM Cultural Resources-2: If fossil or other paleontological materials are observed during the course of ground disturbing activities, such ground disturbing activities shall cease and a certified paleontologist shall be retained to monitor all further excavation activities at the site of the discovery. Paleontological resources discovered during construction activities shall be reported immediately to the applicant and the CPUC. The certified paleontologist shall immediately evaluate the paleontological resources that have been discovered to determine if they are significant, and shall prepare a monitoring and mitigation plan that will address what monitoring will take place and how paleontological resources will be handled. The paleontological monitor shall be empowered to temporarily halt or redirect excavation activities in order to evaluate and recover the paleontological resources.

Upon completion of the evaluation and recovery of the paleontological resources, a report of findings shall be prepared by the certified paleontologist and submitted to the applicant and the CPUC. This report shall include the following at a minimum:

- a statement of the type of paleontological resources found
- the methods and procedures used to recover the paleontological resources
- an inventory of the specimens recovered
- a statement of the scientific significance of the paleontological resources

The paleontological specimens recovered as a result of mitigation shall be donated to a qualified scientific institution where they would be afforded long-term preservation to allow future scientific study.

Mitigation Measure Cultural Resources-1: ExteNet shall require all contractors and subcontractors to inform the crew about the potential for archaeological and paleontological discoveries during construction. A qualified archaeologist and paleontologist shall provide a brief training session to all construction personnel on how to identify such resources, including a description of the kinds of cultural resources that might be encountered during construction. The training session shall also outline the appropriate responses to take if such discoveries are made during construction activities.

Geology and Soils

APM Geology-1: The applicant shall use excavated materials to backfill trenches in order to minimize erosion and soil settlement.

APM Geology-2: Unpaved areas shall undergo a grading process at the end of construction activities to restore the gradient to its original state. The disturbed area shall then be fertilized, mulched, and seeded with native vegetation.

Mitigation Measure Geology-1: Prior to the issuance of any grading permits, a geotechnical investigation and report shall be prepared by a qualified Geotechnical Engineer and submitted to Caltrans for review and confirmation that the proposed project fully complies all applicable codes and standards. The report shall determine the proposed project's surface geotechnical conditions and address potential structural hazards. The recommendations, measures, design criteria, and specifications set forth in the geotechnical investigation and report shall be followed and incorporated into the project.

Hazards and Hazardous Materials

APM Hazards-1: The applicant shall perform the following tasks in order to minimize the potential for hazardous materials contamination through the transport, use, or disposal of hazardous materials:

- The applicant shall prepare an SPCP for construction activities. At a minimum, the plan will include standard operating procedures for spill prevention, hazard assessment, spill prevention and containment, emergency response procedures, and closing the spill incident.
- Before construction begins, site workers will be trained to recognize and respond to spills in accordance with the SPCP, and will be informed regarding which authorities to contact in the event of a spill. Construction crews will have an emergency spill kit containing absorbent booms and pads, personal protective equipment, and emergency response guidance.
- Construction equipment will be maintained and kept in operating condition to reduce the likelihood of line breaks and leakage. Any vehicles with chronic or continuous leaks will be removed from the construction site and repaired before being returned to operation.
- Absorbent material or drip pans will be placed underneath vehicles during equipment maintenance or refueling. Refueling will take place only in designated areas. Any fluids drained from equipment will be collected in leak proof containers and taken to an appropriate disposal or recycling facility.
- Human waste at the construction area will be disinfected. Portable chemical toilets will be used. The toilets will not be placed near environmentally sensitive areas. A commercial worker will maintain the self-contained chemical toilets in good working order to ensure that there are no leaks and will pump the toilets as necessary to prevent overflow. The vendor will be responsible for off-site disposal of the wastes.
- All hazardous waste generated if a spill occurs during construction will be disposed of according to appropriate state and federal regulations. The appropriate disposal method will depend on the type of waste generated. Waste oils and other wastes considered hazardous in California will be transported by an RCRA-certified treatment, storage, and disposal facility and disposed at a Class I hazardous waste landfill.
- ExteNet shall require all contractors to provide training regarding the proper handling and/or storage of potential fire hazards, potential ignition sources (such as

smoking or sparking equipment), and appropriate types of fire protection equipment.

APM Hazards-2: The applicant shall take the following measures to reduce the risk of accidental fires, vehicle collisions, and other hazardous situations and events:

- The construction contractor will develop and implement a Health and Safety Plan consistent with 29 CFR 1910 (OSHA Standards) and 29 CFR 1926 (OSHA Safety and Health Regulations for Construction). The Health and Safety Plan will identify physical and chemical hazards that could result from proposed operations.
- ExteNet shall require all contractors to train their construction crews in the following safety measures: trenching and excavation safety, work zone safety, cardiopulmonary resuscitation (CPR), spill prevention and control, and driving safety.

APM Hazards-3: The applicant shall identify all utility lines within the project alignment prior to any construction activities to reduce the possibility of rupturing, severing, or damaging gas, electric, or sewer lines located in the project region.

APM Hazards-4: Project personnel will be required to smoke only in their vehicles and dispose of cigarette butts properly.

Hydrology and Water Quality

APM Hydrology-1: The applicant shall implement the following BMPs throughout project construction activities:

- The applicant shall develop an Erosion Control Plan. Temporary sediment barriers shall be placed near storm drains and sensitive habitat areas adjacent to ground disturbing activities to prevent any construction materials, sediment, or debris from entering these areas. Such devices may include gravel bags, straw wattles, and silt fence. These devices shall be left in place until restoration activities are deemed successful and complete.
- Following installation of the communications system, trenched and excavated areas shall be compacted and graded to the natural contours of the area prior to construction activities, and reseeded with native vegetation.
- ExteNet shall require all contractors to train their construction personnel on the sensitive types of water resources found in the local area, and on the measures to avoid or minimize impacts to these resources. As necessary, orange construction fencing and warning signage will be placed around water resources in the vicinity of ground-disturbing activities.
- The applicant shall develop and implement a SPCP. This plan will describe potential sensitive water resources in the project area, measures to avoid and minimize impacts to these resources, and measures to deal with any accidental spills occurring during construction of the proposed project.
- Containment and cleanup materials shall be present at all boring sites in case a frac-out or spill of boring materials occurs. Containment equipment may include such

devices as sand bags, straw wattles, sedimentation fencing, and portable vacuum trucks and pumps.

Noise

APM Noise-1: ExteNet shall comply with the construction hours of operation established by the San Mateo County Noise Ordinance. Approved construction hours take place between 7:00 AM to 6:00 PM Monday through Friday and 9:00 AM to 5:00 PM on Saturdays. Construction is prohibited on Sundays, Christmas, and Thanksgiving.

APM Noise-2: The following BMPs shall be implemented during construction of the proposed project to minimize noise impacts:

- All construction equipment shall be equipped with improved noise muffling, and shall maintain the manufacturer's recommended noise abatement measures, such as mufflers, engine covers, and engine isolators in good working condition.
- Stationary equipment that generates noise levels in excess of 65 dBA Leq shall be located as far away from existing rural residential areas as possible.
- Heavy duty vehicle storage and start-up areas shall be located a minimum of 150 feet from occupied residences where feasible.
- All equipment shall be turned off if not in use for more than five minutes.

Transportation and Traffic

APM Traffic-1: Project traffic control measures will conform to the specifications of Caltrans and San Mateo County. The contractors retained for project construction will follow Caltrans' Standard Plan T13 ("Traffic Control System for Lane Closure On Two-Lane Conventional Highways") to manage traffic during the construction of the Project and to ensure that construction activity will not create unsafe traffic conditions. The Plan will include the use of portable warning signs, flaggers, and cones/barricades that will separate the construction activities from traffic.

APM Traffic-2: Complete closure of any residential or commercial driveway shall not occur during project construction. If the Project requires work across any driveways during trenching or excavation, large metal plates shall be placed across the trenches or excavated areas in order to allow ingress and egress for local residents, business owners, and emergency vehicles.

APM Traffic-3: In the event of an emergency, project activities will be suspended in order to allow through access on SR 35 for emergency vehicles and operations.

Mitigation Measure Traffic-1: Lane closures will be limited to non-peak travel periods (between 9 AM and 4 PM on weekdays) to minimize traffic delays on SR 35.

ENVIRONMENTAL DETERMINATION

The Initial Study was prepared to identify the potential effects on the environment from the installation and construction of a DAS telecommunications project primarily within the Right-of-Way of SR 35 in San Mateo County, California, and to evaluate the significance of these effects. The Initial Study was based on information presented in ExteNet's Proponents Environmental Assessment filed on June 7, 2010.

Based on the Initial Study, the project as proposed by ExteNet, including the mitigation measures proposed herein, would have no significant impacts in the areas of aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, recreation, transportation & traffic, and utilities and service systems.

Review Period

All comments regarding the correctness, completeness, or adequacy of this Mitigated Negative Declaration must be received by the CPUC by no later than 5:00 p.m. on Monday, October 3, 2011.

Contact Person

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Email: Highway35@rmtinc.com

09/01/11

Ken Lewis, Program Manager — Date
Energy Division
California Public Utilities Commission

INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

1. Project Title:

ExteNet Systems (California) LLC State Route 35 Distributed Antenna System Project
Application Number A.10-06-004

2. Lead Agency Name and Address:

California Public Utilities Commission (CPUC)
Energy Division
505 Van Ness Avenue
San Francisco, CA 94102

3. Contact Person and Phone Number:

Andrew Barnsdale, Project Manager
Energy Division – Analysis Branch
(415) 703-3221
e-mail: bca@cpuc.ca.gov

4. Project Location:

The proposed project is located within Caltrans and San Mateo County Rights-of-Way along State Route 35 (SR 35) and other local roadways, San Mateo County, California.

5. Project Sponsor's Name and Address:

ExteNet Systems (California) LLC
3030 Warrenville Road
Suite 340
Lisle, IL 60532

6. General Plan Designation:

Land use designations within the project area are designated by the San Mateo County General Plan and include Open Space, Residential, Public and Private Recreation, and Timber Production.

7. Zoning:

Zoning designations within the project area are designated by the San Mateo County Zoning Ordinance and include Resource Management, Timber Preserve Zone, and several low-density single-family zoning designations.

8. Description of the Project:

This Mitigated Negative Declaration analyzes ExteNet's proposed Distributed Antenna System Project located within Caltrans and San Mateo County Right-of-Ways along SR 35 and other local roadways, San Mateo County, California. The proposed project would consist of the following four phases:

- Phase 1: Installation of 1,187 linear feet (0.23 miles) of fiber-optic PVC conduit and hand holes. Installation would occur via trenching, excavation, and boring;
- Phase 2: Installation of 17 fiber-fed antenna nodes with associated fiber-optic communications equipment. The nodes will be placed on either existing, newly-installed, or replaced wooden utility poles;
- Phase 3: Installation and splicing of 66,898 feet (12.67miles) of fiber-optic cable in existing conduit, in newly installed conduit, and on existing and newly installed utility poles. Installation of new

wooden utility service poles at specific node locations to bring fiber-optic cable and electricity to node locations; and

- Phase 4: Connection of the DAS system to an existing cell site base station south of Node # 52.

9. Surrounding Land Uses and Setting:

The proposed project site is located within existing transportation corridors. Ownership of the project site is within public jurisdictions. Due to the developed nature of the project site as a transportation and utility corridor, and the existence of an above ground power line along SR 35 on which ExteNet will install the majority of the proposed project, Project installation is expected to be achieved with few engineering or environmental constraints. Forestlands surround the project site, and scattered rural residences are found in the area surrounding the project site.

10. Other Public Agencies Whose Approval is Required:

In addition to a grant of construction authority from the CPUC, ExteNet may be required to obtain the following permits:

- Combined Use Permit/Architectural Control Permit from the San Mateo County Planning and Building Department
- Electrical permits from the San Mateo County Planning and Building Department
- Encroachment permits from the California Department of Transportation, District 4

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality	☐ Land Use / Planning
☐ Mineral Resources	☐ Noise	☐ Population / Housing
☐ Public Services	☐ Recreation	☐ Transportation / Traffic
☐ Utilities / Service Systems	☐ Mandatory Findings of Significance	

ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

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

I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. 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 (EIR) is required. ☐

I find that the Proposed Project MAY have a "potentially significant impact" or "potentially significant impact unless mitigated" 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 attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An EIR is required, but it must analyze only 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 pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the Proposed Project, nothing further is required. ☐

09/01/11

Ken Lewis, Program Manager
Energy Division
California Public Utilities Commission

Date

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List of Acronyms and Abbreviations

AMSL	Above Mean Sea Level
APM	Applicant Proposed Measure
AB 32	Assembly Bill 32
AB 2588	Assembly Bill 2588
ABAG	Association of Bay Area Governments
BAAQMD	Bay Area Air Quality Management District
BMPs	Best Management Practices
CARB	California Air Resources Board
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
C/CAG	San Mateo County/City Association of Governments
CDFG	California Department of Fish and Game
CDTSC	California Department of Toxic Substances Control
CDWR	California Department of Water Resources
CGS	California Geological Survey
CEQA	California Environmental Quality Act
CERT	Community Emergency Response Team
CH_4	Methane
CNPS	California Native Plant Society
CNDDB	California Natural Diversity Database
CPUC	California Public Utilities Commission
CRA	California Raptor Act
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2-e	Carbon dioxide equivalent
CAP	Clean Air Plan
CPR	Cardiopulmonary Resuscitation

CMP	Congestion Management Program
DAS	Distributed Antenna System
ECP	Erosion Control Plan
EO S-3-05	Executive Order S-3-05
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
GHG	Greenhouse Gas
HDB	Horizontal Directional Boring
HFC	Hydrofluorocarbon
I-280	Interstate 280
IS/MND	Initial Study/Mitigated Negative Declaration
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O_3	Ozone
OAP	Ozone Attainment Plans
OES	Office of Emergency Services (San Mateo County)
OSHA	California Occupational Safety and Health Administration
PEA	Proponent's Environmental Assessment
PFC	Perfluorocarbon
PG&E	Pacific Gas and Electric Company
PM	Particulate Matter
PM_{10}	Particulate Matter Less Than 10 Microns in Diameter

$PM_{2.5}$	Particulate Matter Less Than 2.5 Microns in Diameter
PVC	Polyvinyl Chloride
RCRA	Resource Conservation and Recovery Act
RWQCB	Regional Water Quality Control Board
SF_6	Sulfur Hexafluoride
SP	Service Population
SPCP	Spill Prevention and Contingency Plan
SR 1	State Route 1
SR 35	State Route 35
SR 84	State Route 84
SR 92	State Route 92
SFBAAB	San Francisco Bay Area Air Basin
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

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1: Introduction

1.1 Proposed Project

ExteNet Systems (California) LLC (ExteNet) has filed an Application with the California Public Utilities Commission (CPUC) to construct the State Route 35 (SR 35) Fiber-Fed Distributed Antenna System Project (project). The project includes installation of fiber optic cable and related node facilities (collectively, "Distributed Antenna System" or "DAS") along a portion of SR 35 in San Mateo County, California.

The project components would be located primarily within the right-of-way of SR 35 near the Town of Woodside, California. The remainder of the project alignment would be located within County road rights-of-way and an existing Pacific Gas and Electric (PG&E) utility easement that roughly parallels SR 35. The project, which would be constructed in four phases over a period of 11 weeks (3 months), would include phased installation of the DAS components, including:

- Fiber-optic polyvinyl chloride (PVC) conduit
- Hand holes (concrete utility enclosures that allow access to underground conduits and utilities)
- Wooden utility poles
- Fiber-fed antenna nodes and associated equipment
- Fiber-optic cable

The DAS would be connected to an existing cell site base station located approximately 0.75 miles south of Node # 52. The project location is shown in Figure 1.1-1, the project alignment is shown on Figure 1.1-2, and the project alignment with background topography is shown in Figure 1.1-3.

1.2 CEQA Lead and Responsible Agencies

The CPUC is the lead state agency for review of the project under the California Environmental Quality Act (CEQA). This Initial Study/Mitigated Negative Declaration (IS/MND) includes an assessment of the potential environmental impacts of the proposed project. The MND has been prepared based upon the assessment of potential environmental impacts outlined in this IS. This IS/MND has been prepared pursuant to CEQA, the amended State CEQA Guidelines (14 CCR 15000 et seq.), and the CPUC CEQA rules (Rules 17.1, 17.2, and 17.3).

CEQA requires that the CPUC prepare an IS for discretionary projects, such as the proposed project, to determine whether the project may have a significant adverse effect on the environment based on substantial evidence. The CPUC would be required to prepare an Environmental Impact Report (EIR) if substantial evidence indicates that the proposed project may result in significant effects that cannot be mitigated. An MND can be adopted by the CPUC if the IS does not reveal substantial evidence of significant impacts, or if the potential effects can be reduced to a level of insignificance through project revisions (Section 21080; CEQA Public Resources Code).

An MND has been prepared based on the assessment in this IS prepared for the SR 35 Fiber-Fed Distributed Antenna System Project.

Figure 1.1-1: Location Map

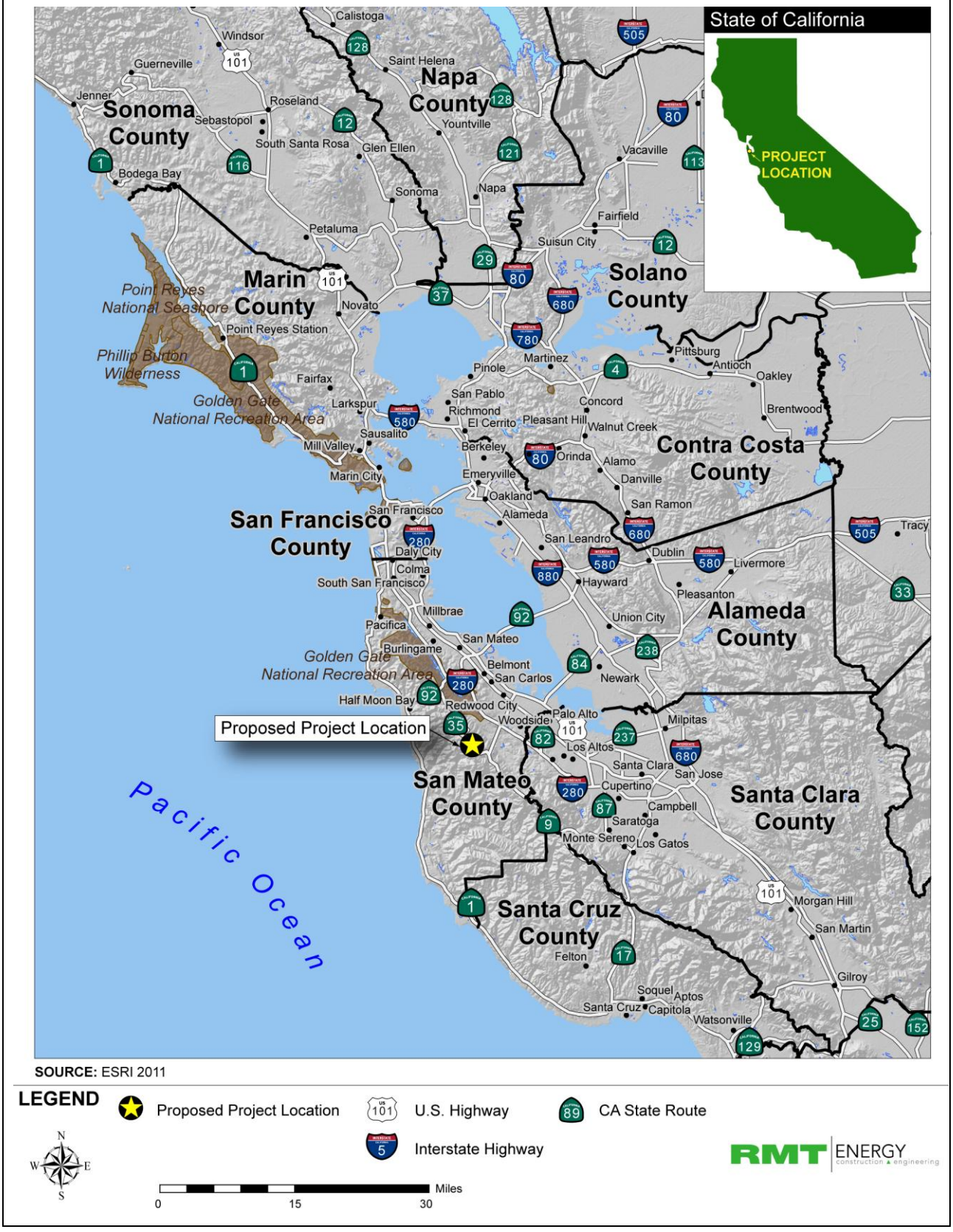


Figure 1.1-2: Project Alignment

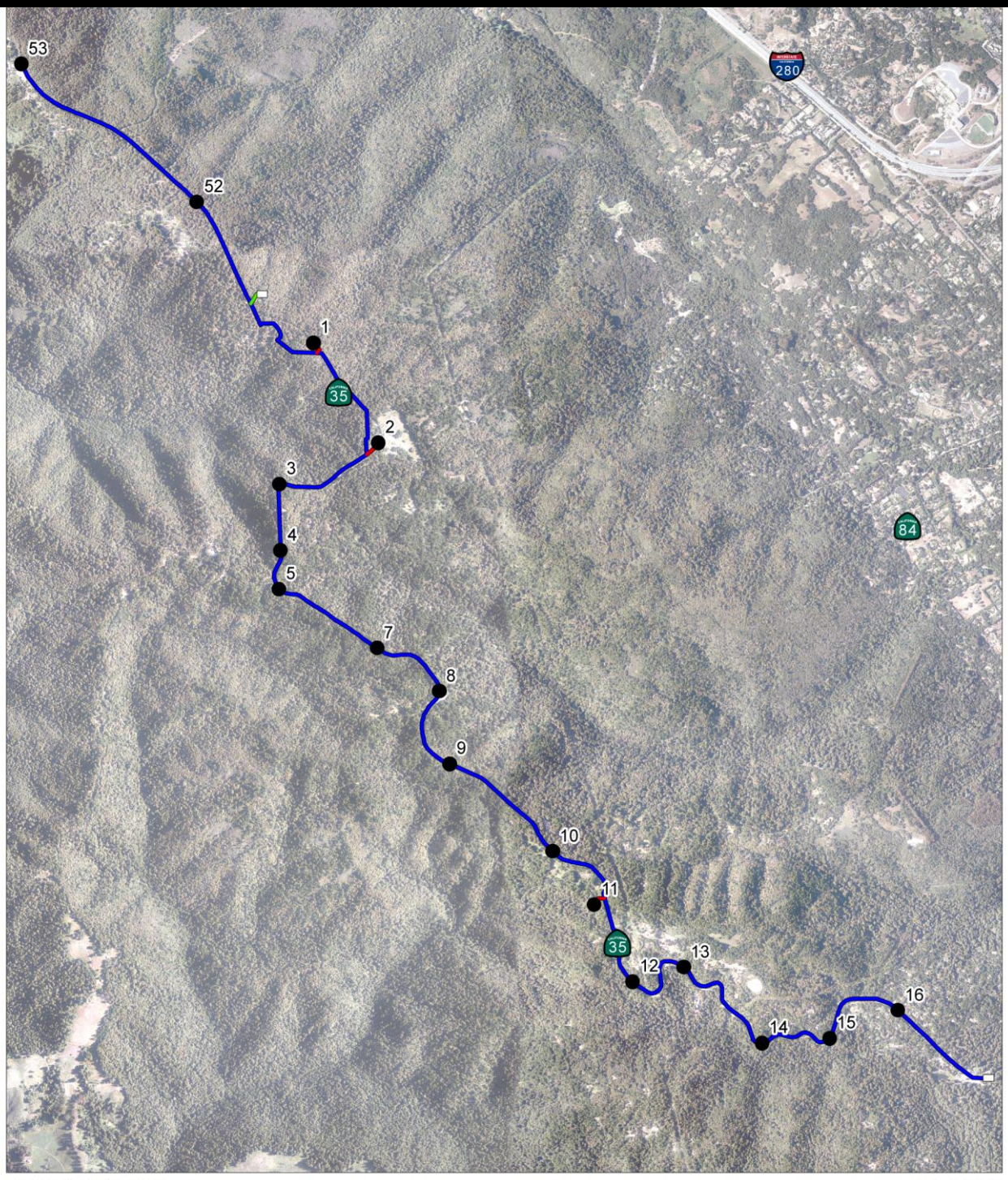
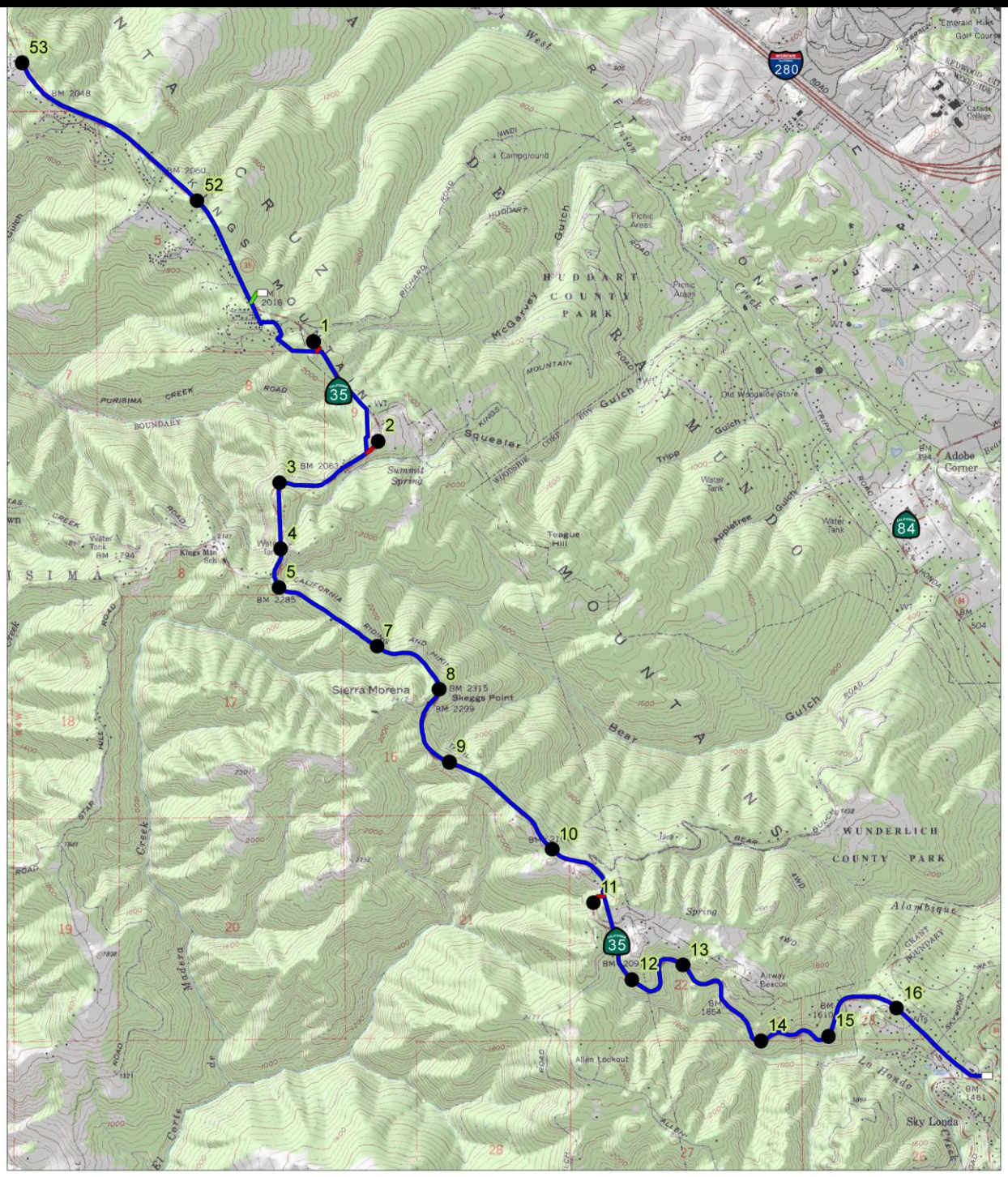


Figure 1.1-3: Project Alignment with Topography



2: Project Description

2.1 Project Objectives

The proposed project is intended to provide added capacity and technological diversity to the existing telecommunications system in the project area, and would ensure that existing systems remain compatible with future technology advances in fiber optic equipment. The proposed project would achieve the following goals:

- Provide greater telecommunication bandwidth
- Provide multiple modes of communication compatible with existing and evolving systems
- Provide more predictable delivery of telecommunication bandwidth
- Provide greater control over the ordering, provisioning, and management of telecommunication bandwidth to better meet the growing bandwidth needs of customers
- Provide wireless phone coverage in an area that is currently underserved with such coverage
- Enhance public safety by providing wireless communication coverage for emergency services and 9-1-1 traffic.

The enhanced telecommunication system would be capable of carrying traffic that is classified as broadband, thereby enhancing the development of an advanced telecommunications infrastructure in California. The proposed project would expand and enhance national and international telecommunications access and existing and future demands for telecommunications services by enabling more networks to exchange traffic across California. The proposed project would also enhance the reliability of the telecommunication network by using high-quality, state-of-the-art fiber optic technology.

The proposed project would increase competitive pressures among existing telecommunications carriers, and promote opportunities for economic growth in California as businesses shift their focus to information services and technology.

2.2 Project Description

2.2.1 REGIONAL LOCATION OF PROJECT AREA

The proposed project is located within San Mateo County, California, as shown in Figure 1.1-1. The project components would be located primarily within the right-of-way of SR 35 near the Town of Woodside, California. The remainder of the project alignment would be located within an existing PG&E utility easement that roughly parallels SR 35. The project alignment is shown in Figure 1.1-2, and the topography of the project area is shown in Figure 1.1-3.

The proposed project site is defined as the footprint of the proposed communications system components and the approximately 12.67-mile-long corridor for the new fiber cable. The project

area is defined as the 50-foot wide access corridor along the route, the construction laydown areas, and the access roads that would be used for construction.

2.2.2 PROJECT COMPONENTS

The project would consist of a fiber-fed DAS, and would be constructed in four phases:

- **Phase 1:** Installation of 1,187 linear feet (0.23 miles) of fiber-optic PVC conduit and fiber optic junction boxes (hand holes). Installation would occur via trenching, excavation, and HDB.
- **Phase 2:** Installation of 17 fiber-fed antenna nodes with associated fiber-optic communications equipment. These nodes contain the panel antenna array and associated electronic equipment for cellular communication services. The nodes would be placed on either existing or newly-installed wooden utility poles. The installation of new wooden utility service poles at specific node locations would bring fiber-optic cable and electricity to these node locations.
- **Phase 3:** Installation and splicing of 66,898 feet (12.67 miles) of fiber-optic cable in existing conduit, in newly installed conduit, and on existing and newly installed utility poles.
- **Phase 4:** Connection of the DAS system to an existing cell site base station located approximately 0.75 miles south of Node # 52, as shown on Figure 1.1-2.

The project components are described in detail in the PEA. Engineering drawings depicting the project route, location of conduit and pole installations, and the components of the proposed project are also included in the PEA. Each phase of the project is described in further detail below.

Phase 1 - Installation of Fiber-Optic Conduit and Hand Holes

ExteNet would install PVC conduit and hand holes during the first phase of construction. Approximately 95 percent of this conduit would be installed with HDB, while the remaining 5 percent would be installed through trenching and excavation. All new conduit would be placed either under the roadbed of SR 35 or along the shoulder of the roadway. The equipment for the underground fiber conduit construction and installation would include one bore rig and one backhoe. A total of nine workers would be required for this first phase of construction, and would include one rig operator, one locator, two laborers, and five traffic control workers.

Installation of Conduit

ExteNet would install approximately 1,187 linear feet (0.23 miles) of PVC conduit to hold fiber-optic cable. This conduit would be installed at three locations in order to connect the proposed nodes 1, 2, and 11 to the fiber-optic backbone of the newly installed communications system. Installation of conduit would take place within the public rights-of-way of SR 35. Conduit would be installed via a combination of HDB and trenching. Each construction method is described further below.

HDB and trenching activities would require us of one boring machine, one mini excavator, and three pickup trucks. The bore machine that would be used for this project is the smallest size bore machine in its class, with dimensions of 4 feet in width, 12 feet in length, and 6 feet in height. Four

laborers would staff the trenching/boring crew, and the combined trenching and boring activities would require 4 days to complete.

Horizontal Directional Boring. HDB is a non-invasive method of installing fiber-optic conduit. These bores can be steered or guided from one point to another. This procedure allows the bore machine to sit at ground level some distance from the desired end point, drill under the ground surface, and steer back to the surface at a pre-determined time and place. Directional boring avoids the need for direct surface disturbance, and avoids disturbance to aboveground objects.

Approximately 400 square feet of staging area would be required at each boring location. The staging areas for boring activities would occur within pre-disturbed areas within the SR 35 right-of-way. No vegetated areas would be disturbed during boring activities.

The directional bore drills a hole slightly larger than the conduit to be installed. In general, the limit on the angle of the bore is 15 degrees. A bentonite and water mixture is used to lubricate the bore, cool the drill, and keep the hole open by sealing the outside surface of the bore. Bentonite is a very fine-grained, non-toxic, natural clay. The slurry mixture is typically 15 to 20 percent bentonite, and the remainder is water. The slurry is circulated through the borehole under pressure and returns to the drill point (through the bore) carrying the cuttings. The mixture enters a recovery tank, where it is filtered to remove cuttings and is then reused. Once the bore reaches the target exit location, the conduit is attached to the drill and pulled back through the bore.

A 2-foot by 2-foot (4 feet square) area would be excavated during boring activities to provide entry and exit pits for these HDB operations. Potholing, as required, would be conducted to locate any utilities crossed during conduit installation activities.

Trenching. Trenching is a more invasive method of conduit installation than HDB, and involves using a backhoe or excavator to excavate a linear trench in which the fiber-optic conduit and facilities are placed. The trench would be typically 12 inches to 18 inches wide and 30 to 120 inches deep (depending on underground utilities encountered in the path of the proposed conduit). The side cast of excavated materials would cover an area of between 2 and 4 feet in width adjacent to the trench, and these side cast materials would be used to backfill the trench once conduit installation is complete. Conduit burial depth may vary or be increased due to permit requirements, presence of existing utilities, or other conditions that warrant additional depth to protect the system. Trenches would be excavated with a rubber-tired backhoe.

Conduit placement would begin immediately following trench excavation. A minimum clearance of 12 inches would be maintained between the utility and the conduit whenever utilities are encountered. Generally, the new facilities would be placed below the existing utilities so as not to interfere with their future maintenance.

Trenches would be backfilled before the end of each day's work, with the exception of excavations created for manholes. Any pit or hole left open overnight will be plated, signed, and fenced according to San Mateo County, Caltrans, and/or OSHA specifications.

Installation of Hand Holes

Fiber-optic junction boxes (hand holes) would be placed at each of the 17 newly installed communications nodes, and at the ends of each of the three underground conduit installation areas. These hand holes would provide locations from which to pull fiber-optic cable into the newly installed conduits, as well as allow access to the cable for repair and maintenance activities. Hand holes would be installed concurrently with the conduit installation component of the project. Vault boxes are often made of polymer concrete, fiber reinforced plastic, or fiberglass. Underground hand holes would measure approximately 17 inches long by 30 inches wide by up to 4 feet deep. Above ground hand holes will be smaller in size.

Hand hole vault box installation would involve excavation with a rubber-tired backhoe, placement of the vault box in the excavated area, and backfilling around the vault box. Backfilling would be accomplished by placing excavated material around the vault box with a rubber-tired backhoe and compacting the backfill with a hand-operated vibratory compactor.

Phase 2 - Installation of Wooden Utility Poles and Installation of Nodes and Associated Communications Equipment

The second phase of construction would involve the installation of 17 new wooden utility poles. Pole installation would involve excavation of a hole roughly the diameter of the wooden pole using an auger attached to a rubber-tired backhoe, placement of the pole in the hole, and backfill and compaction of excavated soil around the pole. The only ground disturbance would occur around where the hole is being drilled, in an area approximately 125 square feet in size. This area of disturbance would include approximately 100 square feet for the backhoe, crane, and rigging equipment, and 25 square feet for the staging of materials. Compaction of soil would be achieved by using a hand-operated vibratory compactor. Some minor trimming of trees may be required where poles are placed, but no trees would be removed as part of project construction. A certified arborist would be present to conduct any necessary tree trimming, and any tree trimming would comply with the San Mateo County Tree Ordinance. A small crane would be used to place the wooden poles into the holes.

After the installation of new poles is complete, ExteNet would install an array of up to 4 4 panel antennas on each of the 17 new wooden poles. ExteNet would then install an electrical meter, a repeater, and fiber optic splice boxes at each communications node.

Poles would be located in a contractor's yard offsite until they are needed on the project site. New poles would be brought to the project site on the day they are to be installed, and would be temporarily (less than one day) staged either on an existing road pullout or in a closed traffic lane.

Equipment for utility pole installation would include one boom truck, one small crane, and one vibratory compactor. Node installation would require one boom truck. Three workers would be required for utility pole installation, including one foreman and two laborers. Node installation would require two technicians.

Phase 3 - Installation of Fiber-Optic Cable

The installation of the fiber-optic cable would occur during the third phase of construction. Fiber-optic cable would be placed in the newly installed and existing conduit, and would be hung from the new and existing utility poles along the project alignment. Fiber-optic cable would be installed by pulling the cables from one hand hole to the next. Equipment required for this operation includes trailers to transport the cable, and truck-mounted mechanical pulling equipment. Although cable pulling does not disturb the ground surface physically, traffic control may be required for hand holes located within traffic lanes or road shoulders.

A pulling lubricant would be used to reduce friction while pulling the cable into the conduit. The lubricant would be introduced without pressure directly into the inner cell of the conduit, typically at a rate of less than 1 gallon per 1,000 feet. The lubricant dries to a non-toxic powder that remains in the conduit and hand hole system.

Aerial cable pulling would include placing fiber optic cable on existing and newly installed utility poles and installing anchors and associated pole line hardware. The cable installation would be conducted in three stages:

- Prepare the site by moving existing cable and telephone lines per General Order 95, Rule 94 separation requirements.
- Install the cable using the Stationary Reel Method, which involves a stationary cable trailer at one end and a pulling vehicle at the other. Fiber would be pulled in 8,000- to 9,000-foot lengths.
- Check for building slack loops at 1,000- to 1,200-foot intervals and secure the fiber-optic cable on pole line using anchors and pole line hardware.

Where necessary, one lane of traffic may be occupied by the construction. Cable installation activities at each end of a pulling operation would occupy approximately 100 linear feet each. Cable pulling activities at each end of a pulling operation would occupy approximately 500 square feet. A typical aerial crew would consist of the two aerial cable-placing bucket trucks with drivers, in-bucket operators, and one or two flagmen (depending on traffic conditions). A typical aerial cable placing operation would use the following equipment:

- 2 aerial cable-placing bucket trucks
- 1 cable reel trailer
- 2 supply and equipment trucks
- 1 pickup truck

Installation of the fiber-optic cable would take approximately 5 weeks. Only one cable installation crew would be working at any given time.

Phase 4 - Connection of Communications System to Existing Cell Site Base Station

Operation of the new communication system would involve connecting the system to an existing cell site base station. This cell site base station would serve as the heart of the communications system. The existing cell site base station is located toward the northern terminus of the project

alignment near the intersection of SR 35 and Silver Sky Way (see Figure 1.1-2). The communications system would be connected to this base station via an existing underground conduit.

2.2.3 STAGING AREAS

The majority of equipment to be used on the project site would be staged at an offsite contractor's yard. Bore machines may be staged overnight at a boring location on the shoulder of SR 35. Shoulder and pullout areas on SR 35 are already disturbed and do not occur near stream beds or other protected habitat areas. Equipment staged at these locations would be clearly marked with safety devices to insure that they do not interfere with traffic on SR 35.

2.2.4 GROUND DISTURBANCE AND SURFACE RESTORATION

Table 2.2-1 illustrates the total amount of ground disturbance anticipated for each phase project component.

Surface restoration would be the final step in the construction process. Generally, restoration involves returning the project site to its pre-construction condition or better.

Restoration would include pavement repair, curb and gutter reconstruction, and pavement re-striping, if needed and as appropriate wherever paved surfaces have been disturbed. Typical pavement repair includes cutting and removing a strip of asphalt or cement extending wider than the trench and running the entire length of the trench. This section of pavement is then replaced with new asphalt or cement after backfilling and compaction are completed. Compacting backfill to a minimum of 95% relative density in two courses provides for a structurally sound repair.

Restoration in unpaved areas would include grading to restore original contours, installing erosion control devices at locations susceptible to erosion, and seeding, mulching, and fertilizing to return the site to pre-construction conditions. Native vegetation would be used for all reseeding activities. Where landscaped areas are disturbed, the landscaping will be replaced to its pre-construction condition or better.

Table 2.2-1: Ground Disturbance by Project Component

Project Component	Acreage of Disturbance
Boring and trenching, conduit installation, installation of vault boxes	0.003 acres (500 square feet per section of new conduit, three sections total)
Installation of new poles, nodes, and associated equipment, installation of fiber-optic cable	0.195 acres (500 square feet per new pole and node, 17 nodes total)
Total Disturbance	**0.198 acres**

SOURCE: ExteNet Systems (California) LLC and Synthesis Environmental Planning 2010.

2.2.5 OPERATION AND MAINTENANCE

Operation and maintenance activities associated with a fiber-optic project are minimal. Operation and maintenance of the facilities would be performed by ExteNet, whose personnel would periodically patrol the project route to look for any damage to the system. If maintenance or repair activities have the potential to affect sensitive resources, ExteNet would contact the appropriate resource agencies to ensure environmental compliance.

2.2.6 PROJECT SCHEDULE

Construction is expected to begin after the CEQA environmental review process is completed, the CPUC makes a decision on whether to proceed with the project, and after all regulatory permits are obtained from the appropriate agencies. Construction is expected to take approximately 11 weeks (3 months) to complete. ExteNet plans to construct the project between 7:00 AM to 6:00 PM on weekdays, between 9:00 AM to 5:00 PM on Saturdays, and no construction would occur on Sundays or holidays. ExteNet intends to comply with conditions and work timeframe restrictions that Caltrans or San Mateo County may impose. All phases of the project would be constructed concurrently to ensure that the project is completed in the proposed time frame.

2.2.7 MITIGATION INCORPORATED INTO THE PROJECT

ExteNet has incorporated avoidance, mitigation, and restoration measures into the proposed project to reduce potential impacts on sensitive resources. Discussion of the measures can be found in the various impact discussions in Chapter 3, and are also outlined briefly below.

Pre-Construction Environmental Training

Pre-construction training would be conducted for all construction employees prior to the start of ground disturbing activities. The purpose of this training would be to inform construction supervisors, workers, and inspectors of any potential sensitive resources that may occur along the project route, to explain their importance and sensitivity to disturbance, to review regulatory protections accorded to these resources, and to describe the project controls and mitigation measures adopted for the project. Training would identify individual responsibilities regarding these resources and communication procedures. Pre-construction training would also cover construction practices, traffic controls, and health and safety practices.

Traffic Control

Traffic on SR 35 would need to be controlled and coordinated during project construction as the proposed project area is located predominantly within a public road right-of-way. Traffic control measures would conform to the specifications of Caltrans and San Mateo County.

Typically, traffic control would be set up for the day's work operation. One lane of traffic may need to be closed during work activities. During such periods, flagmen would be used to direct traffic in the construction zone. Delays would typically average 3 to 5 minutes. Steel plates would be placed over the excavation to provide temporary through access for emergency vehicles or where access to any residential or commercial driveway is obstructed by an open trench.

Noise Control

Project construction would result in a temporary increase noise levels, and ExteNet has proposed measures to keep the increase in temporary construction noise to a minimum. These measures include ensuring that noise muffling equipment is installed on all construction equipment, ensuring that noisy stationary construction equipment is located as far away as possible from sensitive noise receptors, and limiting equipment idling times.

No increase in noise levels would occur from the operational phase of the Project as no noise-producing equipment would be part of the project.

Dust Suppression

Dust associated with the proposed project would be generated by construction traffic and construction activities, such as excavation of soil, transport of excavated materials, and pavement sawing. This dust would be controlled by use of water trucks to keep the dust to a minimum. Water for dust suppression would be obtained from a private well near the project area. Additional measures, such as covering stockpiles of excavated materials, would be implemented as appropriate. Dust impacts at any one location are anticipated to be brief due to the relatively fast pace of construction.

Erosion Controls

Erosion controls would be used where necessary along the proposed project route, particularly in any areas of excavation or other ground disturbance. The most likely situations for use of these controls would be when construction activities occur near storm drains, streams, steep slopes, and other sensitive habitat areas. Control measures that may be used include silt fences, sand bags, certified weed-free straw wattles and straw bales, and other control measures as necessary. Construction vehicles would also be equipped with a vacuum pump for all ground disturbing activities to assist in the removal of wet soil.

Hazardous Materials Spill Prevention and Contingency Plan

Construction activities have the potential to release hazardous materials into storm drains, streams, and other sensitive habitats within the project area. The primary types of hazardous materials associated with the proposed project are petroleum-based products used in construction equipment. ExteNet intends to prepare and implement a Hazardous Materials SPCP to reduce the potential for release of these materials and to minimize the impacts associated with an inadvertent spill. This plan would evaluate potential spill scenarios, identify avoidance and prevention measures, and identify response actions.

2.2.8 KEY PERMITS AND APPROVALS

Key permits and approvals presumed necessary for construction of the proposed project are presented in Table 2.2-1.

Table 2.2-1: Key Permits and Approvals Potentially Required to Construct the Proposed Project

Jurisdictional Agency	Permit
San Mateo County Planning and Building Department	Combined Use Permit/Architectural Control Permit
San Mateo County Planning and Building Department	Electrical Permits
Caltrans District 4	Encroachment Permits (permit numbers 04096UK1683 and 04096UK1684)

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3: Environmental Setting and Environmental Impacts

3.1 Aesthetics

3.1.1 ENVIRONMENTAL SETTING

Regional Setting

The proposed project facilities are located along SR 35, a designated State Scenic Highway within an unincorporated area of San Mateo County. The Scenic Highway corridor extends for a distance of 23 miles from the Santa Cruz County line on the south to SR 92 on the north. SR 35, also referred to as Skyline Boulevard, generally follows the crest of the Santa Cruz Mountains separating San Francisco Bay from the Pacific Ocean. Scenic views of the Santa Cruz Mountains, Half Moon Bay, and San Francisco Bay can be found along the route. SR 35 is one of the few places on the Bay Area's southern peninsula from which the San Francisco Bay and the Pacific Ocean are visible simultaneously, due its high elevation and location.

The proposed overhead conduit alignment would be located along existing utility lines with new transmitter node facilities and new underground conduit proposed within the SR 35 right-of-way. The entire project area is within the Skyline State Scenic Corridor as designated by San Mateo County.

Methodology

The visual analysis for the project was prepared using the criteria identified in *Guidelines for Official Designation of Scenic Highways*, which is typically used by Caltrans for assessing the visual intrusion of facilities (Caltrans 2011). This method evaluates the perceptions of the project as seen from the motorist's view, the visual relationship between the project and its surroundings, and the project in light of the broader environment. Visual impacts are a function of physical change weighed against the viewer's exposure and sensitivity to that change.

Categories describing visual intrusion of power lines and communication facilities include:

- **Minor:** not easily visible from the road
- **Moderate:** visible, but does not dominate the scenic view
- **Major:** towers, poles, or lines dominate the view and the scenic view is degraded

Three visual traits as defined by the U.S. Department of Transportation, Federal Highway Administration (FHWA 1983) are used to characterize the level of visibility when determining if impacts are minor, moderate, or major. These traits are:

- **Intactness:** The integrity of visual order in the natural and built landscape, and the extent to which the landscape is free from visual encroachment.
- **Vividness:** The memorability of the visual impression received from contrasting landscape elements as they combine to form a striking and distinctive visual pattern.

- **Unity:** The degree to which the visual resources of the landscape join together to form a coherent, harmonious visual pattern. Unity refers to the compositional harmony or inter-compatibility between landscape elements.

Landscape Character

Landform

The general topography in the project area is a ridgeline setting that varies in its breadth. Elevation within the project alignment ranges between approximately 1,460 and 2,200 feet. The project alignment would be constructed within the right-of-way of SR 35, and therefore, topography within the project alignment proper is typically level to moderately steep, with portions of the route rising in elevation over long linear distances. The highway corridor is narrow with steep slopes on either side in some locations. Most often within the project area, SR 35 is located on one side or the other of the actual ridgeline.

Elements of the landform are described below:

- *Vegetation:* Vegetation communities along the route vary between relatively dense redwood forests, mountain hardwood forests, and coastal oak woodlands. Some riparian vegetation is visible from the upper portions of roadside drainages.
- *Water:* No open water is visible.
- *Color:* The soils in the project area are predominantly gray to buff brown in color and are derived from sandstone and shale formations. Overall vegetative color is medium green and gray with light yellow-green from the riparian foliage occurring around roadside drainages.
- *Adjacent Scenery:* Unlike much of the rest of the Skyline Scenic Corridor where forests are mixed with open meadows and expansive views, the project area is generally forested, limiting foreground views along the road corridor. Exceptions include:
  - Skylonda: located at the intersection of SR 35 and SR 84, views are dominated by open parking and commercial establishments including two service stations, a convenience store, a real estate office, a small events center, and one restaurant.
  - Skeggs Point Scenic Overlook: where panoramic views over South San Francisco Bay are afforded.
- *Scarcity:* The Skyline State Scenic Corridor is the only such corridor in the Santa Cruz Mountains. It has multiple access points and is a popular drive for scenic touring.
- *Cultural (Man-made) Modifications:* The characteristic landscape of the highway corridor is modified by readily evident utility poles and multiple overhead lines that parallel and cross the highway numerous times through the study area. The utility lines are visible from the road in all but one location along the proposed route.
- *Open Space:* Outside the commercial area at Skylonda, the surrounding lands consist of forested open space with areas of scattered residential development. A number of regional open space areas operated by the Midpeninsula Regional Open Space District and San Mateo County are also present adjacent to the project alignment in the general project area. These areas include El Corte de Madera Creek Open Space Preserve, La

Honda Creek Open Space Preserve, and Wunderlich County Park, among others along the SR 35 corridor, as shown on Figure 3.1-1.

Scenic Integrity and Quality

Scenic integrity relates to the deviations from or alterations to the existing landscape character. Because of the presence of existing power lines and poles, residences fronting the road, and the Skylonda commercial area, scenic intactness is moderate.

The project area scenic quality is moderate as it is dominated by the relatively unified forest along the corridor. Cultural modifications have generally been in place for some time and, because of the density of the forests, are somewhat unified with the characteristic landscape.

General Viewshed

The viewshed from SR 35 is directed to the immediate foreground along the highway corridor due to the density and height of surrounding vegetation, with the exception of Skeggs Point Scenic Overlook where the break in vegetation allows views of the South San Francisco Bay.

Viewer Sensitivity

Concern levels are a measure of the degree of public importance placed on landscapes viewed from travelways and use areas. Factors that affect the level of viewer concern are characterized in Table 3.1-1.

Travel along SR 35 is predominantly residential, recreation, and tourism-related. There is limited commercial traffic present. Viewer sensitivity is high for motorists along SR 35, as it is a designated State Scenic Highway.

Light and Glare

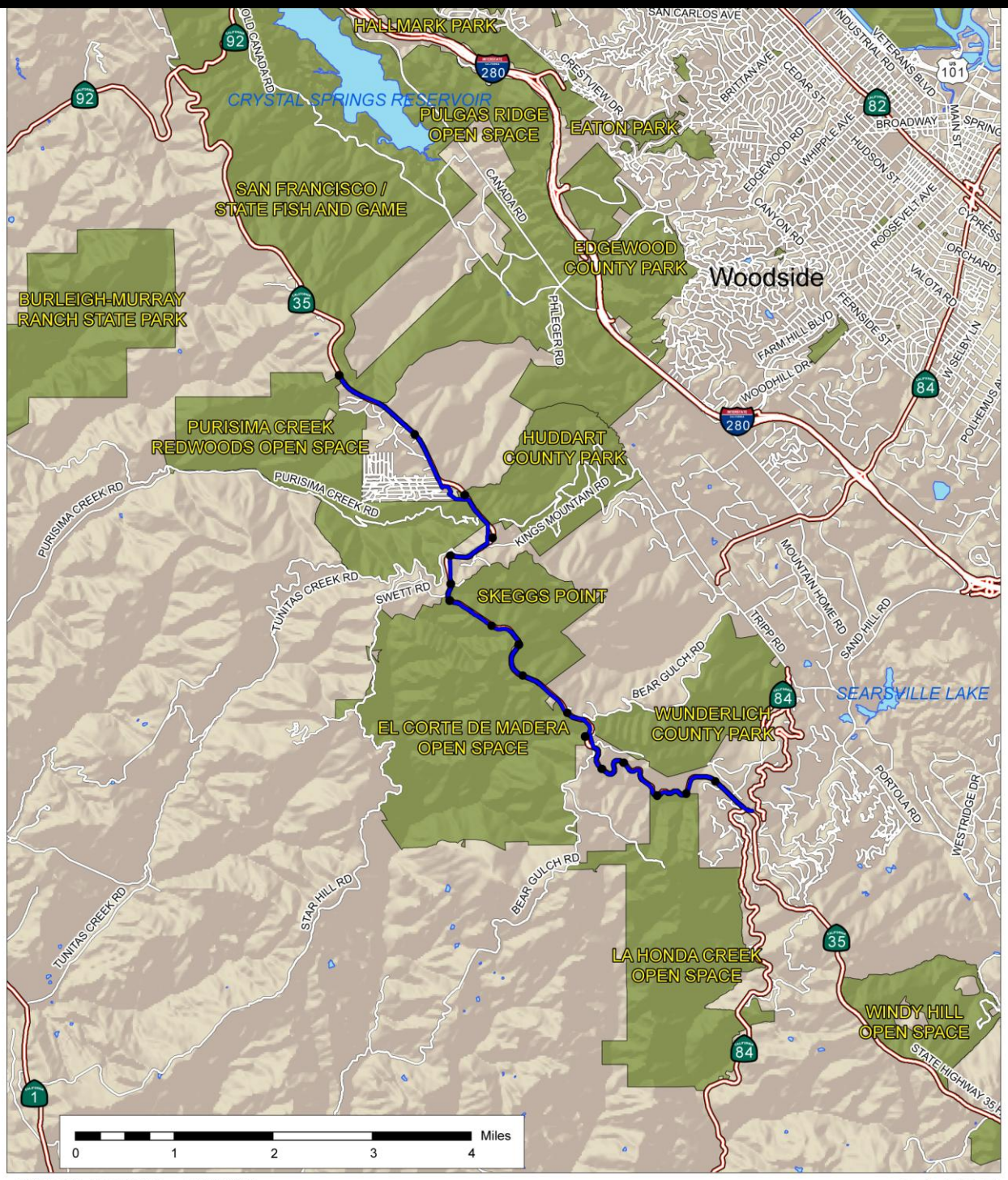
No street lights are currently present within the highway corridor. Existing light sources within the project area are principally related to commercial uses at Skylonda, private residences, and outbuildings. Headlights from cars traveling along SR 35 also produce light during evening hours.

Scenic Routes and Overlooks

Many of the roads within the project region are either designated as a State Scenic Highway, a Scenic Corridor of the San Mateo County General Plan, or a Scenic Corridor within the County's Local Coastal Program. Table 3.1-2 summarizes these designations.

SR 35 is an officially designated State Scenic Highway. The speed limit within the project area is 45 miles per hour. Skeggs Point is a designated scenic vista point owned and operated by Caltrans.

Figure 3.1-1: Open Space Areas in the Project Vicinity



SOURCE: ESRI 2011 and ISD 2011

Scale: 1:100,000

LEGEND

- Proposed Project Route
- Node
- Park or Recreation Area

RMT ENERGY construction engineering

Table 3.1-1: Viewer Sensitivity / Concern Levels

Criteria	Characteristics
Type of use / user	Day-use: destination for scenic driving; hiking; picnicking Overnight use: destination for residences
Amount of use	Moderate on weekdays; high on weekends and holidays during prime recreation season
Public interest	High
Adjacent land uses	Open forest lands; wilderness area; reservoir with recreation boating
Presence of special management areas	SR 35 is a designated State Scenic Highway

Table 3.1-2: Scenic Highways and Corridors

Route	State Scenic Highway	Scenic Roads and Corridors, San Mateo County General Plan	Scenic Roads and Corridors, Local Coastal Program
SR 35 (Skyline Boulevard)	South of SR 92 to the Santa Clara County line	South of SR 92 to the Santa Clara County line	South of SR 92 to the Santa Clara County line
SR 92 (Half Moon Bay Road)		Between the Interstate 280 and SR 1	Intersection of SR 35 to SR 1
SR 1 (Cabrillo Highway)	South of Half Moon Bay; eligible for designation north of Half Moon Bay	Entire length in the County	North of Half Moon Bay
Higgins - Purisima Road		Between SR 1 and Purisima Creek Road	
Interstate 280 (Junipero Serra Freeway)	From a point near the City of San Bruno south to the Santa Clara County line		

SOURCES: Caltrans 2010a, SMC 1986, and SMC 1998

Throughout the project area, views within the Skyline Boulevard corridor are generally contained by surrounding forest vegetation. The intactness and unity of the corridor is interrupted by the following:

- Existing utility line poles and overhead conduit that cross the road numerous times within the project area
- Driveway entrances onto the highway
- Selected residences located immediately adjacent to the road

Regulatory Controls

The California State Scenic Highway Program requires local government bodies to establish a scenic corridor along a scenic highway, along with policies to protect the visual quality of the corridor. Two San Mateo County policy documents provide such protection within the project area. These are:

San Mateo County General Plan (SMC 1986c)

The San Mateo County General Plan contains County-wide guidance for the protection of scenic resources. The County's visual resources policies seek the protection and enhancement of scenic corridors and forest lands, careful planning of rural sites, and limitations on development on ridgelines. The County protects the scenic quality of roads and corridors by giving special recognition and protection to travel routes in rural and unincorporated urban areas that provide outstanding views of scenic vistas, natural landscape features, historical sites, and attractive urban development. Caltrans defines a scenic corridor as the identified roadway and an area approximately 0.25 miles in width on either side of the roadway.

Several general plan policies protect the scenic quality of the Skyline Scenic Corridor. These policies include minimizing the adverse visual quality of utility structures, managing the location and appearance of structural developments, and encouraging the placement of new and existing public utility lines underground.

Standards for Architectural and Site Control within the Skyline Scenic Corridor (SMC 1988)

The purpose of architectural and site review standards is to promote the preservation of the visual character of the Skyline Scenic Corridor in accordance with the requirements of Streets and Highways Code Sections 154, 227-229.1, 260, 261. These standards are designed to protect the rural character of the Skyline area by controlling the design and appearance of structures and equipment located within the scenic corridor including identifying preferable architectural styles, building materials, exterior colors, tree and vegetation removal, outdoor lighting, roads and driveways, parking, and paved areas. Development within the Skyline Scenic Corridor typically requires San Mateo County Planning Commission review.

3.1.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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) Would the project have a substantial adverse effect on a scenic vista?

Visual Characteristics of the Project

Portions of the project conduit system would be buried within the SR 35 right-of-way and therefore would not be seen. The major components of the project that would be visible are summarized in Table 3.1-3.

Construction. Construction activities would be visible throughout the immediate project area. Construction activities would take place between 7:00 AM and 6:00 PM on weekdays and between 9:00 AM and 5:00 PM on Saturdays, and would be of a short duration of 1 to 2 days at any one trenching or node location. Noticeable activities would include:

- Work crews accessing the project area
- Pruning of existing vegetation
- Presence of a rubber-tired backhoe with auger and a small crane for constructing new communication node poles
- Trenching and boring equipment for construction of buried conduit sections
- Bucket trucks for installing new aerial cable
- Trucks and other miscellaneous equipment

Table 3.1-3: Visible Project Components

Project Feature	Dominant Visual Characteristics	Other Pole Mounted Elements
Communication Nodes	Number of new poles: 17 Pole Height: between 32 feet and 57 feet. Color: light gray to brown wooden pole Panel Antennas: - up to 4 per pole - positioning around the utility pole in a single circle with exception of Node #8 that would use cross arms	Electrical meter Repeater Fiber optic splice boxes Galvanized steel conduit risers
Conduit	Length: 66,898 feet (12.67 miles) in existing and new conduit Size: 2 inch-diameter PVC fiber-optic conduit to hold fiber-optic cable Positioning: hung from existing and new utility poles along the project alignment	None

Only one scenic vista is located along the project alignment. Skeggs Point is a parking area with a scenic vista. Views of construction would be short-term (1 to 2 days). Implementation of APM Aesthetics-1 would ensure that construction impacts on scenic vistas remain at a less than significant level.

> **APM Aesthetics-1**. The Skeggs Point parking area will not be utilized for staging of equipment, nor would access to the area be blocked during installation of project components.

Operation and Maintenance. The Skeggs Point scenic vista includes a one-way (south to north) vehicular circulation pattern. Existing utility poles are located on either side of the vista point entrance and exit. Because of the curved alignment of SR 35 at Skeggs Point, the existing electric circuits and other utility lines between the two poles are positioned immediately overhead of the highway and not within the vista area. The 57-foot-tall Node #8 pole and associated features would be located adjacent to the exit of the scenic vista point. The pole and communication facilities would be vivid from the scenic vista point as seen against its forest backdrop, as the proposed pole would be taller than adjacent existing utility poles, include a cross member near its top, and be positioned in open view immediately adjacent to the exit drive. While the positioning of Node #8 communication facilities would be at the side of the vista point area and would not block or disrupt views from the vista point, the impact to the scenic vista would be moderate. Without mitigation this impact could be considered significant. Implementation of mitigation measures Aesthetics-1 through Aesthetics-3 would ensure the unity and integrity of the scenic vista point and reduce the scenic vista impact of the Node #8 facilities to a less than significant level.

Mitigation Measure Aesthetics-1. To maintain the visual integrity of the Skeggs Point scenic vista area, all equipment associated with construction of Node #8 shall be removed from the site daily.

Mitigation Measure Aesthetics-2. All construction activities associated with Node #8 shall occur during weekdays with no construction activities occurring during weekends or holidays.

Mitigation Measure Aesthetics-3. The antenna array on Node #8 shall be positioned in a circle close to the utility pole to conform to the design of other communication nodes that are part of the project.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Construction. Construction activities for buried conduit would take place within previously disturbed areas of roadway and utility rights-of-way. Project construction would not require the removal of any trees, although some minor trimming of trees may be required where new poles are installed. Pruning of trees would be performed by a certified arborist and according to the San Mateo County Tree Ordinance. Minor trimming of trees to accommodate the new utility poles would not disrupt the intactness of the characteristic landscape as seen along SR 35, and impacts to scenic resources would be less than significant. The following APM would be implemented to further minimize already less than significant impacts.

APM Aesthetics-3. No trees will be removed during construction activities. Any trimming of trees will comply with the San Mateo County Tree Ordinance. Trimming of trees will be conducted by a trained arborist who is certified by the International Society of Arboriculture.

The majority of the project features occur within an existing utility corridor. Communication nodes are generally located near existing utility poles. Construction activities and installation of the new nodes and fiber cable would not substantially damage the scenic resources of SR 35 and impacts would less than significant.

Operation and Maintenance. Operation and maintenance activities would involve periodic inspections of the project alignment and repairs as necessary. Site inspections would be made using a pickup truck and one or two inspection workers. Operation and maintenance activities would not affect trees, rock outcrops, or historic buildings.

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Construction. Construction activities would not substantially degrade the existing visual character or quality of the project area and its surroundings. Construction activities would be temporary in nature and would last approximately 11 weeks. All ground disturbed during construction would be restored to original contours and seeded with native vegetation. Construction activities would have a less than significant impact on the visual character and quality of the site and its surroundings.

Operation and Maintenance. The aerial project conduit and new communication nodes would be located within the existing utility corridor facilities that are readily evident and vivid as seen from SR 35. The placement of project components on the existing utility power line poles, on new communication node poles, and conduit connecting the two would add additional objects to the characteristic landscape. However, project components would be installed in the immediate vicinity of this existing utility corridor, and would be similar in visual character and look like existing utilities. New poles and any replacement poles that may be needed would be made of wood to blend with the forest setting, and node equipment would be painted brown to camouflage the appearance of the equipment. Additional existing conduit would be a minor incremental addition to the multiple utility lines that now exist in the corridor. The project would add more utility structures within a scenic area with moderate visual quality. The following measures would be implemented to minimize impacts to less than significant levels.

APM Aesthetics-2. Existing wood utility poles, or replacement wood poles at the same locations, will be used for all aerial cable conduit. New poles associated with the project will be limited to the 17 communication node locations.

APM Aesthetics-4. Wood poles will be used for all new poles to blend with surrounding trees. Node equipment, including galvanized risers, electrical meters, repeaters, and fiber optic splice boxes, will be painted brown in color to help them blend into the surrounding natural environment. With the exception of Node #8, antennae around each new utility pole will be positioned in a single circle to minimize the visual presence of the nodes.

Maintenance activities would involve periodic inspections of the project alignment and repairs as necessary. Site inspections would be made using a pickup truck and one or two inspection workers. Operation and maintenance activities would have a less than significant impact on the existing visual character and quality of the site and surroundings. Implementation of APMs Aesthetics-2 through Aesthetics-4 would help further reduce less-than-significant impacts from the new facilities.

d) Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Construction. Construction activities would occur between 7:00 AM and 6:00 PM on weekdays, and between 9:00 AM and 5:00 PM on Saturdays. This construction timing could involve operations during dawn or twilight hours, depending on the time of the year; however, project construction would typically occur during daylight hours and no nighttime activities are proposed. Project construction would therefore have a less than significant impacts on the environment from emission of light and glare.

Operation and Maintenance. There is no lighting proposed as part of the project. Reflective material on node features, however, could generate unwanted glare. Implementation of APM Aesthetics-4 and mitigation measure Aesthetics-4 would help ensure the unity and integrity of the scenic vista point and avoid glare impacts. Reflective metal could cause new glare; mitigation measure Aesthetics-4 would avoid significant effects related to glare.

Mitigation Measure Aesthetics-4. All communication node features will include integral non-reflective coloring or be painted to be a non-reflective brown color in order to minimize glare created by these facilities.

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3.2 Agricultural and Forest Resources

3.2.1 ENVIRONMENTAL SETTING

The majority of the proposed project alignment lies within the existing SR 35 right-of-way, with the remainder of the alignment within County road right-of-way and an existing PG&E utility easement. SR 35 is under the operational jurisdiction of Caltrans. The project alignment is primarily located adjacent lands designated by the San Mateo County General Plan as timber production, open space, and public recreation, with a scattering of single-family land use designations and a small commercial land use designation at the southern terminus of the project route (Figure 3.10-1). The San Mateo County Zoning Ordinance (Figure 3.10-2) designates the zoning districts adjacent to the project route as Resource Management, Residential Estates, One-Family Residential, and Timberlands Preserve (Figure 3.10-2). There are no agricultural or forestry activities within the project area (SMC 1986; SMC 1999).

There are no important farmlands in the project area, as defined by the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP). The FMMP designates the project area within the project alignment as Grazing Land, Urban and Built-Up Land, and Other Lands (CDC 2008a). The project is not located on any land designated as Williamson Act land, but Williamson Act land is located adjacent to some parts of the project area. FMMP designation and Williamson Act lands are shown on Figure 3.2-1.

3.2.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:				

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion

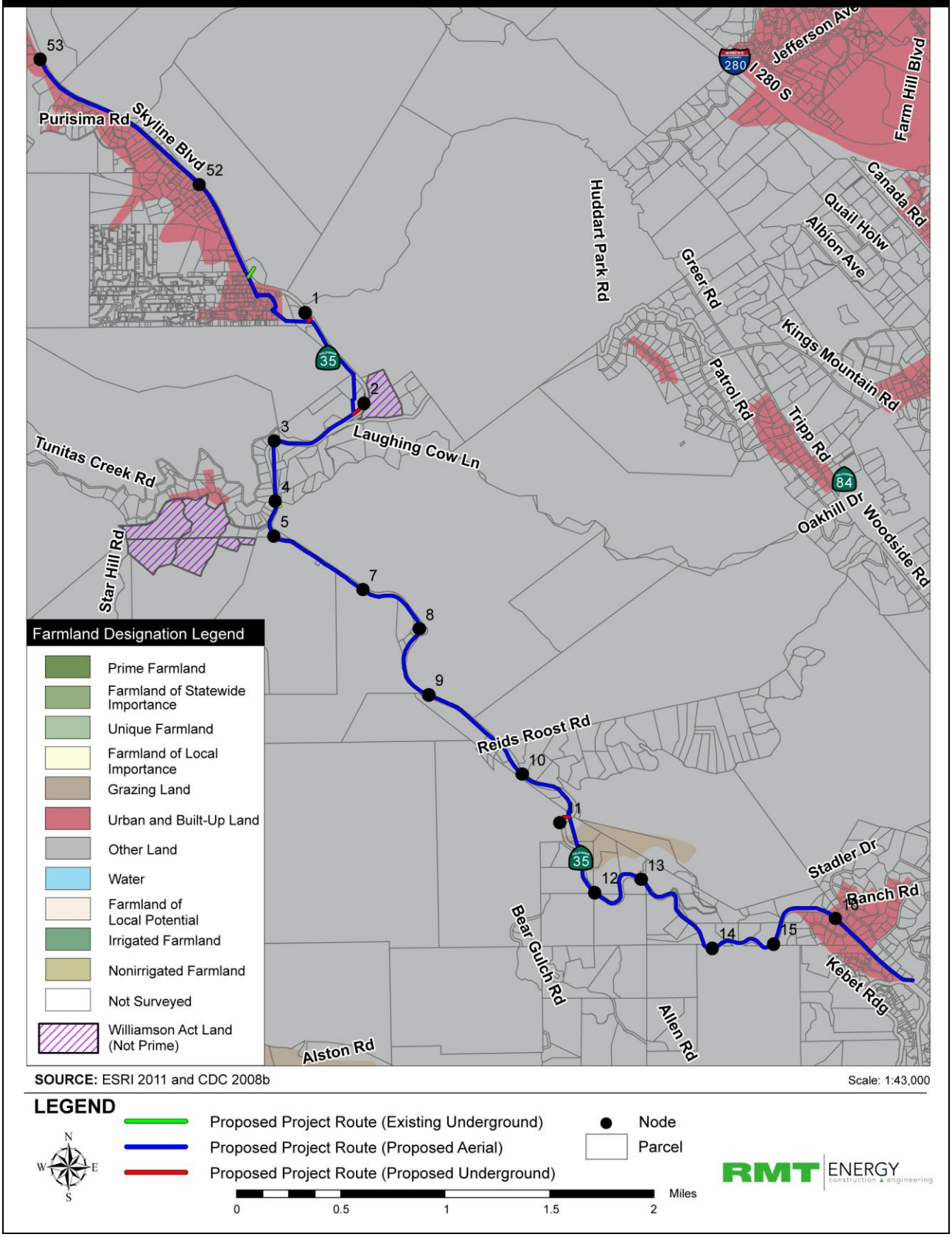
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

There are no lands designated at farmlands in the project vicinity, and construction and operation of the project would therefore have no impact to important farmlands.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

The proposed project would not conflict with existing zoning for agricultural use, or agricultural activities, or any area subject to the Williamson Act. No farming or agricultural activities occur within the project alignment.

Figure 3.2-1: FMMP and Williamson Act Lands in the Project Region



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))?

The proposed project would not conflict with existing zoning for forest or timber use. There are no timber production activities within the project alignment; therefore the project would have no impact to forest and timber zoning.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

The proposed project would not result in the loss of forest land or convert forest land to non-forest land because the project would occur within existing transportation and utility corridors. No forest land would be removed during construction or operation of the proposed project.

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?

The proposed project does not include new construction that might convert farmland to non-agricultural uses. There would be no impacts that would individually or cumulatively result in the loss of farmland to non-agricultural use.

3.3 Air Quality

3.3.1 ENVIRONMENTAL SETTING

Air Basin

The County of San Mateo, which is located on the San Francisco Peninsula, is part of the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB encompasses seven counties (Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara and Napa) and portions of two others (southwestern Solano and southern Sonoma). The project site is located near the western coast within the peninsula subregion of the Basin.

Air quality in San Mateo County is regulated by the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and the Bay Area Air Quality Management District (BAAQMD). These agencies develop rules, regulations, policies, and/or goals to comply with applicable legislation.

Climate and Meteorology

The SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys, and bays, which distort normal wind flow patterns.

The climate is dominated by the strength and location of a semi-permanent, subtropical high-pressure cell. During the summer, the Pacific high pressure cell is centered over the northeastern Pacific Ocean resulting in stable meteorological conditions and a steady northwesterly wind flow. This northwesterly wind flow results in upwelling of cold ocean water from below to the surface, which in turn produces a band of cold water off the California coast. The cool and moisture-laden air approaching the coast from the Pacific Ocean is further cooled by the presence of the cold water band, resulting in condensation and the presence of fog and stratus clouds along the Northern California coast.

In the winter, the Pacific high-pressure cell weakens and shifts southward, resulting in wind flow offshore, the absence of upwelling, and the occurrence of storms. Weak inversions coupled with moderate winds result in a lower air pollution potential in the winter.

Ambient Air Quality

Three air quality designations can be given to an area for a particular pollutant under both the federal and state Clean Air Acts:

- **Non-attainment**: This designation applies when air quality standards have not been consistently achieved.
- **Attainment**: This designation applies when air quality standards have been achieved.
- **Unclassified**: This designation applies when there are not enough monitoring data to determine if the area should be designated non-attainment or attainment.

Air quality in the Basin is monitored by BAAQMD, which operates a regional network of air pollution monitoring stations to determine if the federal and state standards for criteria air pollutants, the National Ambient Air Quality Standards and California Ambient Air Quality Standards (NAAQS and CAAQS), are being achieved.

The nearest monitoring station to the proposed project site is in Redwood City and it indicates that for the 2008 to 2010 period, the national 24-hour standard for particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) was exceeded once in 2010. The state hourly ozone (O_3) standard was exceeded twice in 2010 and the national and state 8-hr standard for O_3 were each exceeded once in 2010. There were no exceedances or insufficient data for carbon monoxide (CO), nitrogen oxide (NO_X), and particulate matter less than 10 microns in diameter (PM_{10}). (CARB 2011)

The SFBAAB is considered "non-attainment" for the O_3 (8-hour) and $PM_{2.5}$ (annual arithmetic mean [AAM] and 24-hour) federal standards, and is considered "non-attainment" for the O_3 (1-hour), particulate matter less than 10 microns in diameter (PM_{10}) (24-hour and AAM), and $PM_{2.5}$ AAM state standards. Table 3.3-1 lists the California and federal air quality standards.

Toxic Air Contaminants

Toxic air contaminants (TACs) or hazardous air pollutants can result in health effects that can be severe. Many TACs are confirmed or suspected carcinogens, or are known or suspected to cause birth defects or neurological damage.

Industrial facilities and mobile emissions sources are significant sources of TACs. Automobile exhaust also contains TACs such as benzene and 1,3-butadiene. Most recently, diesel particulate matter was identified as a TAC by the ARB. Diesel particulate matter (PM) differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. BAAQMD research indicates that mobile-source emissions of diesel PM, benzene, and 1,3-butadiene represent a substantial portion of the ambient background risk from TACs in the SFBAAB.

The Air Toxics "Hot Spots" Information and Assessment Act (Assembly Bill 2588 [AB 2588]) was enacted in September 1987. The project would not be considered a stationary source subject to AB 2588 requirements.

Sensitive Receptors

Sensitive receptors include children, seniors, sick persons, or persons subject to continuous exposure based on the averaging period for the pollutant. Sensitive receptor locations are facilities such as hospitals, schools, convalescent facilities, or residential areas.

Sensitive receptors in the project area include a number of residences located within 100 feet of the project alignment.

Table 3.3-1: California and Federal Air Quality Standards

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		Federal Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM10)	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)	24 Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15.0 µg/m^3		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m^3)	None	Non-Dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	—
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (57 µg/m3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m^3)		0.100 ppm (see footnote 8)	None	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	—	Ultraviolet Fluorescence	0.030 ppm (80 µg/m^3)	—	Spectrophotometry (Pararosaniline Method)
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (365 µg/m^3)	—	
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	1 Hour	0.25 ppm (655 µg/m^3)		—	—	—
Lead[9]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	—
	Calendar Quarter	—		1.5 µg/m^3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average[10]	—		0.15 µg/m^3		
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer — visibility of ten miles or more (0.07 — 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		**No Federal Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[9]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Table 3.3-1 *(Continued)*: California and Federal Air Quality Standards

NOTES:

1. California standards for O_3, CO (except Lake Tahoe), SO_2 (1- and 24-hour), NO_2, and suspended particulate matter (PM_{10}, $PM_{2.5}$, and visibility-reducing particles) are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than O_3, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3standard is attained when the fourth-highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-our standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact EPA for further clarification and current federal policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25 degrees Celsius and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25 degrees Celsius and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure that can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the EPA: An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010).
9. The ARB has identified Pb and vinyl chloride as toxic air contaminants with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
10. National Pb standard, rolling 3-month average: final rule signed October 15, 2008.

ABBREVIATIONS:

µg/m^3 = micrograms per cubic meter

mg/m^3 = milligrams per cubic meter

ppm = parts per million

SOURCE: CARB 2010

3.3.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that 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

a) Conflict with or obstruct implementation of the applicable air quality plan?

BAAQMD prepares plans to attain ambient air quality standards in the SFBAAB. BAAQMD also prepares ozone attainment plans (OAP) for the national ozone standard and clean air plans (CAPs) for the California standard both in coordination with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). BAAQMD has developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether a proposed project could result in potentially significant air quality impacts. If all of the screening criteria, including implementation of Basic Construction Mitigation Measures (see below), are met by a proposed project, then the lead agency or applicant would not

need to perform a detailed air quality assessment of the project's air pollutant emissions. A project meets the screening criteria if the project size and number of employees is less than the levels established by the BAAQMD and found in Table 3-1 of the BAAQMD *CEQA Air Quality Guidelines* (2011). The screening criteria for light industrial land uses are 11 acres for project size and an employee count of 540 people. The proposed project would involve approximately 0.2 acres of land disturbance during construction activities, and a construction employee count of up to 8 workers at a time. Operation and maintenance activities would generally employ only one or two workers. Project construction therefore falls below the BAAQMD screening criteria (BAAQMD 2011) and a detailed assessment of the project's air emissions is not required. No mitigation measures would be required since there would be no impact.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction. BAAQMD has determined that implementation of Basic Construction Mitigation Measures (as appropriate, depending on the size and location of the project site) constitutes sufficient mitigation to reduce PM_{10} impacts to a level considered less than significant. These measures should be applied to all projects, including projects that are below the screening thresholds. These Basic Construction Mitigation Measures have been included as mitigation measures Air Quality-1, which reduce construction impacts to air quality standards to a less than significant level.

Mitigation Measure Air Quality-1. The following Best Management Practices shall be implemented to reduce construction air quality impacts:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours to any complaint. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Operation and Maintenance. During project operation, vehicular emissions associated with periodic maintenance of the facilities would be the only sources of emissions. Maintenance personnel would visit the project site approximately six times per year, with additional visits as needed for emergencies. Impacts associated with this periodic maintenance will be less than

significant as passenger vehicle and small truck emissions associated with project maintenance would be negligible.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Project construction falls below the BAAQMD screening criteria (BAAQMD 2011) and a detailed assessment of the project's air emissions is therefore not required. Implementation of mitigation measure Air Quality-1 would ensure that the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment, and cumulative air quality impacts would be less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

Construction. Sensitive receptors include land uses such as schools, rest homes, medical facilities, parks and recreational areas, and residences. There are no school, religious, or public facilities within 1,000 feet of the project alignment. Residential areas are concentrated between Nodes 53 and 1, 3 and 5, 11 and 12, and from 16 to the southern terminus of the project alignment, as shown in Figure 3.12-1. Residences are located within 100 feet of the project alignment in these areas. Other residences are located scattered throughout the remainder of the project area. The primary pollutant generated during project construction that could impact nearby residences would be dust. Implementation of mitigation measure AirQuality-1 would reduce impacts to sensitive receptors to a less than significant level.

Operation and Maintenance. Operation of the project would not result in air emissions, and maintenance emissions would be limited to vehicle emissions that would not expose sensitive receptors to substantial pollutant concentrations. There would be no impact to sensitive receptors during project operation and maintenance activities.

e) Create objectionable odors affecting a substantial number of people?

Construction. Project construction would create some odors related to the operation of diesel- and gasoline-powered vehicles and equipment. Low-sulfur diesel fuels would be used to reduce the potential for objectionable odors. Odors would be temporary and limited to the construction period. The construction of the project would not generate significant objectionable odors.

Operation and Maintenance. No odor generation would be anticipated as a result of operational and maintenance activities.

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3.4 Biological Resources

3.4.1 ENVIRONMENTAL SETTING

Overview

A literature search was performed to determine what species could occur in the project area. This literature search included a review of the California Natural Diversity Database (CNDDB), the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California*, sensitive species lists from the U.S. Fish and Wildlife Service (USFWS), and other documents containing biological descriptions of the project area. Field surveys for vegetation community types and plant and animal species were then conducted on December 10 and 18, 2009, and March 16, 2010 (ExteNet Systems (California) LLC and Synthesis Environmental Planning 2010). The surveys were conducted by walking all areas of the proposed project alignment, as well as a buffer of 200 feet to either side of the centerline of the project alignment. No direct ground disturbance or construction activities would occur within this buffer area; however, it was considered in this biological resources impact analysis because it is an area where indirect effects from project implementation may occur.

Habitat

General Habitat

The habitat in the region is characterized by a mixed conifer and hardwood overstory with a shrub understory. The project area is located entirely within the rights-of-way of SR 35 and County roads, and within a PG&E utility easement. The areas of proposed ground disturbing activities within the project alignment area are entirely urbanized and devoid of natural habitat, or are currently in a ruderal state (ExteNet Systems (California) LLC and Synthesis Environmental Planning 2010). The remainder of the route where aerial cable pulling would occur has been previously disturbed and remains in active use as transportation and utility corridors.

Vegetation Communities

The buffer area outside of the project alignment passes through various vegetative communities as described below. Table 3.4-1 includes the type of habitat, description, and location of each of the vegetative communities.

Wetlands

The project alignment is located on the ridgeline of the Santa Cruz Mountains, and thus the project area contains no catchment basins that would develop any significant water resources. Since the project alignment is on the watershed divide, streams and stormwater flow away from the alignment. Stormwater on SR 35 sheet flows off of the roadway onto the dirt shoulder and into grass-lined swales, where it infiltrates into the ground or continues to sheet flow downhill into local drainages. There are no culverts or stormwater drainage improvements along SR 35 within the project alignment.

No wetlands or other water features are found within the project alignment. Wetlands are found outside and downstream of the project area, primarily in the vicinity of stream channels.

Table 3.4-1: Vegetative Communities in the Project Vicinity

Community	Description	Location
Ruderal/Urbanized	The ruderal/urbanized vegetative community is the only vegetation community within the project alignment. Common vegetative species found in this community are composed of weedy non-native and native species. Although often comprised of non-native plant species, ruderal habitats, particularly at edges of natural communities, can provide foraging habitat for common and resilient species of birds and mammals.	Along the majority of the alignment
Montane Hardwood Forest	The montane hardwood vegetative community occurs within the project study area intermixed in upland areas with annual grassland and integrated with the redwood and montane riparian vegetative communities. Montane hardwood habitat is composed of a pronounced hardwood tree layer, with an infrequent and poorly developed shrub layer, and a sparse herbaceous layer. Mature stands of the canopy tend to be uniform, although, subordinate to conifers. The large variety of species, both conifer and hardwood, results in a very stable community.	Between Node 53 and the southern terminus of the project area
Coastal Oak Woodland	Coastal oak woodland is a highly variable community that is generally dominated by deciduous and evergreen hardwoods, particularly oaks. The canopy can be closed with an understory of shrubs, ferns, and forbs or a dense layer of litter with sparse vegetation. The canopy can also be open savannah with an understory of grasses, forbs, and shrubs, which is typical in the project site and area. Slope, soil, precipitation, and moisture relationships determine the composition of this vegetative community.	Between Node 53 and the southern terminus of the project area
Coastal Shrub	The coastal scrub vegetative community is characterized by low to moderate-sized shrubs with mesophytic leaves, flexible branches, semi-woody stems growing from a woody base, and a shallow root system. This habitat is a dense and continuous two-layer cover of tall, overstory shrubs with a short, perennial herb/sub-shrub understory. This community tolerates drier conditions than its associated communities. Typically it is in areas with steep, south-facing slopes; sandy, mudstone or shale soils; and low average annual rainfall.	Scattered throughout; primarily between Node 53 and the southern terminus of the project area
Annual Grassland	This plant community is generally composed of introduced grasses and broadleaf weedy species, which quickly re-colonize disturbed areas.	Scattered throughout; primarily east of Node 2 and west of Node 10

Table 3.4-1 *(Continued)*: Vegetative Communities in the Project Vicinity

Community	Description	Location
Freshwater Emergent Wetland	Freshwater emergent wetlands are characterized by erect, rooted herbaceous hydrophytes. All emergent wetlands are flooded frequently, enough so that the roots of the vegetation prosper in an anaerobic (oxygen lacking) environment. Vegetation may vary in size from small clumps to vast areas of coverage. In general, freshwater emergent wetland occurs on virtually all exposures and slopes, provided a basin or depression is saturated or at least periodically flooded.	Adjacent to stream channels downstream from the alignment.
Montane Riparian	The montane riparian vegetative community is variable and often structurally diverse. Vegetation generally occurs as a narrow, often dense grove of broad-leaved, winter deciduous trees up to 100 feet tall with a sparse understory. Water flow in these habitats varies from perennial to ephemeral. Figure 3.9-1 shows the streams located within a one-mile area surrounding the project alignment. Riparian corridors provide nesting, foraging, roosting, and cover habitat for a variety of wildlife species.	Adjacent to streams, downstream from the alignment.

SOURCE: ExteNet 2010

Special-Status Species Analyses

For the purposes of this assessment, "special status" is defined to be those species that are of management concern to state or federal natural resource agencies, and include those species that are:

- Listed as endangered, threatened, proposed, or candidate for listing under the Federal Endangered Species Act
- Listed as endangered, threatened, rare, or proposed for listing under the California Endangered Species Act
- Designated as endangered or rare pursuant to California Fish and Game Code §1901
- Designated as fully protected pursuant to California Fish and Game Code §3511, §4700, or §5050
- Designated as a species of special concern by California Department of Fish and Game (CDFG)
- Plants listed as rare under the California Native Plant Protection Act
- Plants designated rare or endangered by CNPS (Lists 1A, 1B, or 2)

A list of special-status plant and animal species that historically occurred within the project area and vicinity was compiled based upon the following:

- Any previous and readily-available biological resource studies pertaining to the project area

- Informal consultation with USFWS by generating an electronic Species List (available on the applicable Field Office website)
- A spatial query of the CNDDB

The CNDDB was searched and any reported occurrences of special-status species within the USGS 7.5-minute quadrangle of the project area or the surrounding quadrangles were plotted in relation to the project area boundary using GIS software. Figures 3.4-1 and 3.4-2 show the special status plant and animal species, respectively, identified in the CNDDB search. These special-status species with historical occurrences within, or adjacent to, the project area are also listed in Tables 3.4-2 and 3.4-3.

The special-status species identified from these database queries were further assessed for their likelihood to occur within the project area based upon previously documented occurrences, field surveys, their habitat requirements, and the quality and extent of any suitable habitat within the project area. Each species was ranked for its likelihood to occur within the project alignment:

- A "high" rank was given for species where current field surveys have positively identified the species within the project area, where there have been previously documented occurrences within the project alignment, and/or where essential habitat elements are located within the project alignment.
- A "moderate" rank was given for species that were not detected during current field surveys, but where there have been previously documented occurrences within the project area, and where preferred habitat elements exist within the project alignment.
- A "low" rank was given for species with no known observations within the project area, and where habitat elements exist within the project area, but the quality of that habitat is degraded or of poor quality, and/or where project area conditions and land uses deter its use of the project alignment.
- An "unlikely" rank was given for species with no known observations within the project area, and where no suitable habitat exists within the project alignment.

The results of these analyses are summarized in Tables 3.4-2 and 3.4-3, and details of these analyses are discussed below.

Special Status Plant Species

The region has historical occurrences of various special-status plant species, and listed in Table 3.4-2. All proposed ground disturbance would take place in areas that have been previously disturbed and are either unvegetated or are in a ruderal state with non-native plant species dominating. No special status plant species were detected during the botanical surveys of the project alignment and buffer area. Therefore, the project area is unlikely to contain special-status plant species.

Figure 3.4-1: Special Status Plant Species Occurrences in the Project Area

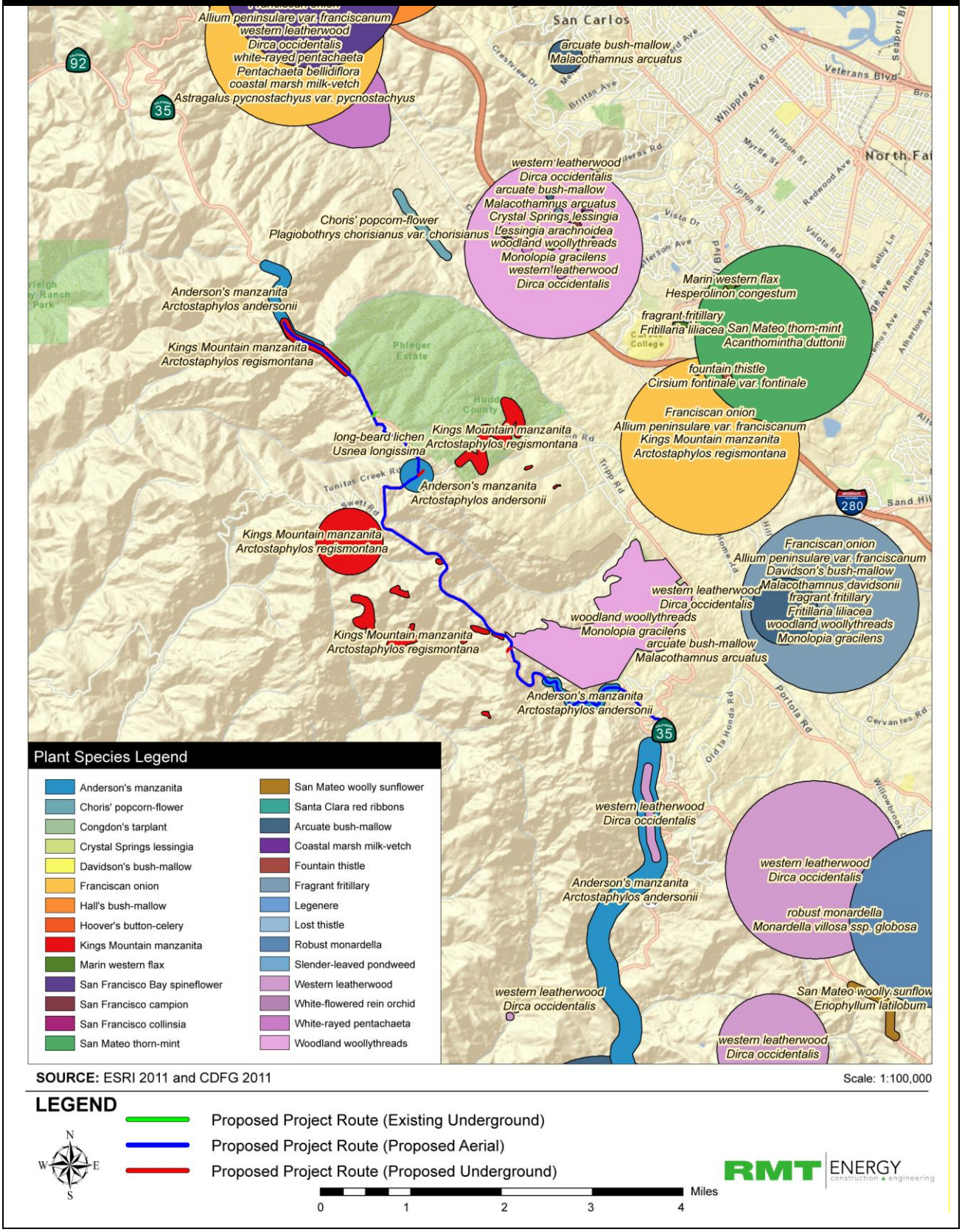


Figure 3.4-2: Special Status Animal Species Occurrences in the Project Area

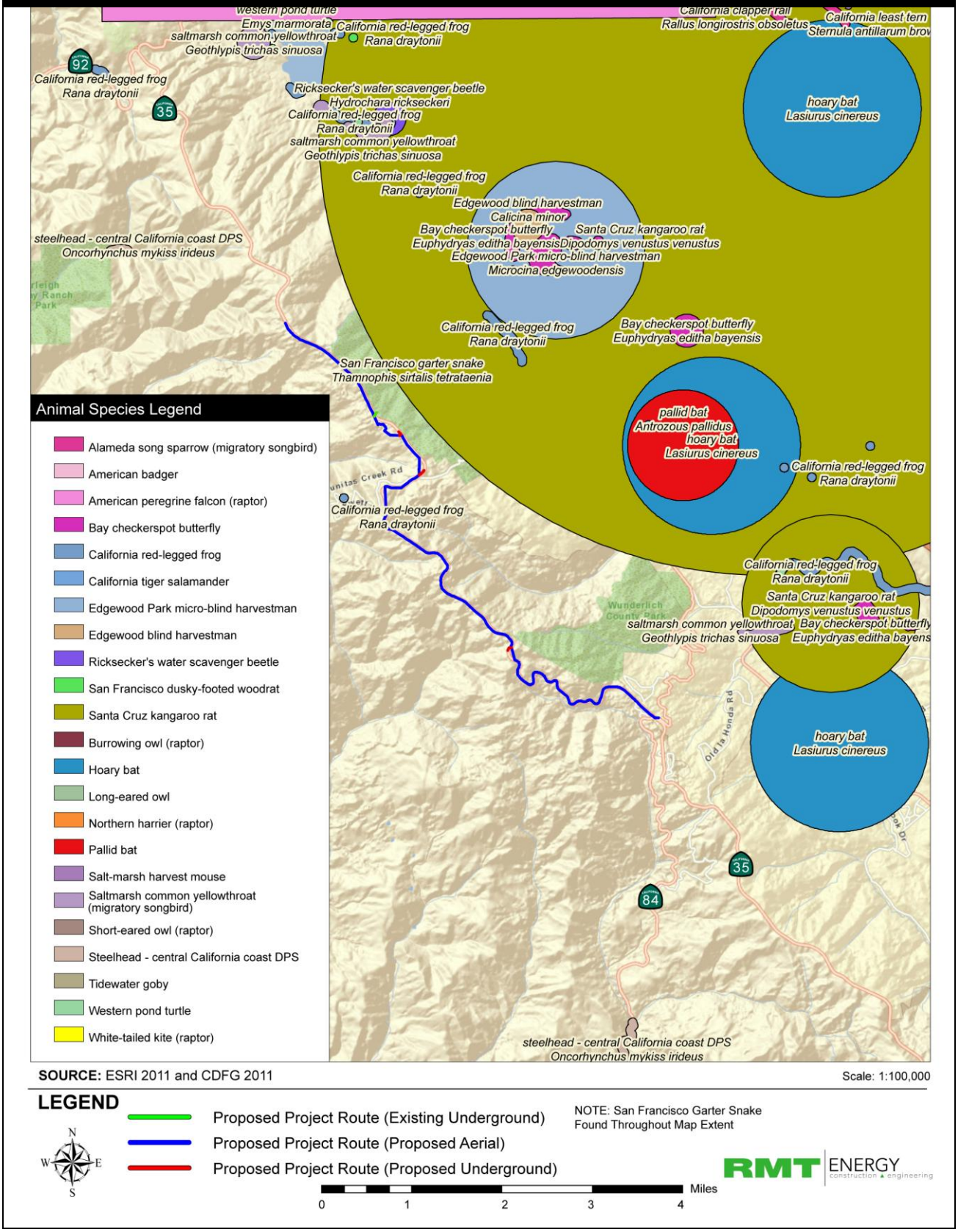


Table 3.4-2: Special-Status Plant Species with the Potential to Occur in the Study Area

Common Name	Scientific Name	Federal Status	State Status	Habitat Requirements	Potential to Occur Within Project Alignment
San Mateo thornmint	*Acanthomintha duttoni*	FE	CE/List 1B	Chaparral, valley, and foothill grassland. Elevation range: 50 to 300 meters. Blooming period: April through June.	Low
Franciscan onion	*Allium peninsulare var. franciscanum*	--	List 1B	Cismontane woodland and valley and foothill grassland. Found in clay, volcanic, and serpentinite soils. Elevation range: 100 to 300 meters. Blooming period: May through June.	Low
Anderson's manzanita	*Arctostaphylos andersonii*	--	List 1B	Broadleaved upland forest, chaparral, and north coast coniferous forest. Elevation range: 60 to 730 meters. Blooming period: November through April.	Low
Kings Mountain manzanita	*Arctostaphylos regismontana*	--	List 1B	Broadleaved upland forest, chaparral, and north coast coniferous forest. Elevation range: 305 to 730 meters. Blooming period: January through April.	Low
Round-leaved filaree	*California macrophylla*	--	List 1B	Cismontane woodland, valley and foothill grassland. Elevation range: 15 to 200 meters. Blooming period: March through May	Low
(Crystal Springs) Fountain thistle	*Cirsium fontinale var. fontinale*	FE	CE/List 1B	Chaparral, cismontane woodland, valley and foothill grassland. Elevation range: 46 to 175 meters. Blooming period: May through October.	Low
Lost thistle	*Cirsium praeteriens*	--	List 1A	Habitat requirements unknown. Elevation range: 0 to 100 meters. Blooming period: June through July.	Low

Table 3.4-2 *(Continued)*: Special-Status Plant Species with the Potential to Occur in the Study Area

Common Name	Scientific Name	Federal Status	State Status	Habitat Requirements	Potential to Occur Within Project Alignment
Santa Clara red ribbons	*Clarkia concinna ssp. Automixa*	--	List 4	Chaparral and cismontane woodland. Elevation range: 90 to 1,500 meters. Blooming period: April through July.	Low
San Francisco collinsia	*Collinsia multicolor*	--	List 1B	Closed-cone coniferous forest and coastal scrub. Elevation range: 30 to 250 meters. Blooming period: March through May.	Low
Western leatherwood	*Dirca occidentalis*	--	List 1B	Broadleaved upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, north coast coniferous forest, riparian forest, and riparian woodland. Elevation range: 50 to 395 meters. Blooming period: January through April.	Low
Ben Lomand buckwheat	*Eriogonum nudum var. decurrens*	--	List 1B	Chaparral, cismontane woodland and flower montane coniferous forest. Elevation range: 50 to 800 meters. Blooming period: June through October.	Low
San Mateo woolly sunflower	*Eriophyllum latiobum*	FE	CE/List 1B	Cismontane woodland. Elevation range: 45 to 150 meters. Blooming period: May through June.	Low
Fragrant fritillary	*Fritillaria liliacea*	--	List 1B	Cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland. Elevation range: 3 to 410 meters. Blooming period: February through April.	Low
Marin dwarf-flax (Marin western	*Hesperolinon congestum*	FT	CT/List 1B	Chaparral, valley and foothill grassland. Elevation range: 5 to 370 meters. Blooming period: April through July.	Low

Table 3.4-2 *(Continued)*: Special-Status Plant Species with the Potential to Occur in the Study Area

Common Name	Scientific Name	Federal Status	State Status	Habitat Requirements	Potential to Occur Within Project Alignment
flax)					
Crystal Springs lessingia	*Lessingia arachnoidea*	--	List 1B	Cismontane woodland, coastal scrub, and valley and foothill grassland. Elevation range: 60 to 200 meters. Blooming period: July through October.	low
Woolly-headed lessingia	*Lessingia holoeuca*	--	List 3	Broadleaved upland forest, coastal scrub, lower montane coniferous forest, and valley and foothill grassland. Elevation range: 15 to 305 meters. Blooming period: June through October.	Low
San Mateo tree lupine	*Lupinus arboreus var. eximius*	--	List 3	Chaparral and coastal scrub. Elevation range: 90 to 550 meters. Blooming period: April through July.	Low
Arcuate bush-mallow	*Malacothamnus arcuatus*	--	List 1B	Chaparral and cismontane woodland. Elevation range: 15 to 355 meters. Blooming period: April through September.	Low
Davidson's bush-mallow	*Malacothamnus davidsonii*	--	List 1B	Chaparral, cismontane woodland, coastal scrub, and riparian woodland. Elevation range: 185 to 855 meters. Blooming period: June through January.	Low
Hall's bush-mallow	*Malacothamnus hallii*	--	List 1B	Chaparral and coastal scrub. Elevation range: 10 to 760 meters. Blooming period: May through October.	Low
Mt. Diablo cottonweed	*Micropus amphiboles*	--	List 3	Broadleaved upland forest, chaparral, cismontane woodland, and lower montane coniferous forest. Elevation range: 45 to 825 meters. Blooming period: March	Low

Table 3.4-2 *(Continued)*: Special-Status Plant Species with the Potential to Occur in the Study Area

Common Name	Scientific Name	Federal Status	State Status	Habitat Requirements	Potential to Occur Within Project Alignment
				through May.	
Robust monardella	*Monardella villosa ssp. globosa*	--	List 1B	Broadleaved upland forest, chaparral, cismontane woodland, and valley and foothill grassland. Elevation range: 100 to 915 meters. Blooming period: June through July.	Low
Dudley's lousewort	*Pedicularis dudleyi*	--	CR/List 1B	Chaparral, cismontane woodland, north coast coniferous forest, and valley and foothill grassland. Elevation range: 60 to 900 meters. Blooming period: April through June.	Low
White-rayed pentachaeta	*Pentachaeta bellidiflora*	FE	CE/List 1B	Cismontane woodland, valley and foothill grassland. Elevation range: 35 to 620 meters. Blooming period: March through May.	Low
White-flowered rein orchid	*Piperia candida*	--	List 1B	Broadleaved upland forest, lower montane coniferous forest, and north coast coniferous forest. Elevation range: 30 to 1,310 meters. Blooming period: May through September.	Low
Slender-leaved pondweed	*Potamogeton filiformis*	--	List 2	Marshes and swamps. Elevation range: 300 to 2,150 meters. Blooming period: May through July.	Unlikely
San Francisco campion	*Silene verecunda ssp. verecunda*	--	List 1B	Coastal bluff scrub, chaparral, coastal prairie, coastal scrub, and valley and foothill grassland. Elevation range: 30 to 645 meters. Blooming period: March through August.	Low
Caper-	*Tropidocarpu*	--	List 1B	Valley and foothill grassland.	Low

Table 3.4-2 *(Continued)*: Special-Status Plant Species with the Potential to Occur in the Study Area

Common Name	Scientific Name	Federal Status	State Status	Habitat Requirements	Potential to Occur Within Project Alignment
fruited tropidocarpum	*m capparideum*			Elevation range: 1 to 455 meters. Blooming period: March through April.	

Notes:

FE = federally endangered

FT = federally threatened

CE = state endangered

CT = state threatened

List 1B = Plants rare, threatened, or endangered in California and elsewhere

List 2 = Plants rare, threatened, or endangered in California, but more common elsewhere

List 3 = Plants about which more information is needed

List 4 = Plants of limited distribution

SOURCE: ExteNet 2010, Parus Consulting 2011

Special Status Animal Species

The region has historical occurrences of various special-status animal species, as listed in Table 3.4-3. In addition to the special-status animal species listed in Table 3.4-3, there are a number of raptor and migratory bird species that have the potential to occur in the project area. No special-status animal species were detected during the field surveys. Only species with potential habitat in the project area are presented in the table.

Table 3.4-3: Special-Status Animal Species with the Potential to Occur in the Study Area

Common Name	Scientific Name	Federal Status	State Status	Habitat Requirements	Potential to Occur Within Project Alignment
Mammals					
Pallid bat	*Antrozous pallidus*	-	CSC	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. These bats are very sensitive to disturbance of roosting sites.	Low

Table 3.4-3 *(Continued)*: Special-Status Animal Species with the Potential to Occur in the Study Area

Common Name	Scientific Name	Federal Status	State Status	Habitat Requirements	Potential to Occur Within Project Alignment
Santa Cruz Kangaroo Rat	*Dipodomys venustus venustus*	-	-	This species requires well drained, deep soils and is often found on slopes where chaparral, or chaparral mixed with oak or pine, grow. This species makes burrow networks that are simple, but that include several supplementary branches where no food is cached or nests are built.	Unlikely
Hoary bat	*Lasiurus cinereus*	-	-	Prefers open habitats or habitat mosaics, with access to trees for cover and open area or habitat edges for feeding. Roosts in dense foliage of medium to large trees primarily on moths, and requires water.	Low
San Francisco dusky-footed woodrat	*Neotoma fuscipes annectens*	-	CSC	Occurs in brushy habitat in chaparral and foothills of woodlands around San Francisco Bay and adjacent coastal ranges.	Low
American badger	*Taxidea taxus*	-	CSC	Found in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Require uncultivated ground. Prey on burrowing rodents. Dig their own burrows.	Unlikely
Birds					
Long-eared owl	*Asio otus*	-	CSC	Long-eared owls inhabit dense vegetation close to grasslands, as well as open forests shrublands from sea level up to 2,000 meters elevation. They are common	Low

Table 3.4-3 *(Continued)*: Special-Status Animal Species with the Potential to Occur in the Study Area

Common Name	Scientific Name	Federal Status	State Status	Habitat Requirements	Potential to Occur Within Project Alignment
				in tree belts along streams of plans and even desert oases. They can be found in shelterbelts, small tree groves, thickets surrounded by wetlands, grasslands, marshes and farmlands.	
Marbled murrelet	*Brachyramphus marmoratus*	FT	SE	Feed on fish and invertebrates in the nearshore marine environment, but fly up to 50 miles inland to nest in conifer forests. Murrelets utilize forests with mature- or old-growth characteristics, including large trees, a generous amount of canopy closure, and complex under- and overstory structure. Nest trees must have trunk or branch formations, such as large horizontal branches, that can serve as nest platforms.	Low
Amphibians					
California red-legged frog	*Rana draytonii*	FT	CSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent sources of deep water for larval development. Must have access to aestivation habitat, consisting of small mammal burrows and moist leaf litter.	Unlikely
Foothill yellow-legged frog	*Rana boylii*	-	CSC	Found in partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized	Unlikely

Table 3.4-3 *(Continued)*: Special-Status Animal Species with the Potential to Occur in the Study Area

Common Name	Scientific Name	Federal Status	State Status	Habitat Requirements	Potential to Occur Within Project Alignment
				substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.	
Invertebrates					
San Bruno elfin butterfly	*Incisalia mossii*	FE	-	Rocky outcrops, woody canyons, and cliffs	Low
Unsilvered fritillary	*Speyeria adiaste adiaste*	FT	CSC	Found in openings in redwood and coniferous forests, oak woodlands, and chaparral.	Low

Notes:

FE = federally endangered

FT = federally threatened

CSC = California species of concern

SE = state endangered

CT = state threatened

SOURCE: ExteNet 2010, Parus Consulting 2011

3.4.2 ENVIRONMENTAL IMPACTS

Checklist

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 the U.S. Fish and Wildlife Service?	☐	☒	☐	☐

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or the 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 native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion

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 the U.S. Fish and Wildlife Service?

Construction. Special status species are highly unlikely to be found within the project alignment footprint due to the disturbed nature of the alignment and its proximity adjacent to the SR 35 and the disturbance and traffic associated with the highway. Measures have been included to ensure

avoidance of listed species such that there would be no potential for take of these species. Impacts are discussed here by species.

Special Status Plants

The project region has historical occurrences of various special-status plant species, as listed in Table 3.4-2. Rare manzanita species were reported along the SR 35 corridor, but no trees are scheduled for removal from project implementation. No special status plant species were detected during the botanical surveys. All proposed ground disturbance would take place in areas that have been previously disturbed and are either unvegetated or are in a ruderal state with non-native plant species dominating. The region contains numerous special-status plant species that could be present within the larger project area, and project implementation could result in a potentially significant adverse impact to such plant species in the unlikely event they were to occur within the alignment. Special status plants could be impacted through direct removal from excavation activities or by being crushed by construction equipment.

Implementation of mitigation measure Biology-1 would reduce impacts special status plant species to less than significant levels.

> **Mitigation Measure Biology-1.** Prior to project construction and in the appropriate blooming period, a qualified botanist shall perform a botanical survey to determine the presence of any special-status plant species within the project alignment. If any special status plant species are determined to be present within the alignment, one of the following mitigation measures shall be implemented:
>
> - The project alignment will be modified to completely avoid biologically sensitive areas; or
> - The areas surrounding the special-status plants shall be avoided and protected by the installation of high-visibility construction fencing and signage designating the environmentally sensitive area; plywood or silt fences may also be installed as needed to further protect the special-status plants from sediment-laded stormwater or fill dirt. Worker-awareness tailgate training shall be implemented to inform all workers of this sensitive area.
> - Where impacts to sensitive plants cannot be avoided, a plan shall be prepared by a qualified biologist for restoration (as well as an attempt at relocation of the individual plant) and seeds of the plant shall be collected. The plan shall include at a minimum (a) the location of where the plant shall be seeded or replanted, with preference for on-site replacement such as over the pipeline route; (b) the plant species and seeding rate; (c) a schematic depicting the replanting or seeding area; (d) the planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on-site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. The plan shall be prepared and implemented prior to allowing disturbance within 100 feet of the plant.
> - Five federally and/or state listed threatened or endangered plant species have a low potential for occurrence. If one of these species is identified and cannot be avoided,

CDFG and USFWS shall be consulted, and the restoration plan or equivalent measures shall be approved by the agencies prior to allowing any disturbance within 100 feet of the plant.

Note also that implementation of APMs Hazards-1 and Hydrology-1 would further mitigate any impacts to special-status plant species by ensuring that hazardous materials are not released and stormwater is not polluted during construction. These APMs include the implementation of an Erosion Control Plan (EPC) and Spill Prevention and Contingency Plan. Implementation of these measures would reduce potentially significant impacts to special-status plant species to a less than significant level.

Special Status Animals

Mammals. There is no potential habitat for any federal or state listed endangered or threatened mammals to occur within the project alignment or buffer area.

There is a low potential for occurrence of hoary bat (*Lasiurus cinereus*), pallid bat (*Antrozous pallidus*), and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) within the project buffer area in areas of aerial installation. Santa Cruz kangaroo rat (*Dipodomys venustus venustus*) and American badger (*Taxidea taxus*) have some habitat within the project buffer outside areas of aerial installations, but are unlikely to occur.

None of these species were observed during field surveys; however, they could occur in the project area due to their mobility, although unlikely. The project could impact these species through being injured or crushed by construction equipment. Indirect impacts to special status mammal species could include temporary loss of some foraging habitat, and impacts from noise; however, given the marginal quality of the habitat and its proximity to the road where traffic hazards and noise are already high for these mammals, indirect impacts would be less than significant.

Implementation of mitigation measures Biology-2 and Biology-3 would reduce impacts to special status mammal species to less than significant levels.

Mitigation Measure Biology-2. Prior to project construction each morning, a qualified biologist shall perform daily sweeps for the presence of any special-status animal species within the project alignment or within 50 feet of construction activities. If any special status animal species are determined to be present within the alignment, the following mitigation measures shall be implemented, as appropriate:

- The biologist shall identify any potential kangaroo rat or badger burrows within 50 feet of construction activities. The burrow shall be marked and avoided and any work that must be performed in proximity of the burrow (within 50 feet) shall be performed in the presence of the biological monitor. The biological monitor shall have the authority to stop work and implement new buffers if the animal is showing signs of distress.
- The biologist shall identify any woodrat nests. Woodrat nests shall be avoided and any work that must be performed in proximity of the nest (within 50 feet) shall be performed in the presence of the biological monitor. The biological monitor shall

have the authority to stop work and implement new buffers if the animal is showing signs of distress.

- Trees within 50 feet of the work area shall be checked for bats. If bats are found, the trees shall be avoided and any work that must be performed in proximity of the tree shall be performed in the presence of the biological monitor. The biological monitor shall have the authority to stop work and implement new buffers if the animal is showing signs of distress.
- A biological monitor shall be present during project construction. If a special status animal species is found foraging or traveling through the project construction alignment, construction shall be halted in the area of the animal until the animal moves out of harms way on its own.
- Exclusion fencing can be installed at the recommendation of the biologist and in accordance with CDFG and/or USFWS regulations and recommendations
- If special status invertebrates are found within the project areas, they will be avoided or relocated by the qualified biologist.
- No work shall commence if California red-legged frogs, San Bruno elfins, or unsilvered fritillarys are found during the morning sweep until USFWS and/or CDFG is contacted and recommended measures are implemented.

Mitigation Measure Biology-3. Construction best management practices shall be implemented during project construction to minimize impacts to wildlife in the project area, and will include the following:

- Any holes, trenches, pits, and tanks that are still open at the end of the construction work day shall either be covered or fenced temporarily to prevent entry.
- Any holes, trenches, pits, and tanks that are still open at the end of the construction work day shall be monitored and inspected by construction personnel at the end of the construction day to determine whether trapped wildlife are present before hole closure.
- The project route shall be restored to its original condition upon completion of construction activities. This restoration shall include re-vegetation where necessary. Re-vegetation shall use plant materials native to the area.
- No pets shall be allowed on the project site.
- No animals shall be deliberately injured or killed during construction activities.

Fish. No fish habitat is located within the project alignment. Potential habitat for Coho salmon (*Oncorhynchus kisutch*), steelhead (*Oncorhynchus mykiss*), and Chinook salmon (*Oncorhynchus tshawytscha*) was observed in stream crossings in the area surrounding the project alignment; however, no ground-disturbing activities are proposed in the vicinity of any stream channels that provide potential habitat for these species. The project would not have any direct impacts on fish. Indirect impacts could occur from sedimentation or contamination of waterways through polluted runoff; however, APMs Hazards-1 and Hydrology-1 would be implemented to minimize potential for polluted runoff or erosion, avoiding impacts to streams.

Invertebrates. Potential habitat for San Bruno elfin butterfly (*Incisalia mossii*) and unsilvered fritillary (*Speyeria adiaste adiaste*) is located in the greater project region. Both of these are federally listed threatened or endangered species.

No habitat was found in areas where ground-disturbing activities would occur. The likelihood of encountering these species is very low and the project would not impact their breeding or foraging habitat. Aerial installation is not expected to cause impacts to these species due to the minimally invasive nature of installation, access to the installation areas along the existing highway, and use of vehicles similar to what is currently being on the roadway. The project areas would be cleared daily for biological resources, including invertebrates, as described in mitigation measure Biology-2. If one of these butterflies is identified during a morning sweep, work will halt in the area of the species until the CDFG or USFWS is contacted for implementation of the appropriate measures and to ensure avoidance. Since breeding and foraging habitat is not located in the project area, any individual encountered would likely be transient. Impacts to these species would be avoided with implementation of mitigation measures Biology-1, Biology-2 and Biology-3.

Amphibians and Reptiles. No habitat for special status reptiles was found in the project area. Potential habitat for California red-legged frog (*Rana draytonii*) and foothill yellow-legged frog (*Rana boylii*) was observed in streams located downstream of the project alignment. California red-legged frog is a federally threatened species.

These amphibian species are usually active in daylight and inhabit dense, shrubby or emergent riparian vegetation and still or slow-moving perennial and ephemeral water bodies that also serve as breeding sites. Perennial creeks, including Purisima Creek and Corte Madera Creek, are located more than 0.25 miles from the project area and the nearest known occurrence is over 0.5 miles away (Figure 3.4-2). The nearest ephemeral creeks include La Honda Creek, located 57 feet west of the project route, and Squealer Gulch, located 175 feet south of the project alignment, although occurrence of red-legged frogs in these drainages is unlikely. The project construction in the vicinity of these drainages includes installation of nodes and wire stringing adjacent to the highway. Amphibians stay predominantly within areas of moisture and are not expected to be found within the project alignment where work would occur. The project would therefore have no direct impacts to amphibians and reptiles. Spills would be contained in accordance with APM Hazards-1 and erosion control would be installed in accordance with APM Hydrology-1, avoiding any indirect effects to waterways that could impact special status amphibians and reptiles. If a California red-legged frog were to be observed during biological monitoring or morning sweeps as described in mitigation measure Biology-1, no work would commence until CDFG or USFWS is contacted and the appropriate measures implemented in order to avoid impacts to the frog. The likelihood of encountering California red-legged frog within the alignment, however, is extremely low.

Avian Species. Potential forging and nesting habitat for long-eared owl (*Asio otus),* marbled murrelet (*Brachyramphus marmoratus*), raptor species, and migratory songbirds was observed in the project alignment where aerial installation activities would occur and the buffer area. Marbled murrelet is a federally threatened and state endangered species. No habitat was found in areas where ground-disturbing activities would occur. None of these species or their nests were

observed during field surveys; however, it is possible that nests could be found in proximity to the project alignment in the future. These species are protected by the California Raptor Act (CRA) (CDFG Code Section 710.7) and the federal Migratory Bird Treaty Act (MBTA). Tree removal would not be necessary for project implementation, but tree trimming may be required. Construction noise and the presence of construction crews and equipment within the project area have the potential to indirectly impact special-status avian species if they are nesting or foraging nearby during construction activities. An abundance of high quality foraging habitat is present within the general project region; therefore, impacts to foraging habitat are considered less than significant. Indirect impacts to nesting special-status avian species from construction noise could result in the abandoning of active nest sites and mortality, which would be a significant impact. However, existing noise from highway traffic would likely preclude nesting within proximity of the project, which is located adjacent to the highway and within the highway and other County roadway rights-of-way. Implementation of APM Biology-1 and mitigation measures Biology-2 and Biology-4 would avoid impacts to migratory birds.

> **APM Biology-1.** A pre-construction nesting survey by a qualified biologist shall be conducted for nesting birds and special-status bird species in the project alignment and buffer area. If no nesting birds or special-status bird species are found, project activities will proceed and no further mitigation measures will be required. If active nests are identified in these areas, the qualified biologist will determine the appropriate avoidance buffer taking into consideration existing noise of the roadway and proximity of work to the roadway. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site.
>
> **Mitigation Measure Biology-**4: Pre-construction nesting surveys shall be conducted not more than 30 days prior to construction if construction occurs in the nesting season (March 1 through August 31), and shall be repeated if no work occurs within 30 days. Pre-construction nesting surveys will not be required if construction occurs outside the nesting season. The surveys shall be conducted for areas within 500 feet of the project alignment. If during the surveys, marbled murrelet nests are identified, no work within 500 feet of such nests shall commence until USFWS and CDFG are consulted. Work within 500 feet of a nest shall be avoided until a qualified biologist has determined the young have fledged and are independent of the nest site. Other equivalent measures approved by USFWS and CDFG can be implemented in lieu of the buffer.

Operation and Maintenance. Project maintenance activities would involve periodic inspection of the fiber-optic cable route. These inspections would typically involve visual inspection from a vehicle driving the length of the route. Operation and maintenance activities would have no impact on special status plant species or animal species.

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

Construction. The vegetation community surveys performed in December of 2009 and March of 2010 determined that no riparian habitat is found in the vicinity of ground disturbing activities, including trenching, boring, and installation of new nodes. APMs Hazards-1 and Hydrology-1 would be implemented to ensure that no hazardous materials or sediment-laden construction run-off reaches any stream courses adjacent to the project alignment. Ground disturbing construction activities are therefore not expected to have a significant impact on riparian habitat.

Aerial pulling of the fiber-optic cable would largely avoid riparian habitat, but may come close to riparian habitat in a few locations. The cable pulling activities would occur within existing transportation and utility corridors, and would require minimal trimming of existing trees. Cable pulling construction activities are therefore not expected to have a significant impact on riparian habitat.

Operation and Maintenance. Project maintenance activities would involve periodic inspection of the fiber-optic cable route. These inspections would typically involve visual inspection from a vehicle driving the length of the route. Operation and maintenance activities would have no impact on sensitive habitats or communities.

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?

Construction. An informal wetland delineation was performed concurrent with the field surveys, and no wetlands were detected within the project alignment. Wetlands in the buffer area appear to occur primarily in the vicinity of stream channels. Ground disturbing construction activities would be performed entirely within upland areas. Trenching, boring, node installation, and other ground disturbing activities would occur in areas that have been disturbed in the past and are currently covered with gravel, pavement, or packed earth. Therefore, the project would not have an effect on any wetlands as defined by Section 404 of the Clean Water Act. Aerial cable pulling activities would involve the use of vehicles and workers on foot within existing roadway and utility corridors, and would not impact any wetland areas.

Operation and Maintenance. Project maintenance activities would involve periodic inspection of the fiber-optic cable route. These inspections would typically involve visual inspection from a vehicle driving the length of the route. Operation and maintenance activities would have no impact on wetland habitat.

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 native wildlife nursery sites?

Construction. The proposed project has been designed to avoid stream courses and wetlands. No project construction activities would take place directly in any stream courses or wetlands. No fisheries resource exists in the project area. Aerial fiber-optic cable installation would be performed using bucket trucks or on foot from areas that have likewise been previously disturbed and are now covered with gravel or pavement. The applicant proposes to implement the standard erosion control measures outlined in APMs Hydrology-1 and Hazards-1 to ensure that no

sediment-laden construction run-off or hazardous materials reaches any stream courses. No construction-related impacts to migratory fish or their habitat are anticipated, and no additional mitigation measures are required.

The project alignment is located within established transportation and utility corridors, so no wildlife nursery sites are located within the project alignment. Transportation corridors are not functional wildlife corridors; instead, they are significant sources of mortality. . Common wildlife, such as deer and raccoons, likely cross the project alignment in utility corridors that are away from roads and dwellings. Construction activities would not take place on any one section of the alignment for more than four days, so any interruption of wildlife corridors would be temporary and less than significant.

Aerial wildlife migratory corridors would be largely unaffected by construction activities, as construction impacts would be localized and temporary. Impacts would be less than significant.

Operation and Maintenance. Project maintenance activities would involve periodic inspection of the fiber-optic cable route. These inspections would typically involve visual inspection from a vehicle driving the length of the route. Operation and maintenance activities would have no impact on migratory corridors and nursery sites for fish or other wildlife.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Construction. Node installation activities may require minor trimming of existing trees, and no trees would be removed as part of the project. The applicant intends to comply with all San Mateo County ordinances and requirements regarding tree trimming activities. No other local policies or ordinances protecting biological resources exist in the project area. Impacts to local policies and ordinances protecting biological resources would be less than significant.

Operation and Maintenance. Operation and maintenance activities would not involve activities that would affect the biological environment. No conflicts with local biological policies or ordinances are anticipated during project operation and maintenance.

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

There are no adopted Habitat Conservation Plans, Natural Communities Conservation Plans, or other approved conservation plans that affect the project area. Construction, operation, and maintenance of the proposed project would therefore not have any impacts on conservation plans.

3.5 Cultural Resources

3.5.1 ENVIRONMENTAL SETTING

Information presented in this section was compiled from the *Cultural Assessment Report for the Proposed King's Mountain Highway 35 Fiber-Fed Distributed Antenna Communications System Project*, prepared by Peak and Associates (Peak and Associates 2010).

Archaeology

Prehistory

The Bay Area in general was lightly occupied prior to about 2000 B.C. by hunter/gatherer populations that did not concentrate on estuarine or marine food resources. Shellfish were eaten, but they were not predominant in the diet, and sites were located inland as commonly as near the ocean or bay. About 2000 B.C. a radically different cultural focus, the Berkeley Pattern, took over. The Berkeley Pattern was characterized by the movement of Penutian speakers into the area, displacing Hokan speakers.

The next major shift in cultural patterns appears to have developed in the area over time as a result of population expansion and technological development. The Augustine Pattern, from around A.D. 500 to Euro-American contact, shows an increased reliance on vegetable foods (necessary to support a denser population), more settlements, wide-ranging trading patterns with both neighboring and distant groups, and several other traits reflecting a mature cultural development.

Ethnography

The old name for the native population of the peninsula, Costanoan, derives from the Spanish term for coastal people and was not used by the Native American people. Modern descendants generally prefer the term Ohlone to refer to this linguistic grouping. Ohlone territory extended from the Carquinez Strait in the northeast to just south of Chalome Creek in the southeast, and from San Francisco to the Sur River along the Coast. This vast territory was broken into eight different language-based zones. These eight branches of the Costanoan family were separate languages, not dialects. The language of the Ohlone in the project vicinity was Ramaytush. The Ramaytush occupied the land from San Francisco south through San Mateo County. It is estimated that the 1770 population of the Ramaytush was approximately 1,400.

Between 1770 and 1797, the Franciscans established seven missions in Ohlone territory and effectively changed the Native American way of life. Unwilling recruits to the missions resisted control by Franciscans. Some Ohlone returned to traditional religious and subsistence practices after the Mexican government secularized the missions between 1834 and 1836, while others worked on Mexican ranchos. Former mission residents formed multi-tribal Indian communities in Pleasanton and other locations within the aboriginal territory.

Historic Resources

Numerous land grants were awarded by Spanish and Mexican authorities in the area that includes modern San Mateo County. The project area skirts these land grants for the most part, but the northern portion of the project is within or adjacent to Rancho Cañada de Raymundo, and a

portion of the project near La Honda Road is within the boundaries of Rancho Cañada del Corte de Madera.

The northern terminus of the project route lies within the far eastern boundary of Rancho Cañada Verde y Arroyo de la Purisima. This property is fronted by the Pacific Ocean. The area on the high ridge slopes in the vicinity of the project alignment was little used in the Spanish-Mexican period.

The travel corridor up the bayshore through modern Redwood City, Woodside, and the many other communities of the Peninsula was a major transportation artery from the earliest history in the area. El Camino Real was in place before any of these communities existed, and U.S. 101 and other routes soon followed. Skyline Boulevard was constructed to provide an alternative to the bayshore routes, thus relieving congestion, and to provide better access to the scenic ridgeline that divides the bayside and oceanside segments of the Peninsula. The route extends southward from the "Great Highway" at its intersection with Sloat Boulevard in San Francisco and terminates in Santa Cruz County where it connects with SR 17.

The need for an additional route was recognized as early as 1919, when survey and design work began on SR 35. By 1925, the new SR 35 was open to the public from San Francisco to La Honda. By 1930, the highway had been extended to Saratoga Gap and construction on the remaining 14 miles was in progress.

From its inception, Skyline Boulevard was recognized for its scenic qualities and views, a result of its position winding through the northern portion of the Santa Cruz Mountains. Early descriptions note the panoramic views of the Pacific Ocean as well as the San Francisco Bay and beyond. The highway was built with a wider roadbed and extra parking space at certain points of interest in order to take advantage of the views. This scenic quality soon attracted construction of second homes and retirement homes to an area that had already had a small population of truck farmers. The length of Skyline Boulevard is now much more residential than rural, although it is still densely forested and scenic.

Defining Archaeological and Historical Resources

Cultural resources in the State of California are recognized as non-renewable resources that require management to assure their benefit to present and future Californians. In the protection and management of the cultural environment, CEQA guidelines provide definitions and standards for cultural resources management. The term “historical resource” is defined as follows:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (CRHR).
2. A resource included in a local register of historical resources or identified as significant in a historical resources survey shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site area, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency’s determination is

supported by substantial evidence in light of the whole record. Generally, a cultural resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR, including the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

The term "unique archaeological resource" has the following meaning under CEQA:

> An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
>
> 1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information,
> 2. Has a special and particular quality such as being the oldest of its type or the best available example of its type, or
> 3. Is directly associated with a scientifically recognized important prehistoric or historical event or person [Public Resources Code Section 21083.2(g)].

Survey Methodology and Results

Record Search

Two individual record and information searches, each covering the project area and its vicinity at different stages of project design, were conducted at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at Sonoma State University. The record searches found twelve surveys that had been conducted at properties adjoining SR 35, and only one survey, a Caltrans evaluation of the Skeggs Point Scenic Lookout, that had been directed specifically at the road corridor. A total of three cultural resources were identified from the documented investigations within 1.5 miles of the project area, including the Skeggs Point Scenic Lookout located adjacent to the project alignment; the Filoli Mansion and Grounds located to the east of the project route; and the Arguello Adobe, located on private, gated land west of Skeggs Point Scenic Lookout.

Skeggs Point Scenic Lookout is located along the east side of SR 35 and consists of a large paved parking area separated from the roadway by an approximately 4-foot-tall masonry retaining wall. A similarly constructed but lower wall encloses the eastern edge of the feature. A viewing platform in the eastern portion of the lookout is elevated about two feet above the parking area. The lookout was likely built sometime around 1934, which coincides with the general timing of the completion of SR 35 construction. The lookout was built privately and was not originally associated with the highway, though the lookout property was later sold to the State of California.

According to the cultural resources report prepared for this project, Caltrans has determined that the Skeggs Point Scenic Lookout is not eligible for inclusion in the National Register of Historic Places (NRHP).

The Filoli Mansion and Grounds are located approximately 1.5 miles east of the project alignment. The Filoli Mansion was constructed around 1917 for William Bowers Bourne II and features a red brick two story main house in Georgian Revival style. The mansion is surrounded by landscaped grounds that include a teahouse, walled gardens, and other features typical of a country manse from that time period. The mansion and gardens are now a State Historic Landmark and are listed on the NRHP and owned by the National Trust for Historic Preservation. A portion of SR 35 within the project alignment is located along the far western edge of the original Bourne property. The project alignment is outside the bounds of the original Bourne property, and no portion of the Filoli Mansion and Grounds are visible from SR 35 due to dense forest growth.

The Arguello Adobe is located west of Skeggs Point Overlook, but conflicting documentation exists as to its exact location. The field inspection established that there would be no possibility of impact to the site as a result of the proposed construction.

Field Survey

A field survey of the project alignment was conducted on December 18, 2009, by Mr. Robert Geary of Peak and Associates. An additional field survey was conducted on April 17, 2010 to survey additional nodes and areas of proposed ground disturbance that were subsequently added to the original project. The inspection was conducted by driving to each node and buried cable segment and performing an on-foot inspection of the area of potential disturbance and nearby adjoining land. Typically, the on-foot inspection was conducted within a circle of about 20 meters diameter around a pole location. Buried cable sections were covered with one transect up one side of the alignment and a return along the other side. No resources other than the previously recorded Skeggs Point Lookout were identified during the field inspection.

Paleontological Resources

Paleontological resources (fossils) are the remains or traces of prehistoric animals and plants. A paleontological analysis was conducted to determine the sensitivity of the project area with regard to the potential for these resources to occur. The project site was surveyed for fossils, and to determine the geology of the site, during field surveys in December of 2009 and March of 2010. Three geologic units underlay the project alignment, and each of these geologic units has the potential to contain paleontological resources. The project alignment has been altered in the past in order to construct the existing transportation and utility corridors; however, monitoring for paleontological resources did not necessarily occur during that construction.

Native American Consultation

The Native American Heritage Commission (NAHC) was contacted on November 20, 2009, to request a check of Sacred Lands files and to obtain a list of individuals and groups to contact regarding the proposed project. Letters were sent to everyone identified on the NAHC list on

December 11, 2009. Follow-up contacts were made by fax or e-mail. Correspondence with the NAHC and the individuals and groups provided on the NAHC contact list is included in the PEA.

3.5.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 as defined in §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Discussion

a and b) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in §15064.5?

Construction. The three potentially historic properties in the project vicinity include the Skeggs Point Scenic Outlook, which has been determined ineligible for NHRP, and thus not likely eligible under §15064.5; the Filoli Mansion and Garden, which is a NHRP property; and the Arguello Adobe, one of the earliest and few remaining adobes in San Mateo County, which could not be accessed for a determination of its historic significance because it was located on private property behind a locked gate. Proposed Node 8 would be located to the immediate north of the northern entrance to the Skeggs Point Scenic Lookout. Wooden utility poles are currently located just beyond the two vehicle entrances to the lookout. The addition of a new utility pole near the lookout would not have an effect on the historic eligibility or significance of Skeggs Point because the pole would be located outside of the limits of the Skeggs Point property and would not obstruct views from the property.

The proposed project alignment is located to the immediate west of the westernmost boundary of the original Bourne properties that comprise the Filoli Mansion and Garden. The proposed project would have no effect on the Filoli property because it is outside of the property boundaries and would not be visible from the mansion and garden.

Although there is conflicting documentation regarding the exact location the Arguello Adobe, the nearest recorded location of the Adobe places it just west of the Skeggs Point Scenic Lookout at the top of a vertical bluff approximately 40 feet above the elevation of SR 35. If the location is correct, then the Arguello Adobe site would be outside of the limits of project disturbance and would not be affected by the proposed project.

No Sacred Lands were identified in the NAHC file, and no responses to Native American contacts have been received to date.

Previously undiscovered historical or archaeological resources could be uncovered during ground disturbing activities. Damage or loss of such historical or archaeological resources would be considered a potentially significant impact. Implementation of Mitigation Measure Cultural-1, which would require worker awareness training prior to construction, and APM Cultural Resources-1, which would require a temporary halt of construction activities if an historical or archaeological resource is uncovered, and which outlines steps to be taken to ensure that such resources are adequately protected, would reduce impacts to a less than significant level.

> **Mitigation Measure Cultural Resources-1:** ExteNet shall require all contractors and subcontractors to inform the crew about the potential for archaeological and paleontological discoveries during construction. A qualified archaeologist and paleontologist shall provide a brief training session to all construction personnel on how to identify such resources, including a description of the kinds of cultural resources that might be encountered during construction. The training session shall also outline the appropriate responses to take if such discoveries are made during construction activities.
>
> **APM Cultural Resources-1.** Should any signs of historic or archeological resources be observed during excavation or ground-disturbing activities, the following measures shall be implemented:
>
> - If archeological resources are discovered during excavation or ground disturbing activities, a certified archeologist shall be retained by the applicant to monitor construction excavations and to produce a mitigation plan for the proposed project. Archeological monitoring shall include inspection of exposed materials to determine if artifacts are present. The monitor shall have authority to temporarily divert grading away from exposed resources in order to recover specimens.
> - The certified archeologist shall record all details of the find on field data forms, and shall prepare monthly progress reports to be filed with the applicant and the CPUC.
> - Recovered artifacts shall be prepared to the point of curation, identified by qualified experts, listed in a database to allow analysis, and deposited in a designated repository.

- The certified archeologist shall prepare a final mitigation report to be filed with the applicant, the CPUC, and the repository.
- If human remains are encountered during the course of excavation, all construction activities in the vicinity of the find shall cease, and the San Mateo County coroner and Native American representatives (if appropriate) shall be contacted to identify the find and determine the proper course of action.

Operation and Maintenance. Operation and maintenance activities would involve periodic inspections of the project facilities, typically involving a visual inspection from a vehicle. No ground disturbing activities would occur during operation and maintenance activities, and these activities would have no effect on historic and archaeological resources.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Construction. No paleontological resources or unique geological features are known to be located within the project alignment. The possibility exists, however, that paleontological resources could be unearthed during construction activities, and damage to such resources could result in a potentially significant impact. APM Cultural-2 would require a temporary halt of construction activities if paleontological resources are uncovered, and outlines steps to be taken to ensure that such resources are adequately protected. Implementation of Mitigation Measure Cultural Resources-1 and APM Cultural Resources-2 would reduce impacts to paleontological resources to a less-than-significant level.

APM Cultural Resources-2. If fossil or other paleontological materials are observed during the course of ground disturbing activities, such ground disturbing activities shall cease and a certified paleontologist shall be retained to monitor all further excavation activities at the site of the discovery. Paleontological resources discovered during construction activities shall be reported immediately to the applicant and the CPUC. The certified paleontologist shall immediately evaluate the paleontological resources that have been discovered to determine if they are significant, and shall prepare a monitoring and mitigation plan that will address what monitoring will take place and how paleontological resources will be handled. The paleontological monitor shall be empowered to temporarily halt or redirect excavation activities in order to evaluate and recover the paleontological resources.

Upon completion of the evaluation and recovery of the paleontological resources, a report of findings shall be prepared by the certified paleontologist and submitted to the applicant and the CPUC. This report shall include the following at a minimum:

- a statement of the type of paleontological resources found
- the methods and procedures used to recover the paleontological resources
- an inventory of the specimens recovered
- a statement of the scientific significance of the paleontological resources

The paleontological specimens recovered as a result of mitigation shall be donated to a qualified scientific institution where they would be afforded long-term preservation to allow future scientific study.

Operation and Maintenance. Operation and maintenance activities would involve periodic inspections of the project facilities, typically involving a visual inspection from a vehicle. No ground disturbing activities would occur during operation and maintenance activities, and these activities would have no effect on paleontological resources.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Construction. Human burials, in addition to being potential historical resources, have specific treatment requirements found in the California Public Resources Code (PRC) Section 5097 and California Health and Safety Code Sections 7050.5, 7051, and 7054. It is highly unlikely that human remains would be encountered during project construction; however, the potential of uncovering human remains exists, and disturbance of human remains would be considered a potentially significant impact. Implementation of APM Cultural Resources-1 would reduce impacts from the discovery of human remains to a less than significant level.

Operation and Maintenance. Operation and maintenance activities would involve periodic inspections of the project facilities, typically involving a visual inspection from a vehicle. No ground disturbing activities would occur during operation and maintenance activities, and these activities would have no effect on human remains.

3.6 Geology, Soils, and Seismicity

3.6.1 ENVIRONMENTAL SETTING

Topography

The majority of the project alignment is located within the transportation corridor and right-of-way of SR 35 in San Mateo County, with the remainder of the alignment located within County roadway and utility corridors. SR 35 runs through the Santa Cruz Mountains where the elevation ranges between 500 feet above mean sea level (amsl) in South San Francisco and exceeds 2,000 feet at the highest peak. The elevation of the roadway within the project alignment ranges between 1,460 to 2,200 feet amsl.

Geology

SR 35 follows a mostly linear route along a ridgeline and has various chert and sandstone outcroppings visible along the road. The geologic formations underlying the project alignment are middle and lower Eocene Butano Sandstone (Tb), Oligocene and lower Miocene Lambert Shale (Tla), and middle and lower Eocene Whiskey Hill Formation (Tw). Figure 3.6-1 shows a more detailed map of the geologic formations of the project region and adjacent land.

Soils

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) has mapped the soils in the project area. Major soil types along the alignment range from sandy loam, gravelly sandy loam, loam, and unweathered bedrock in a small section of the middle of the project alignment (NRCS 2011). The most prevalent soil types in the project region are Butano loam and Hugo and Josephine sandy loams. Figure 3.6-2 shows the soil types in the project area, and a brief description of soil type characteristics are included in Table 3.6-1.

Faulting and Seismicity

The project area is located in a seismically active region with several active and potentially active faults. The predominant northwest-trending structures of the Coast Ranges Province, in which the project area is located, are related to the San Andreas Fault transform boundary, which separates two major tectonic plates. The main feature of the boundary is the San Andreas Fault Zone, a right-lateral strike-slip fault zone located approximately 1.5 miles east of the project site at its closest point. The fault system is considered to be the primary seismic hazard in California and has historically caused significant damage in the project region. Large earthquakes were recorded in 1838, 1865, 1890, 1906, and 1989.

A recent report by the Working Group on California Earthquake Probabilities (WGCEP) indicates that there is a 63 percent probability that at least one magnitude (M) 6.7 or greater earthquake will occur in the San Francisco Bay region before 2037, and a 31 percent probability that a M 6.7 or larger earthquake will occur on the Hayward fault in this same time period (USGS and CGS 2008). Due to its proximity and ability to generate large earthquakes, the San Andreas Fault dominates the ground shaking hazard at the site; however, other regional faults situated at a greater distance to the site could also contribute to ground shaking risks. County Hazards Mitigation maps, prepared using data from ABAG, indicate that the project area could experience very strong

Figure 3.6-1: Geologic Formations Map

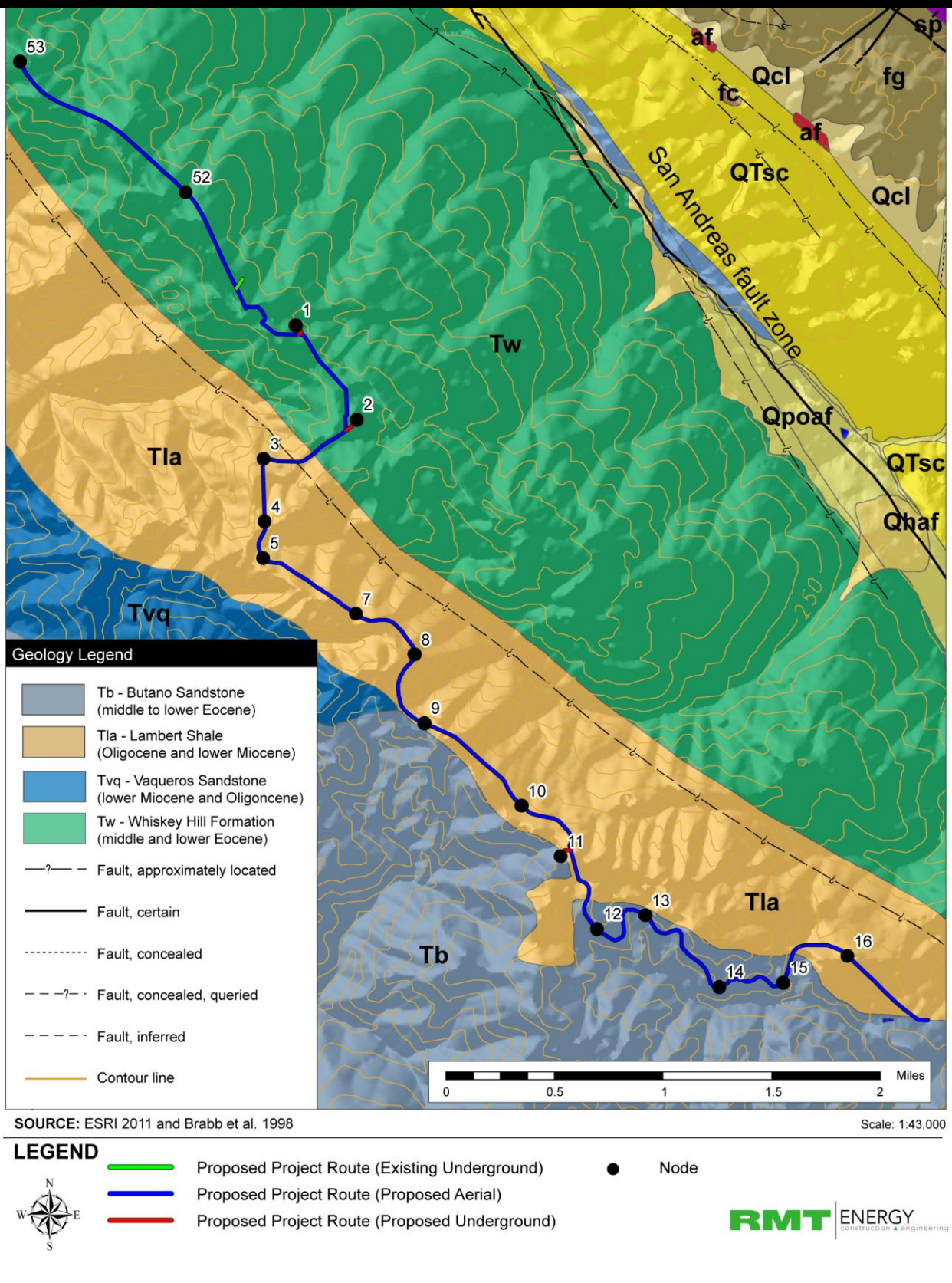


Figure 3.6-2: Soil Types in the Project Vicinity

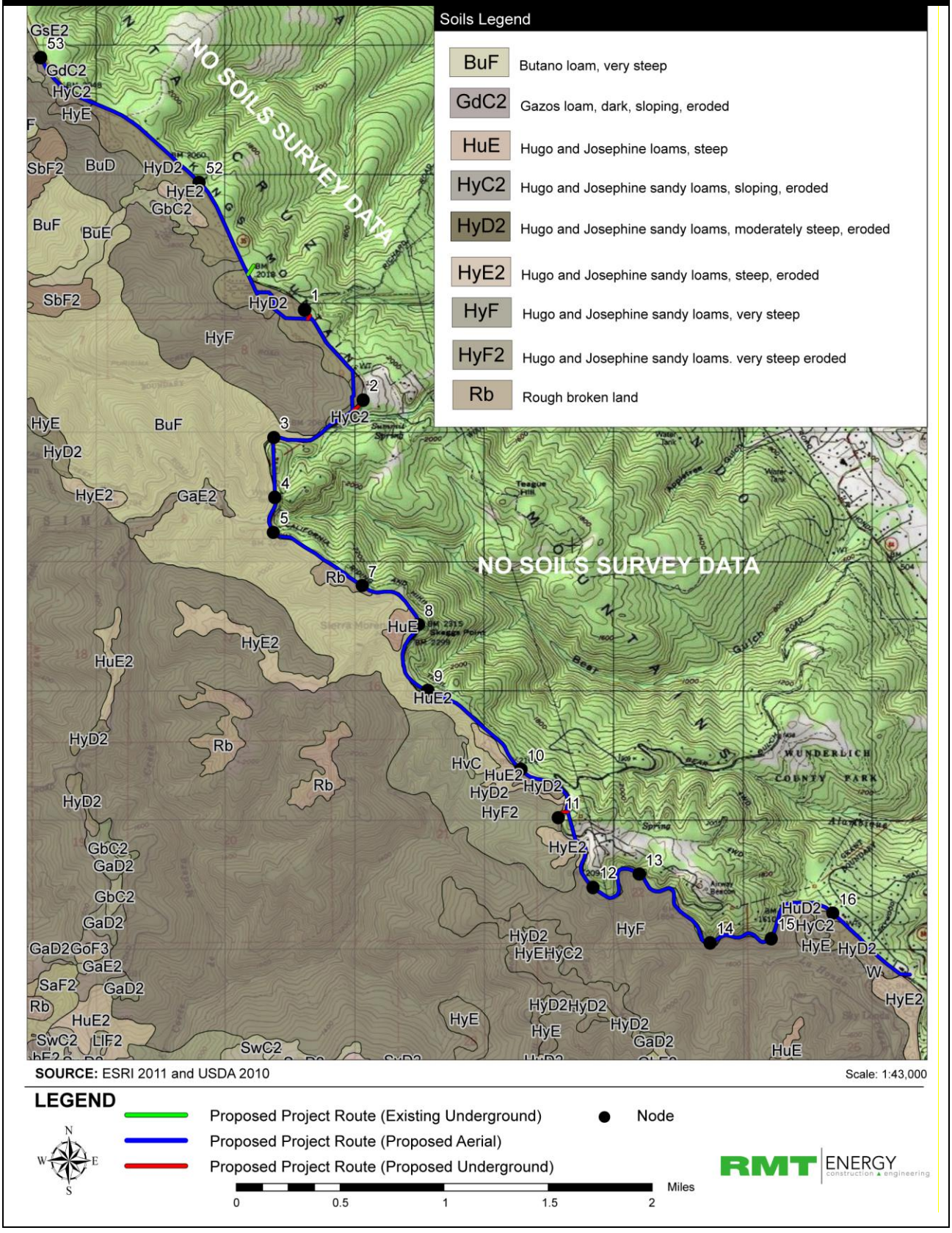


Table 3.6-1: Soil Type Characteristics

Soil Types	Characteristics
Butano loam, very steep	Butano loam, very steep, is typically 36-60 inches deep over bedrock and occurs on slopes of 30 to 45 percent. Permeability is moderate; runoff is medium to rapid; and the erosion hazard is moderate to high.
Hugo and Josephine loams, steep	Hugo and Josephine loams, steep, is typically less than 60 inches deep over bedrock and occurs on slopes of 30-45 percent. Permeability is moderate; runoff is rapid; and the erosion hazard is high.
Hugo and Josephine sandy loams, sloping, eroded	Hugo and Josephine sandy loams, sloping, eroded, is typically less than 60 inches deep over bedrock and occurs on slopes of 5-11 percent. Permeability is moderately rapid; runoff is slow, and the erosion hazard is slight to moderate.
Hugo and Josephine sandy loams, moderately steep, eroded	Hugo and Josephine sandy loams, moderately steep, eroded, is typically less than 60 inches deep over bedrock and occurs on slopes of 11-20 percent. Permeability is moderate; runoff is medium; and the erosion hazard is moderate.
Hugo and Josephine sandy loams, steep, eroded	Hugo and Josephine sandy loams, steep, eroded, is typically less than 60 inches deep over bedrock and occurs on slopes of 20-40 percent. Permeability is moderate; runoff is rapid; and the erosion hazard is high.
Hugo and Josephine loams, very steep	Hugo and Josephine loams, very steep, is typically 36-60 inches deep over bedrock. Slopes are 45 percent or steeper. Soil permeability is moderate; runoff is slow; and the erosion hazard is slight.
Hugo and Josephine sandy loams, very steep eroded	Hugo and Josephine sandy loams, very steep, eroded, is typically less than 60 inches deep over bedrock and occurs on slopes of 40 percent or steeper. Permeability is moderately rapid; runoff is rapid; and the erosion hazard is high.
Gazos loam, dark, sloping, eroded	Gazos loam is typically 20-36 inches deep over bedrock and occurs on slopes of 7-16 percent. Permeability is moderate; runoff is slow; and erosion hazard is slight.
Rough broken land	Rough broken land is a miscellaneous land type that consists of very steep rocky uplands comprised of granite, Monterey shale, sandstone, and basalt. Rocky outcrops occupy about half the surface area, and there is seldom more than 10-inch thickness of soil material. Permeability is variable; runoff is very rapid; and the erosion hazard is very high.

SOURCE: NRCS 2011.

intensity shaking during an earthquake on the northern portion of the San Andreas Fault, and could experience very strong to violent shaking during an earthquake on the peninsula segment of the San Andreas Fault (SMC 2011).

The Alquist-Priolo Earthquake Fault Zoning Act designates earthquake fault zones based on the presence of a sufficiently active and well-defined fault. The California Geological Survey (CGS)

developed criteria to classify fault activity for the Alquist-Priolo Earthquake Fault Zoning Act. By definition, an active fault is one that is "sufficiently active and well-defined," with evidence of surface displacement within Holocene time (about the last 11,000 years) (Hart and Bryant 2007). A potentially active fault is defined as a fault that has shown evidence of surface displacement during the Quaternary period (last 1.6 million years), unless direct geologic evidence demonstrates inactivity for all of the Holocene or longer (Hart and Bryant1997). The project alignment is located 1.5 miles west of the San Andreas Fault, which is considered to be an active fault. Other major faults in the region include the Hayward Fault, located approximately 15 miles east of the project site; San Gregorio Fault, located approximately 12 miles south of the site; and Calaveras Fault, located approximately 22 miles east of the site. Currently, there are no designated Alquist-Priolo faults in the immediate project area.

Liquefaction

Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. Liquefaction potential within the project area ranges from very low to low, based on the liquefaction scenario maps produced by County (SMC 2011).

Landslide Hazards

There is no known potential for landslide hazards within or immediately adjacent to the project area, based on the landslide hazard map produced by the County (SMC 2011). Portions of the project alignment are constructed on fill materials used during construction of the transportation corridor. Constructing on non-engineered fills placed without standards for fill materials or compaction could result in slope instability or failure.

3.6.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 soil, as defined in Table 18-1-B 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 waste water?	☐	☐	☐	☒

Impacts

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?

The risk of fault rupture is greatest in the immediate vicinity of active faults. The project area is located outside of any identified Alquist-Priolo fault zones; therefore, substantial effects during construction or operation and maintenance of the proposed telecommunications lines would not occur.

ii) Strong seismic ground shaking?

Construction. The project alignment could be exposed to very strong intensity shaking during the lifespan of the project due to its proximity to the San Andreas Fault and other faults in the region. Severe ground shaking has the potential to cause human injury; however, due to the short duration of construction and the low probability of a seismic event occurring during this time, the potential for construction crews to experience strong seismic ground shaking is minimal. Impacts from ground shaking would be less than significant.

Operation and Maintenance. Operation and maintenance activities for the power line would be similar in scope to existing operation and maintenance activities, as they would occur infrequently, up to five or six times a year under normal conditions. Due to the short duration of these activities and the low probability of a seismic event occurring during operation and maintenance activities, impacts from ground shaking would be less than significant.

The telecommunications line would be designed and installed to seismic standards for the area for utilities. Seismic shaking could cause damage to the line. Damaged sections would be repaired and impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

The soils on which construction would occur are indicated by the County as having a very low or low potential for liquefaction. Therefore, the potential for liquefaction and other forms of ground failure to occur as a result of a seismic-related event would be less than significant.

iv) Landslides?

Construction activities primarily include trenching, boring, and utility pole installation in areas that are relatively flat to gently sloping with no known potential for landslides. However, construction would occur on existing engineered slopes within the SR 35 corridor, which could be potentially unstable if they contain unsuitable and/or poorly compacted fills. Project construction could further destabilize the slopes or cause them to fail. Implementation of mitigation measure Geology-1, which would require the applicant to incorporate the recommendations of a site-specific geotechnical report, would reduce this hazard to a less than significant level.

> **Mitigation Measure Geology-1:** Prior to the issuance of any grading permits, a geotechnical investigation and report shall be prepared by a qualified Geotechnical Engineer and submitted to Caltrans for review and confirmation that the proposed project fully complies all applicable codes and standards. The report shall determine the proposed project's surface geotechnical conditions and address potential structural hazards. The recommendations, measures, design criteria, and specifications set forth in the geotechnical investigation and report shall be followed and incorporated into the project.

b) Result in substantial soil erosion or the loss of topsoil?

The majority of the project alignment is located within the transportation corridor and right-of-way of SR 35 in San Mateo County, with the remainder of the alignment located within other County roadways and utility corridors. Soils in the project alignment have been previously disturbed during installation of previous utility poles for existing telecommunication lines. As such, ground-disturbing activities such as site clearing, trenching, and boring would not result in

the removal of a high-value topsoil resource. These activities, however, may have the potential to contribute to accelerated erosion, which potentially could impair surface water or groundwater quality in the region. The general contractor selected for project implementation would be required to prepare and implement a stormwater pollution prevention plan (SWPPP) in order to comply with the requirements of applicable permits under the NPDES program. The SWPPP would include measures to minimize the potential for accelerated erosion, as discussed in Section 3.9 - Hydrology and Water Quality. Implementation of APMs Geology-1 and Geology-2 would require measures to minimize erosion during construction, and would reduce erosion impacts to a less than significant level.

APM Geology-1: The applicant shall use excavated materials to backfill trenches in order to minimize erosion and soil settlement.

APM Geology-2: Unpaved areas shall undergo a grading process at the end of construction activities to restore the gradient to its original state. The disturbed area shall then be fertilized, mulched, and seeded with native vegetation.

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?

New utility pole and underground conduit locations were chosen in areas of the alignment that are generally flat to gently sloping with no known potential for landslides. However, construction would occur on existing engineered materials within the SR 35 corridor, which could be potentially unstable if they contain unsuitable and/or poorly compacted fill. Project construction could result in slope instability or failure, subsidence, and other soil hazards related to non-engineered soils. Implementation of mitigation measure Geology-1 and APM Geology-1 would reduce these hazards to a less than significant level.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Expansive soils expand and contract due to changes in water content and have the potential to damage buildings and structures; particularly structures with concrete slab foundations. Expansive soils are soils having a high clay content that swell when wet and shrink when dry. The soils along the project alignment are primarily loams, gravelly loams, and sandy loams. These soils do not have high clay content and are therefore not expansive. However, existing fill materials within the roadway right-of-way may have expansive properties and could present a potential risk to life and property. Implementation of mitigation measure Geology-1 would reduce potential risks related to expansive soils to a less than significant level.

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?

No septic tanks are included as part of this project. Portable toilets would be used during the construction phase of the project. All wastewater generated during construction activities would be transported off-site and treated remotely. There would be no impact on geology or soils as a result of a septic tank or wastewater disposal.

3.7 Greenhouse Gases

3.7.1 ENVIRONMENTAL SETTING

A "greenhouse gas" or "greenhouse gases" include, but are not limited to, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (NOx), hydrofluorocarbon (HFC), perfluorocarbon (PFC), and sulfur hexafluoride (SF_6) as defined by Assembly Bill 32(AB 32).

Similar to regulated air pollutants, greenhouse gas (GHG) emissions and global climate change also represent cumulative impacts. GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. Climate change impacts may include an increase in extreme heat days, higher concentrations of air pollutants, sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts. No single project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contribute substantially to the phenomenon of global climate change and its associated environmental impacts (BAAQMD 2011).

Governor Schwarzenegger issued Executive Order (EO) S-3-05 in June 2005, in response to the increasing body of evidence that GHGs will continue to affect global climate. EO S-3-05 established several GHG emission reduction targets for California. GHG emissions are to be reduced to the year 2000 emission levels by 2010; to 1990 emission levels by 2020 (a 29% reduction from Business-as-Usual emissions levels projected for 2020); and to 80% below 1990 levels by 2050.

The California State Legislature adopted Assembly Bill (AB) 32 – The California Global Warming Solutions Act of 2006 subsequent to the Governor's issuance of EO S-3-05. AB 32 establishes a cap on statewide GHG emissions and sets forth the regulatory framework to achieve the corresponding reduction in statewide emissions levels. Specifically, AB 32 recognizes a serious threat to the "economic well being, public health, natural resources, and the environment of California" that results from global climate change. Consequently, AB 32 mandates a significant reduction in GHGs in order to contribute to efforts to stabilize atmospheric concentrations of GHGs (BAAQMD 2011).

3.7.2 ENVIRONMENTAL IMPACTS

On December 30, 2009, the California Resources Agency adopted amendments to the CEQA guidelines for GHG emissions. On February 16, 2010, the Office of Administrative Law approved the amendments and filed them with the Secretary of State for inclusion in the California Code of Regulations. The amendments became effective on March 18, 2010. According to these amendments, impacts to GHGs may be considered significant if the project will:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and/or
- Conflict with an applicable plan, policy or regulation adopted for the purposes of reducing the emissions of GHGs.

BAAQMD's approach to developing a Threshold of Significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move towards

climate stabilization. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant (BAAQMD 2011).

BAAQMD's GHG threshold is defined in terms of carbon dioxide equivalent (CO_2-e), a metric that accounts for the emissions from various greenhouse gases based on their global warming potential.

The Thresholds of Significance for operational-related GHG emissions are:

- For land use development projects, the threshold is compliance with a qualified GHG Reduction Strategy; or annual emissions less than 1,100 metric tons per year of CO2-e; or 4.6 metric tons CO2-e/Service Population(SP)/yr (SP = residents + employees). Land use development projects include residential, commercial, industrial, and public land uses and facilities. The proposed project would be considered a land use development project.
- For stationary-source projects, the threshold is 10,000 metric tons per year of CO2-e. Stationary-source projects include land uses that would accommodate processes and equipment that emit GHG emissions and would require an Air District permit to operate.

BAAQMD does not have an adopted Threshold of Significance for construction-related GHG emissions. However, quantification and disclosure of GHG emissions that would occur during construction is required, along with making a determination on the significance of these construction-generated GHG emission impacts in relation to meeting AB 32 GHG reduction goals, as required by the Public Resources Code, Section 21082.2. Incorporation of best management practices to reduce GHG emissions during construction is encouraged, as feasible and applicable (BAAQMD 2011).

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 emission of greenhouse gases?	☐	☐	☒	☐

Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction. Project construction would result in emission of GHGs from on-site construction equipment and off-site worker trips. Anticipated GHG emissions were calculated for all construction-related activities. The most common GHGs associated with fuel combustion are CO_2, CH_4, and NOx. CH_4 and NOx emissions represent less than 1 percent of the combustion emissions on a CO_2-e basis based on emission factors from the Local Government Operations Protocol (CARB, CCAR, ICLEI, and TCR 2010). Therefore, although these compounds have global warming potential, they were not included in the GHG calculations. Other GHGs such as SF_6, HCF, and PFC were not included in the analysis because the proposed project would not emit these constituents. Construction emissions were estimated for three construction phases: trenching and underground conduit installation, installation of new poles, nodes and equipment, and installation of aerial cable. Detailed construction emissions are included in the PEA. The total project construction emissions were estimated to be 58.8 metric tons of CO_2-e. These one-time construction emissions do not interfere with the GHG reduction goals intended in AB 32, and are therefore considered less than significant with implementation of APMs GHG-1 through GHG-5. Implementation of these measures would reduce short-term construction GHG emissions by approximately 5 percent to 55.9 metric tons of CO_2-e.

> **APM GHG-1:** Encourage construction workers to carpool to the work site to the extent feasible.
>
> **APM GHG-2:** Minimize unnecessary construction vehicle idling to the extent feasible.
>
> **APM GHG-3:** To the extent feasible, use low-emission construction equipment. All engines used shall be maintained in compliance with the EPA and the applicable CARB engine standards.
>
> **APM GHG-**4: Use existing power poles where available and feasible rather than temporary power generators.
>
> **APM GHG-**5: Consider the use of biodiesel or increased amounts of ethanol to fuel vehicles used for maintenance activities.

Operation and Maintenance. No GHGs would be emitted from operation of the new communications network. Some GHGs would be emitted from vehicle trips for periodic monitoring of the lines and occasional trips for maintenance activities. The annual maintenance emissions would be on the order of 0.21 metric tons of CO_2-e per year based on emission factors from the Local Government Operations Protocol (CARB, CCAR, ICLEI, and TCR 2010), assuming that there would be approximately six maintenance trips per year and another six trips for unscheduled repairs, and assuming the use of a standard heavy-duty pickup truck making a 40-mile roundtrip from the San Mateo area. Emissions from these activities would be below the significance threshold of 1,100 metric tons of CO_2-e per year. Implementation of APMs GHG-1 through GHG-5 would reduce GHG emissions from maintenance activities to approximately 0.20 metric tons of CO_2-e per year.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases?

The Climate Change Scoping Plan, approved by CARB on December 12, 2008 (CARB 2008), provides an outline of actions to reduce California's GHG emissions. The scoping plan requires that CARB and other state agencies adopt regulations and other initiatives to reduce GHG emissions. However, there are no applicable plans, mandatory GHG regulations, or finalized agency guidelines at this time that would apply to this project. The project would be in compliance with the AB 32 goal of reducing GHG emissions to 1990 levels by 2020, and construction, operation, and maintenance activities would result in a less than significant impact to adopted GHG plans, policies, and regulations.

3.8 Hazards and Hazardous Materials

3.8.1 ENVIRONMENTAL SETTING

The majority of the proposed project alignment is located within the right-of-way of SR 35 and the remainder of the alignment is located in other County roadway and utility corridors. SR 35 is a paved roadway in San Mateo County. The area surrounding the project alignment is heavily forested with scattered residences.

Hazardous Sites

Track Info, LLC conducted a linear database search on November 13, 2009 of an area that included a 300-foot buffer on either side of the project site. The search was conducted in accordance with the regulations and guidelines of the following agencies:

- Resource Conservation and Recovery Act (RCRA)
- Comprehensive Environmental Response, Compensation, and Liability Act
- National Priority List
- Emergency Response Notification System
- Brownfield Management System
- Leaking Underground Storage Tanks

The results of the search indicated that there are no hazardous material sites within the project area.

There are hazardous material sites in San Mateo County according to the California Department of Toxic Substances Control (CDTSC); however, these sites are located in South San Francisco, Daly City, and Pacifica (CDTSC 2011). The closest hazardous material site is approximately 26 miles north of SR 35 in South San Francisco and is an active cleanup site with land use restrictions.

Fire Hazards

The portion of San Mateo County in the project vicinity has a high fire potential because of the large quantity of vegetative fuel. Peak fire season for San Mateo County is May through October (SMC Parks 2008).

Fires can be caused by human activities such as cigarette smoking, sparks from vehicles, and electric fires. Fire hazards in San Mateo County are also a product of the dry climate, high winds, steep slopes, and natural hazards such as lightening. The most recent significant fire in the vicinity of SR 35 occurred in October 2001and burned 54 acres of forest.

Emergency Plans

San Mateo County does not have individual emergency response plans, but the County does have first responders within the San Mateo County Office of Emergency Services (OES) who are prepared for hazardous material emergencies or other emergency situations. These emergency responders are part of the Hazardous Materials Response Team that consists of the South County Fire HAZMAT Team, the Environmental Health Division of the County Health Services Agency,

and the Sheriff's Office of Emergency Services. The response team has access to a number of emergency vehicles (SMC Sheriff 2011a).

San Mateo County also has the Community Emergency Response Team (CERT) and the Silver Dragon Drill III as of March 11, 2009. CERT educates residents in the County about disaster preparedness in the case that an emergency arises before professional personnel arrive (SMC Community Response Team 2009). Silver Dragon Drill III is an exercise meant to fortify public health and safety awareness. The Silver Dragon Drill III is made up of all local public service emergency teams: fire departments, police departments, CERT, and others within the county (SMC Health System 2009).

Airports and Airstrips

There are no airports or private airstrips in the vicinity of SR 35. The two closest airports are the Half Moon Bay Airport and the San Carlos Airport which are approximately 20 miles northwest and approximately 15 miles east of SR 35, respectively.

Schools

There are no schools in the project area. The closest school is located at 3195 Woodside Road in the Town of Woodside, approximately 3 miles east of the proposed project.

3.8.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 0.25 mile of an existing or proposed school?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Be located on a site that 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 2 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?	☐	☐	☒	☐
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) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction. Construction equipment commonly contains petroleum-based fuels and oils. All transportation and construction activities would follow federal, state, and local regulations to minimize a possible spill or other contamination of the site; however, transporting construction materials to and from locations along the project alignment poses some risk of a hazardous material spill, which would be a significant impact.

Implementation of APM Hazards-1 would reduce potential impacts from the use, disposal, and transportation of hazardous waste materials to a less than significant level.

APM Hazards-1: The applicant shall perform the following tasks in order to minimize the potential for hazardous materials contamination through the transport, use, or disposal of hazardous materials:

- The applicant shall prepare an SPCP for construction activities. At a minimum, the plan will include standard operating procedures for spill prevention, hazard assessment, spill prevention and containment, emergency response procedures, and closing the spill incident.
- Before construction begins, site workers will be trained to recognize and respond to spills in accordance with the SPCP, and will be informed regarding which authorities to contact in the event of a spill. Construction crews will have an emergency spill kit containing absorbent booms and pads, personal protective equipment, and emergency response guidance.
- Construction equipment will be maintained and kept in operating condition to reduce the likelihood of line breaks and leakage. Any vehicles with chronic or continuous leaks will be removed from the construction site and repaired before being returned to operation.
- Absorbent material or drip pans will be placed underneath vehicles during equipment maintenance or refueling. Refueling will take place only in designated areas. Any fluids drained from equipment will be collected in leak proof containers and taken to an appropriate disposal or recycling facility.
- Human waste at the construction area will be disinfected. Portable chemical toilets will be used. The toilets will not be placed near environmentally sensitive areas. A commercial worker will maintain the self-contained chemical toilets in good working order to ensure that there are no leaks and will pump the toilets as necessary to prevent overflow. The vendor will be responsible for off-site disposal of the wastes.
- All hazardous waste generated if a spill occurs during construction will be disposed of according to appropriate state and federal regulations. The appropriate disposal method will depend on the type of waste generated. Waste oils and other wastes considered hazardous in California will be transported by an RCRA-certified treatment, storage, and disposal facility and disposed at a Class I hazardous waste landfill.
- ExteNet shall require all contractors to provide training regarding the proper handling and/or storage of potential fire hazards, potential ignition sources (such as smoking or sparking equipment), and appropriate types of fire protection equipment.

Waste oils and other waste considered hazardous by the State of California would be dealt with according to all applicable regulations, including transport to a RCRA certified treatment, storage, and disposal facility and disposal at a Class I hazardous waste landfill. There are several certified waste transporters in San Mateo County, including three in South San Francisco and one in Burlingame.

Operation and Maintenance. Operation of the telecommunication line would have no hazardous impacts on the environment. Maintenance could result in inadvertently spilling waste oil; however, such a case would result in using a prepared SPCP and would have a less than significant impact on the environment.

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?

Construction vehicles and equipment contain substances such as gasoline, diesel, antifreeze, and lubricants that, if accidentally released to the environment, could be hazardous. APM Hazards-1 would reduce potential impacts from construction-related hazardous substances to less than significant levels.

Underground utilities are located in the project alignment. Boring and trenching activities could result in rupturing existing sewage, electrical, or other utilities. Implementation of the best management practices described in APM Hazards-1 through APM Hazards-3 would reduce hazards to the public or the environment to a less than significant level.

> **APM Hazards-2:** The applicant shall take the following measures to reduce the risk of accidental fires, vehicle collisions, and other hazardous situations and events:
>
> - The construction contractor will develop and implement a Health and Safety Plan consistent with 29 CFR 1910 (OSHA Standards) and 29 CFR 1926 (OSHA Safety and Health Regulations for Construction). The Health and Safety Plan will identify physical and chemical hazards that could result from proposed operations.
> - ExteNet shall require all contractors to train their construction crews in the following safety measures: trenching and excavation safety, work zone safety, cardiopulmonary resuscitation (CPR), spill prevention and control, and driving safety.
>
> **APM Hazards-3:** The applicant shall identify all utility lines within the project alignment prior to any construction activities to reduce the possibility of rupturing, severing, or damaging gas, electric, or sewer lines located in the project region.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

There are no schools within 0.25 miles of the proposed project; the closest school is located at 3195 Woodside Road in Woodside, approximately 3 miles east of the proposed project. The proposed project would have no impact associated with hazardous material on a school zone.

d) Be located on a site that 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?

No hazardous materials sites are located in the project vicinity the project would have no impact on listed hazardous materials sites.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

The project is not located within 2 miles of a public airport or public use airport; therefore, the project would not have an impact on an airport land use plan.

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?

The project is not located within the vicinity of a private airstrip; thus, the project would not have an impact on safety hazards 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?

Construction. San Mateo County does not have individual response plans, but it does have a standby fleet of emergency vehicles and personnel for a hazardous material emergency or other emergency. Access for these emergency vehicles could potentially be affected by the project due to the increased number of vehicles and construction personnel. The increase in traffic volume would be slight and temporary, however, and would result in a less than significant impact on emergency access and response.

Access for emergency vehicles could also potentially be affected by the temporary lane closures during construction activities. Construction equipment and vehicles would not be allowed to block driveways, and construction activities would be suspended in the event that an emergency vehicle must pass the construction site. As required by APM Traffic-2, metal plates would be placed over open trenches to allow emergency vehicles to pass a construction site. Implementation of APMs Traffic-1 throughTraffic-3 would result in a less than significant impact on emergency response plans or emergency evacuation plans.

Operation and Maintenance. Access for emergency vehicles would not be affected by operation of the project. Some maintenance work may occur occasionally, but it would not interfere with emergency access. The improvement to telecommunications services in the area would have a positive effect on emergency response through the availability of a more reliable wireless communication system.

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?

SR 35 is a scenic highway and is primarily surrounded by forested areas, and therefore there is potential for loss, injury, or death involving wildland fires. The most likely risk of fire would be generated by construction activities, including construction personnel improperly disposing of cigarettes and equipment that generates sparks. APMs Hazards-1 and Hazards-4 would be implemented to ensure that the risk of a wildland fire is reduced to a less than significant level.

> **APM Hazards-4:** Project personnel will be required to smoke only in their vehicles and dispose of cigarette butts properly.

3.9 Hydrology and Water Quality

3.9.1 ENVIRONMENTAL SETTING

Regional Setting

The majority of the proposed project alignment is located within the SR 35 rights-of-way, which travels along the ridgeline of the Santa Cruz Mountains. SR 35 is paved; however, the shoulders vary along the route from relatively flat to steeply graded, and from packed earth to moderately dense understory foliage to dense redwood forest. No drainage improvements exist within the shoulder of SR 35, and stormwater runoff is allowed to flow along unimproved channels on either side of the roadway. The remainder of the proposed project alignment is located within other County road and utility corridor rights-of-way. The surfaces of these other rights-of-way vary from paved to gravel to compacted dirt, and the shoulders of these rights-of-way do not contain drainage improvements.

The project area straddles the boundary between the San Gregorio Creek watershed to the west and the San Mateo Creek watershed to the east (NRCS 2008). Surface waters generally flow away from the project alignment because of its location on a ridgeline.

Precipitation

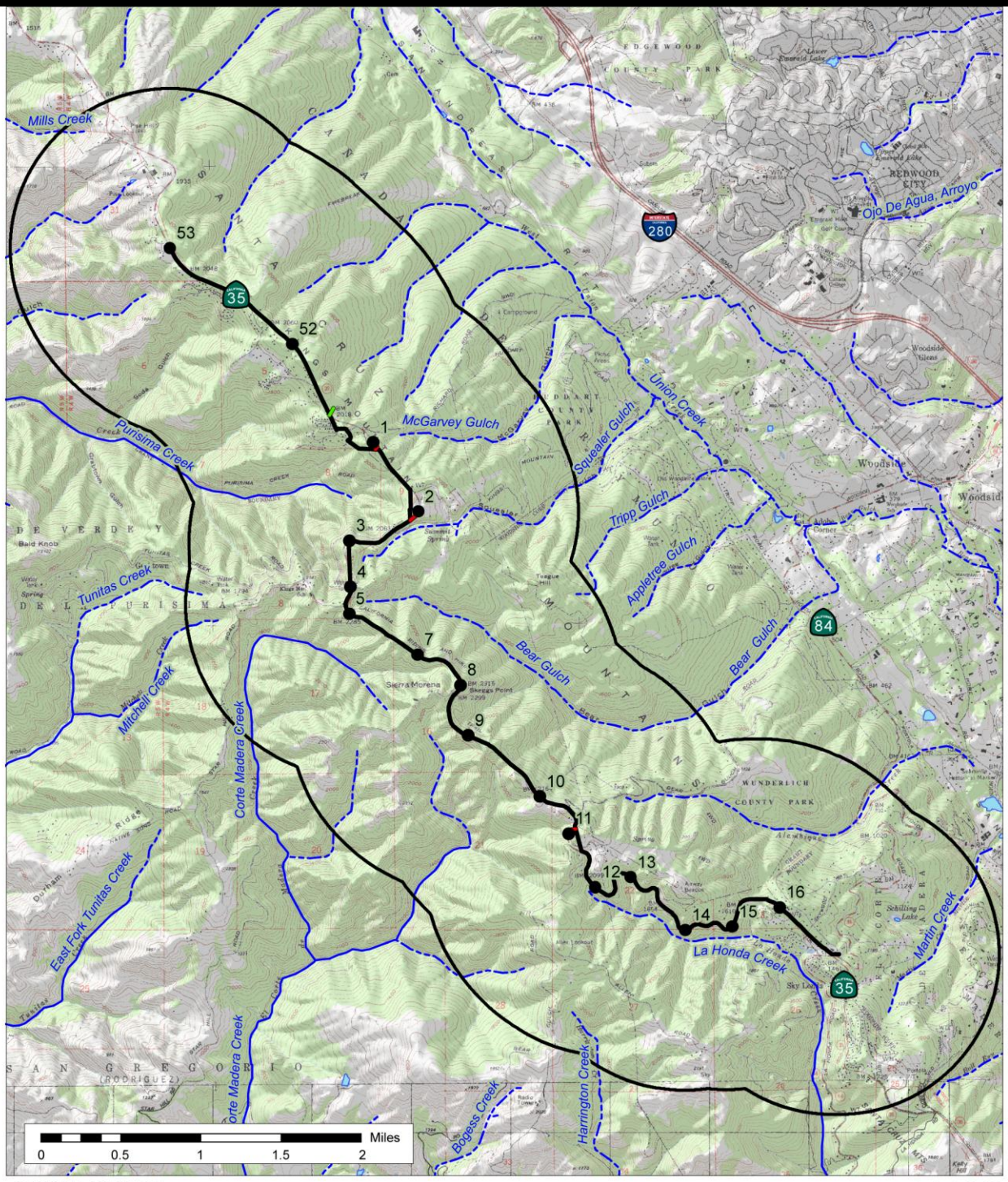
The project alignment is located along the ridgeline of the Santa Cruz Mountains, which results in a blocking effect causing differing temperatures for the eastern and western sides of the mountain range. Both areas usually experience cool, foggy weather. San Francisco and Redwood City to the north and east experience an average of 19.5 inches of rain per year, and Half Moon Bay to the west experiences about 25 inches of rain per year. Areas in the Santa Cruz Mountains tend to experience a higher average of rainfall (notably to the west of the ridgeline) (ExteNet Systems 2010).

Surface Waters

A number of perennial and intermittent streams are located in the project area (Figure 3.9-1); however, none of the streams cross the project alignment. The SR 35 right-of-way is located along the ridgeline of the Santa Cruz Mountains.

The two perennial streams that flow closest to the project site are Corte Madera Creek and Purisima Creek; however, neither creek passes closer than 0.25 miles from the project alignment. Squealer Gulch and La Honda Creek are the two intermittent surface streams that are in the closest proximity to the project alignment. Squealer Gulch is approximately 175 feet south of the project alignment at its closest point, and La Honda Creek is approximately 57 feet west of the proposed project route at its closest point. These two creeks flow intermittently from November through May, and are usually dry for the remainder of the year. Squealer Gulch is on the eastern side of the ridgeline and flows to the east, emptying into the southern portion of the San Francisco Bay. La Honda Creek is on the western side of the ridgeline and flows southeast for approximately 1 mile, generally paralleling SR 35, before turning south. La Honda Creek eventually empties into the Pacific Ocean.

Figure 3.9-1: Blue Line Streams within a One-Mile Radius of the Project Alignment



Freshwater wetlands are located immediately adjacent to some of the streams; refer to Section 3.4 - Biological Resources for a more detailed description on the wetlands in the project area.

Flooding

The Federal Emergency Management Agency (FEMA 1996) Flood Insurance Rate Map for the area shows that no portion of the project is located within a 100-year flood hazard region. The closest 100-year flood hazard region is 2 miles to the east of the project. SR 35 primarily follows a ridgeline and is not at risk for substantial hazardous flooding. There are no existing culverts or storm drainage systems along the project alignment.

Groundwater

There are no groundwater resources west of the project alignment according to the California Department of Water Resources (CDWR 2011); however, the San Mateo Plain Subbasin (within the Santa Clara Valley Groundwater Basin) is located to the east of the project alignment. This groundwater area covers approximately 48,100 acres and receives recharge from natural infiltration. There is no published information regarding groundwater storage capacity or groundwater currently in storage, nor is there enough data to present an approximation of the basin's budget or extraction (CDWR 2011).

Water Quality

SR 35 is within Region 2 of the San Francisco Bay Regional Water Quality Control Board (RWQCB). Region 2 contains several water resources, such as Lake Chabot and Stevens Creek Reservoir, which are being considered for listing under RWQCB Section 303(d) as impaired water bodies. Water bodies that are listed under Section 303(d) are described as impaired due to a failure to meet water quality standards with the minimum pollution abatement technology. None of the perennial or intermittent streams within the proposed project region are listed under Section 303(d).

3.9.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 (e.g., the production rate of existing nearby wells would drop to a level that 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 that 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 that would result in flooding on or off site?	☐	☐	☐	☒
e) Create or contribute runoff water that 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 federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place structures within a 100-year flood hazard area, 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

a) Violate any water quality standards or waste discharge requirements?

Construction. Construction activities would involve trenching and boring that would include a small amount of ground disturbance (0.198 acres), which in turn would have the potential to result in erosion or sediment transport into nearby surface waters. No construction activities would take place directly in streams or wetlands. The closest ground disturbing activities to any creek would be the installation of Node 2, which would be located approximately 175 feet away from Squealer Gulch.

The proposed project's construction footprint would be approximately 0.2 acres and therefore would not require enrollment under the State Water Resources Control Board's (SWRCB's) National Pollutant Discharge Elimination System (NPDES) Permit (Order No. 2009-0009-DWQ). Construction includes trenching and boring to install underground components, as well as excavation for the installation of 17 new poles. These activities would all require a limited amount of ground disturbance. Construction may occur during any time of the year. Construction activities during the rainy season (November-March) would be more likely to affect intermittent streams by contributing to erosion and sedimentation than construction during the dry season (April-October). Construction during the dry season could still potentially result in sediment transport and erosion of nearby intermittent streams. Implementation of the Best Management Practices (BMPs) as defined in APM Hydrology-1 would reduce these impacts to a less than significant level.

APM Hydrology-1: The applicant shall implement the following BMPs throughout project construction activities:

- The applicant shall develop an Erosion Control Plan. Temporary sediment barriers shall be placed near storm drains and sensitive habitat areas adjacent to ground disturbing activities to prevent any construction materials, sediment, or debris from entering these areas. Such devices may include gravel bags, straw wattles, and silt fence. These devices shall be left in place until restoration activities are deemed successful and complete.
- Following installation of the communications system, trenched and excavated areas shall be compacted and graded to the natural contours of the area prior to construction activities, and reseeded with native vegetation.
- ExteNet shall require all contractors to train their construction personnel on the sensitive types of water resources found in the local area, and on the measures to avoid or minimize impacts to these resources. As necessary, orange construction fencing and warning signage will be placed around water resources in the vicinity of ground-disturbing activities.
- The applicant shall develop and implement a SPCP. This plan will describe potential sensitive water resources in the project area, measures to avoid and minimize impacts to these resources, and measures to deal with any accidental spills occurring during construction of the proposed project.
- Containment and cleanup materials shall be present at all boring sites in case a frac-out or spill of boring materials occurs. Containment equipment may include such devices as

sand bags, straw wattles, sedimentation fencing, and portable vacuum trucks and pumps.

There is a slight possibility that an accidental hazardous material spill could occur on the site during construction. Such a spill could include petroleum-based materials such as gasoline or diesel fuels and various oils and lubricants commonly used for construction equipment. Vulnerable ecosystems such as streams, creeks, and other sensitive habitats could potentially be exposed to hazardous materials in the event of such a spill. Implementation of APM Hazards-1 requires the preparation of a SPCP to ensure that proper safety measures are followed in the case of an accidental spill. The plan would include an analysis of possible accidents that could occur, strategies for emergency action, and other avoidance measures.

Operation and Maintenance. Operation and maintenance activities would not have an adverse impact on water quality standards or discharge requirements because these activities would not involve any ground disturbance that could result in sedimentation or erosion. The potential risk of contamination from the release of chemicals from equipment into existing water resources during operation or maintenance activities would be negligible. Impacts to water quality standards or waste discharge requirements would be less than significant.

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 (e.g., the production rate of existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

Construction. The current groundwater resources beneath SR 35 are not currently known, as the project area's groundwater resources have not been mapped or identified by the CDWR. Water required for dust suppression during construction activities would be supplied by the municipal system from fire hydrants along the project route. The quantity of water extracted would be metered and the applicant would pay San Mateo County for the water use. The water usage is anticipated to be minimal as water is only needed for limited dust suppression and would not deplete groundwater resources.

Operation and Maintenance. Operation and maintenance activities would have no impact on groundwater resources as it would not involve groundwater. The potential risk of contamination from the release of chemicals from equipment into existing water resources during operation or maintenance activities would be negligible. Impacts to water quality standards or waste discharge requirements would be less than significant.

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 that would result in substantial erosion or siltation on or off site?

Construction. Runoff from the project alignment currently flows naturally across the paved or gravel surface of the transportation and utility corridors and to the shoulders on either side of these corridors. No construction would take place in or near a stream or river. Cable pulling activities would have no effect on drainage patterns, but ground disturbing activities such as trenching, boring, and installing new poles could affect drainage patterns if sediment or other

debris is allowed to leave the construction area. Potential erosion and siltation of nearby streams would be prevented by implementing the BMPs described in APM Hydrology-1. Construction would have a less than significant impact on existing drainage patterns with implementation of APM Hydrology-1.

Operation and Maintenance. The project would not result in any changes to the amount of permeable surfaces in the area, and would therefore not hinder the evaporation or infiltration process of storm water. Operation and maintenance activities would include periodic inspections of the project facilities, and would not include activities that would affect drainage patterns in the area or alter the course of streams in a manner that could cause 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 that would result in flooding on or off site?

The project would not alter the course of a stream as no streams are located within the alignment. The project includes the installation of overhead and underground telecommunication lines and would not result in an increase in impervious surfaces that could increase the rate of surface water runoff. The project would not result in on- or off-site flooding.

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?

Construction. Water used for dust suppression during construction activities could result in a minimal and temporary amount of water runoff. This potential minor, temporary runoff would have no effect on stormwater drainage systems because there are no stormwater drainage systems in the area. The resulting potential runoff from water used for dust suppression would not provide any substantial sources of polluted runoff because the water would be used for a temporary duration and only for dust suppression of naturally occurring materials from the area.

Operation and Maintenance. Operation and maintenance activities would not result in any water runoff, and would therefore have no impact on stormwater drainage capacity or polluted runoff.

f) Otherwise substantially degrade water quality?

Construction. Construction activities could potentially affect water quality in the event of the accidental spill of hazardous material spill or sedimentation of creeks. Implementation of the BMPs outlined in APM Hazards-1 would prevent the degradation of water quality, and would reduce impacts regarding the degradation of water quality to a less than significant level.

Operation and Maintenance. Operation and maintenance activities would not result in any impacts regarding the degradation of water quality because these activities would not involve any ground disturbance that could result in degradation of water quality. The potential risk of contamination from the release of chemicals from equipment or other disturbance activities resulting in sedimentation or erosion into existing water resources during operation or maintenance activities would be negligible. Impacts to water quality standards or waste discharge requirements would be less than significant.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The proposed project does not involve the construction of any housing nor is the project alignment located in a 100-year flood region as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map. The proposed project would have no impact on a 100-year flood hazard region.

h) Place structures within a 100-year flood hazard area, which would impede or redirect flood flows?

The installation of new utility poles, nodes, and other communications equipment would not be located within a 100-year flood hazard region; therefore, the proposed project would have no impact on the direction of flood flows in a 100-year flood hazard region.

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?

There are no levees or dams in the project region, and the proposed project would not create any new retaining or releasing structures for water flow. The project would have no impact on flooding due to dam or levee failure.

j) Inundation by seiche, tsunami, or mudflow?

The project would have no impact on the risk of inundation by seiches, tsunamis, or mudflows as the project would be constructed on a ridgeline where these hazards are not likely to occur.

3.10 Land Use and Planning

3.10.1 ENVIRONMENTAL SETTING

The project area is located entirely within the County of San Mateo. The majority of the project alignment lies within the existing SR 35 right-of-way, with the remaining alignment located within County road rights-of-way and an existing PG&E utility corridor. SR 35 is under the jurisdiction of Caltrans. The lands within the project alignment are designated as Open Space, Residential, Public and Private Recreation, and Timber Production by the San Mateo County General Plan (SMC 1986b), as shown on Figure 3.10-1. San Mateo County Zoning Ordinance (SMC 1986d) land use designations include Resource Management, Timber Preserve Zone, and several low-density single-family zoning designations, as shown in Figure 3.10-2 (SMC 1999). A few commercial businesses are clustered on the southern end of the project alignment where SR 35 and SR 84 intersect. These commercial uses include two service stations, a convenience store, a real estate office, a small events center, and one restaurant.

The CPUC has primary jurisdiction over the proposed project because it authorizes the construction, operation, and maintenance of public utility facilities. Although such projects are exempt from local land-use and zoning regulations and permitting, local and state land-use plans are considered as part of the environmental review process.

3.10.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

Figure 3.10-1: San Mateo County General Plan Land Use Designations in the Project Area

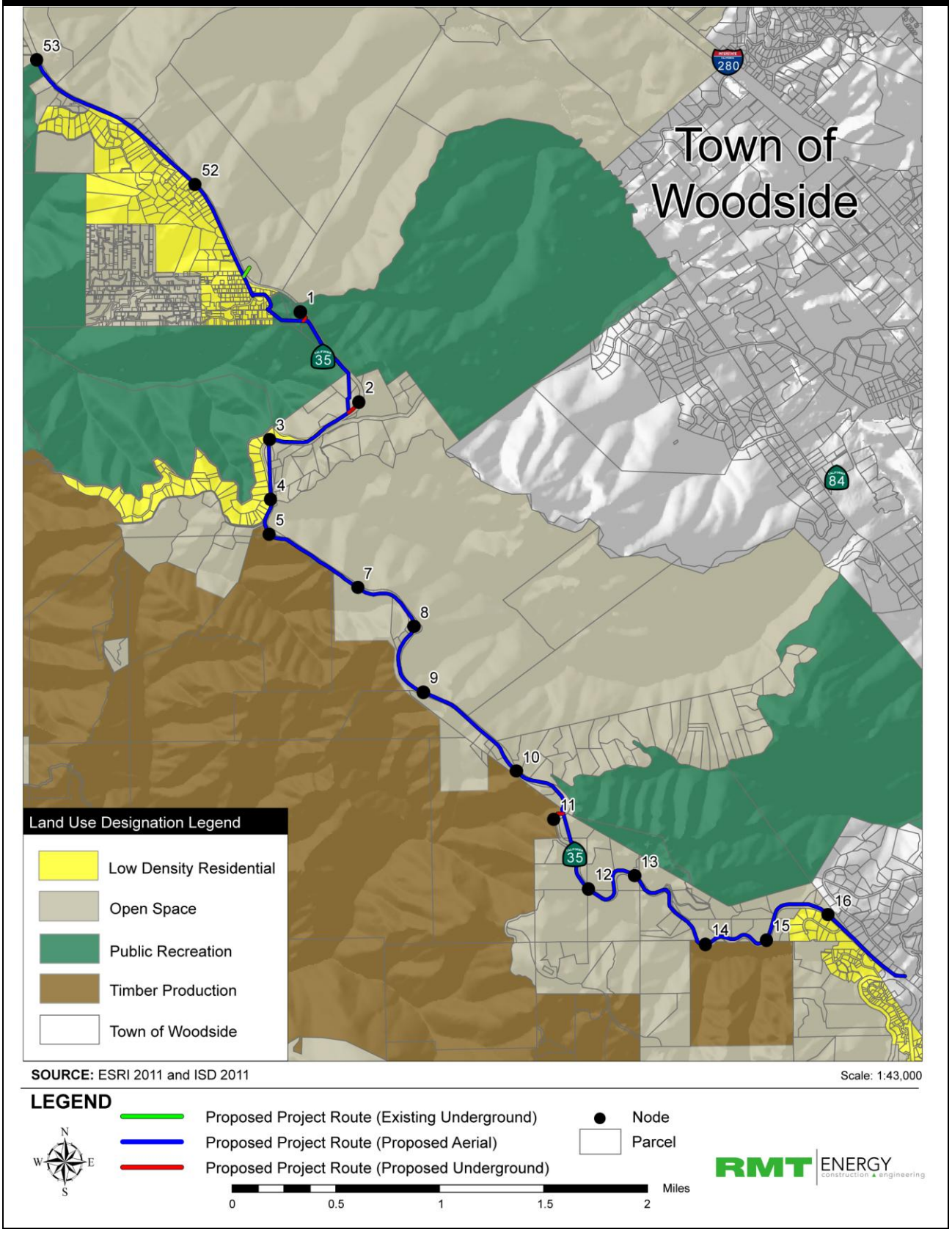
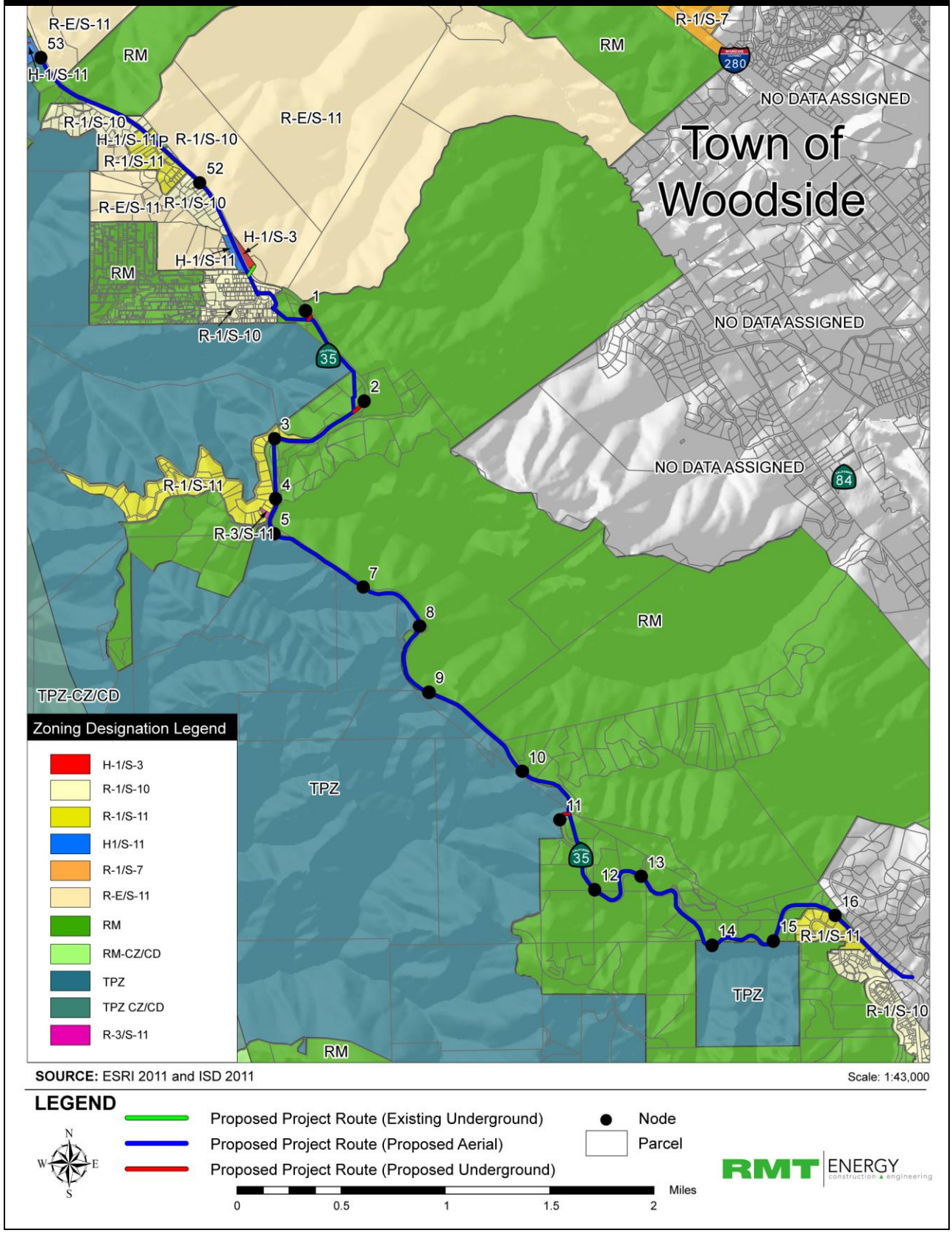


Figure 3.10-2: San Mateo County Zoning Ordinance Land Use Designations in the Project Area



Discussion

a) Physically divide an established community?

Construction, operation, and maintenance of the proposed project would not cause the physical division of an established community. The project components would be located underground or on existing or new utility poles within existing transportation and utility corridors. No impacts to established communities are expected as a result of the proposed project.

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?

Construction and maintenance of the proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed project. The use of this project alignment for telecommunication lines is consistent with the current use of the project area and utilizes a number of existing utilities. Section 6500(b) in the San Mateo County Zoning Ordinance exempts local distribution utility lines from requiring a use permit (SMC 1999). No impacts with adopted land use plans and policies are expected as a result of the proposed project.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

The proposed project would not conflict with any habitat conservation plans or natural community conservation plans because there are no habitat conservation or natural community plans in San Mateo County that would be applicable to the proposed project. No impacts to habitat conservation plans are expected as a result of the proposed project.

3.11 Mineral Resources

3.11.1 ENVIRONMENTAL SETTING

There are no mineral deposits, quarries, or significant mineral resource areas within the project alignment (SMC 1986).

3.11.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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) 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?

No impacts to known mineral resources are expected as a result of the proposed project.

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?

No impacts to locally-important mineral resources are expected as a result of the proposed project.

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3.12 Noise

3.12.1 ENVIRONMENTAL SETTING

Noise Sources

The proposed project alignment is located primarily within the right-of-way of SR 35, where the majority of existing ambient noise in the area is generated by regular vehicular movement on the roadway and by activities at the scattered rural residences. The remainder of the project alignment is located on County road rights-of-way and an existing PG&E utility corridor, both of which are located near SR 35 and are subject to the same general noise environment. Some noise is also generated by a small cluster of privately owned businesses at the southern end of the proposed project where SR 35 intersects SR 84. The commercial uses at this location include a gas station, convenience store, and several restaurants.

Sensitive Receptors

Noise exposure goals for different types of land uses depend on the noise sensitivities of those uses. Religious centers, schools, guest lodging, and libraries are particularly sensitive to noise intrusion and, therefore, have more stringent noise exposure limits than manufacturing or agricultural areas.

Sensitive receptors found in the project vicinity include residences and recreational facilities. There are approximately 342 residences within 500 feet of the project alignment. These residences are clustered between Nodes 52 and 1, Nodes 3 and 5, and Node 17 to the southern terminus of the project alignment, as shown in Figure 3.12-1.

Noise Requirements

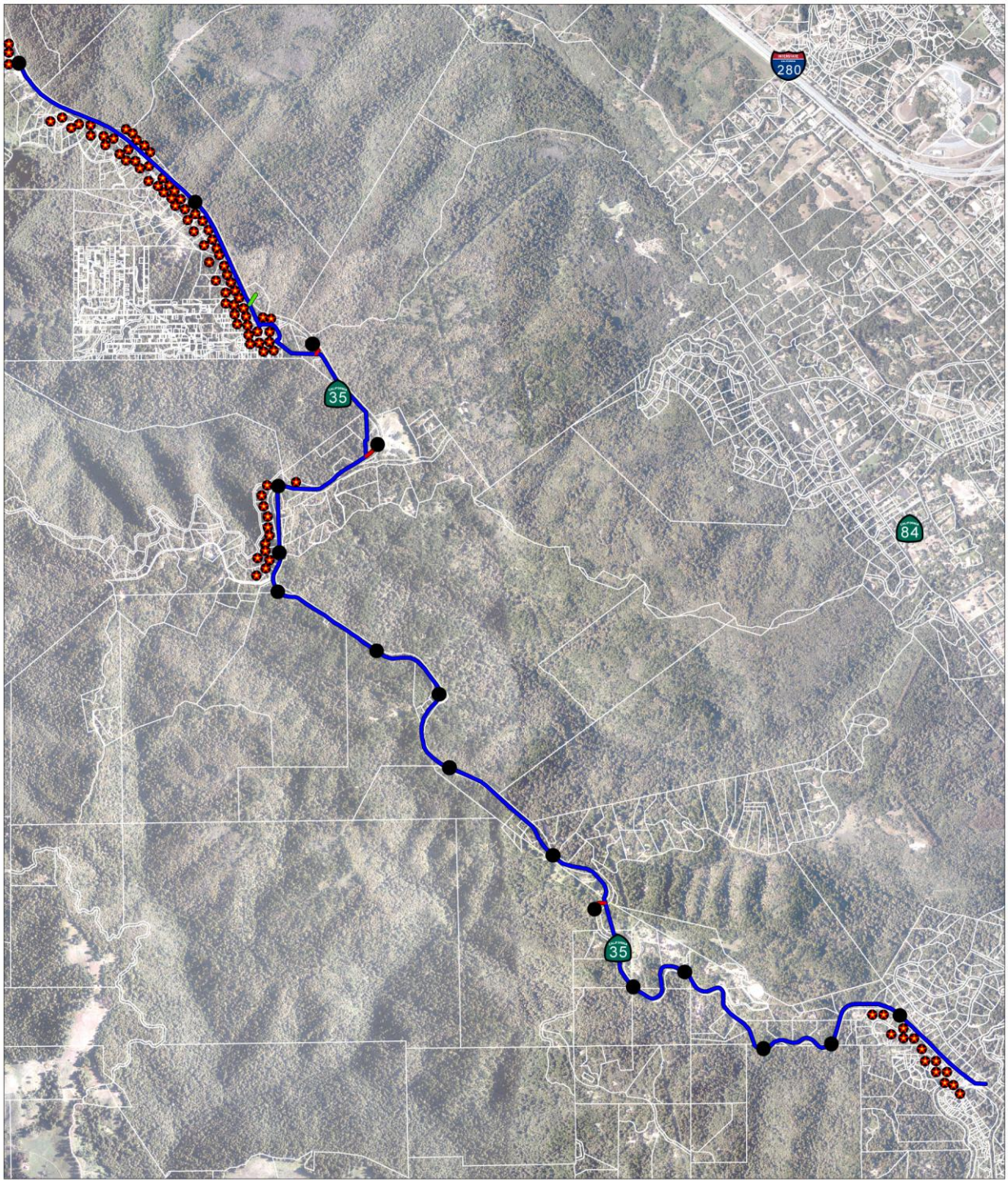
San Mateo County does not have fixed decibel level limits for construction activities. Section 4.88.360 of the San Mateo County Control Ordinances states that noise sources associated with demolition, construction, repair, remodeling, or grading of any real property, provided said activities do not take place between the hours of 6:00 P.M. and 7:00 A.M. weekdays, 5:00 P.M. and 9:00 A.M. on Saturdays or at any time on Sundays, Thanksgiving, and Christmas, are exempt from noise ordinances.

Ground-Borne Vibrations

Vibrating objects in contact with the ground radiate energy through the ground. Vibrations from large and/or powerful objects, such as cars driving on a rough road, are perceptible by humans and animals. The rumbling sound caused by vibrating room surfaces is called ground-borne noise. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration from traffic is rarely perceptible. Ground motion caused by vibration is recorded in terms of peak particle velocity in inches per second, and in the U.S. is referenced as vibration decibels (VdB) (Caltrans 1998).

The U.S. Department of Transportation (USDOT) has guidelines for vibration levels from construction activities, and recommends that the maximum peak particle velocity levels remain

Figure 3.12-1: Sensitive Receptors within 500 Feet of the Project Alignment



SOURCE: ESRI 2011 and ISD 2011

Scale: 1:43,000

LEGEND

- Proposed Project Route (Existing Underground)
- Proposed Project Route (Proposed Aerial)
- Proposed Project Route (Proposed Underground)
- Node
- Parcel
- Sensitive Receptor

N W E S

0 0.5 1 1.5 2 Miles

less than 0.05 in/sec at the nearest structures. Vibration levels greater than 0.5 in/sec have the potential to cause architectural damage to normal dwellings. The USDOT also states that vibration levels greater than 0.015 in/sec are sometimes perceptible to people, and the level at which vibration becomes annoying to people is 0.64 in/sec (USDOT 2006).

3.12.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Cause 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) Cause exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) Result in 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 2 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) Cause 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?

Construction. During construction, the noise levels of the proposed project would be above ambient noise levels because of noise generated by construction equipment. Noise levels for trenching, boring, and excavation activities are estimated to reach between 80 and 90 A-weighted decibels (dBA) at a distance of 50 feet from the active construction area. The nearest residence to a trenching and boring location is approximately 800 feet, while approximately 16 residences are within 50 to 400 feet of the excavation activities that would be required for Nodes 3, 4, and 5. Noise levels from these ground disturbing activities could be disruptive to the residences nearest these activities. Noise levels generated by the cable pulling activities are anticipated to be significantly lower than the other construction-related activities.

Construction noise would be temporary in nature, with no single location along the project alignment being subjected to construction noise for more than approximately four days. Noise impacts could still be significant if construction were to occur during early mornings, evenings, Sundays, and holidays when residence are more likely to be in their homes. APMs Noise-1 and Noise-2 would be implemented to reduce noise impacts generated by project construction to less than significant levels.

> **APM Noise-1.** ExteNet shall comply with the construction hours of operation established by the San Mateo County Noise Ordinance. Approved construction hours take place between 7:00 A.M. to 6:00 P.M. Monday through Friday and 9:00 A.M. to 5:00 P.M. on Saturdays. Construction is prohibited on Sundays, Christmas, and Thanksgiving.
>
> **APM Noise-2.** The following BMPs shall be implemented during construction of the proposed project to minimize noise impacts:
>
> - All construction equipment shall be equipped with improved noise muffling, and shall maintain the manufacturer's recommended noise abatement measures, such as mufflers, engine covers, and engine isolators in good working condition.
> - Stationary equipment that generates noise levels in excess of 65 dBA Leq shall be located as far away from existing rural residential areas as possible.
> - Heavy duty vehicle storage and start-up areas shall be located a minimum of 150 feet from occupied residences where feasible.
> - All equipment shall be turned off if not in use for more than five minutes.

Operation and Maintenance. Periodic maintenance activities would involve limited equipment and machinery that could generate some periodic noise. Noise generated would be limited in duration, would be infrequent, and therefore, would be less than significant.

b) Cause exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

Construction. Construction activities may generate temporary localized ground-borne vibration. Vibration levels from ground-disturbing activities such as trenching, boring, and excavation

activities are expected to generate vibration levels of up to 0.03 in/sec at a distance of 50 feet. These levels are dependent on the soil type at the construction site and the type of equipment used. Vibration levels exceeding 0.64 in/sec could cause some persons to become annoyed; therefore, ground-disturbing activities could, under some circumstances, temporarily impact persons in buildings within 50 feet of construction equipment. Persons in buildings further than 50 feet away from the construction area (i.e., the majority of the residences on the project route) would not be impacted by construction vibrations. Project-related vibrations would not cause any structural damage. Impacts from vibrations would be temporary (e.g., no more than two or three days at each site) and localized and, therefore, less than significant. Implementation of APMs Noise-1 and Noise-2 would further reduce vibration-related impacts.

Operation and Maintenance. No ground borne vibrations would occur once the project is complete and the telecommunication line is running.

c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction of the proposed project would result in a temporary increase in ambient noise levels, lasting no more than approximately four days at any one location along the project alignment. The telecommunication line would not generate any noise once construction is complete, and maintenance activities would only generate noise from the occasional maintenance vehicles and work. The project would not result in any permanent increase in ambient noise levels, and impacts to ambient noise levels would be less than significant.

d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction. Construction noises from the project would be audible to the private residences along SR 35. Construction noise would be temporary in nature, with no single location along the project alignment being subjected to construction noise for more than approximately four days. Implementation of APMs Noise-1 and Noise-2 would ensure that construction noise impacts are kept to a less than significant level.

Operation and Maintenance. Project maintenance activities would involve periodic inspection by maintenance crews, and would be similar in scope to existing operation and maintenance activities for the existing overhead utility lines. Project operation or maintenance would not result in an increase in existing ambient noise levels; therefore, no impacts would occur.

e) For a project located within an airport land use plan, or where such a plan has not been adopted, within 2 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?

The project is not located within an airport land use plan, and therefore no impact regarding exposure to excessive noise levels due to public airport land use plans would occur.

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?

The project is not located within the vicinity of a private airstrip, and therefore no risk of exposure to excessive noise levels caused by a private airstrip would occur.

3.13 Population and Housing

3.13.1 ENVIRONMENTAL SETTING

The project alignment is located within transportation and utility corridors, and is adjacent to scattered rural residential and commercial uses.

3.13.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
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) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

Construction. The proposed project would not include construction of new homes or businesses, land use changes, or infrastructure extensions that would directly induce substantial population growth in the area. The project is needed to provide added diversity within the existing telecommunications system, and thus, would not induce growth in the project area. Improved telecommunications is not anticipated to induce growth.

The project would require a maximum of 12 construction workers at any one time for a duration of approximately three months. The workers would likely come from local areas and would not require housing in the project area. No direct or indirect impacts to population growth would occur.

Operation and Maintenance. Operation and maintenance of the proposed project would be performed by the existing local ExteNet workforce, and would have no potential to induce substantial population growth. No impacts on population and housing would occur.

b and c) Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?

Construction and operation of the proposed project would not displace any of the existing housing or people. Some disturbance to homes may occur during construction; however, temporary or permanent displacement of residents would not occur. No impact to housing would occur.

3.14 Public Services

3.14.1 ENVIRONMENTAL SETTING

Fire Protection and Emergency Response

Fire services to the project area are provided by CALFIRE, a California state agency that functions as the County Fire Department under contract with San Mateo County. The Sky Londa Fire Station, located at 17290 Skyline Boulevard in the Town of Woodside, is the closest station to the project area. The station is located adjacent to the southern end of the project alignment.

Police Protection

The San Mateo County Sheriff's Department is the primary agency responsible for law enforcement in the County. The County Sheriff patrols 741 square miles of area bordered by San Francisco, Santa Clara, and Santa Cruz Counties. The County Sheriff Department office is located at 400 County Center in Redwood City, approximately 6 miles northeast of the project alignment (SMC Sherriff 2011a).

Schools

There are no schools located in the project area. The nearest school is the Woodside Elementary School, which is located at 3195 Woodside Road in Woodside, approximately 3 miles east of the proposed project alignment.

Parks

Several parks, trails, and open space preserves are located in the project vicinity. These facilities are shown on Figure 3.14-1.

Huddart County Park

Huddart Park is a 973-acre public county park dominated by second-growth coast redwood forest, mixed evergreen forest, and other native plants. The park facilities include barbecue pits, a playground, grassy meadows, and hiking and riding trails (SMC Parks 2011a).

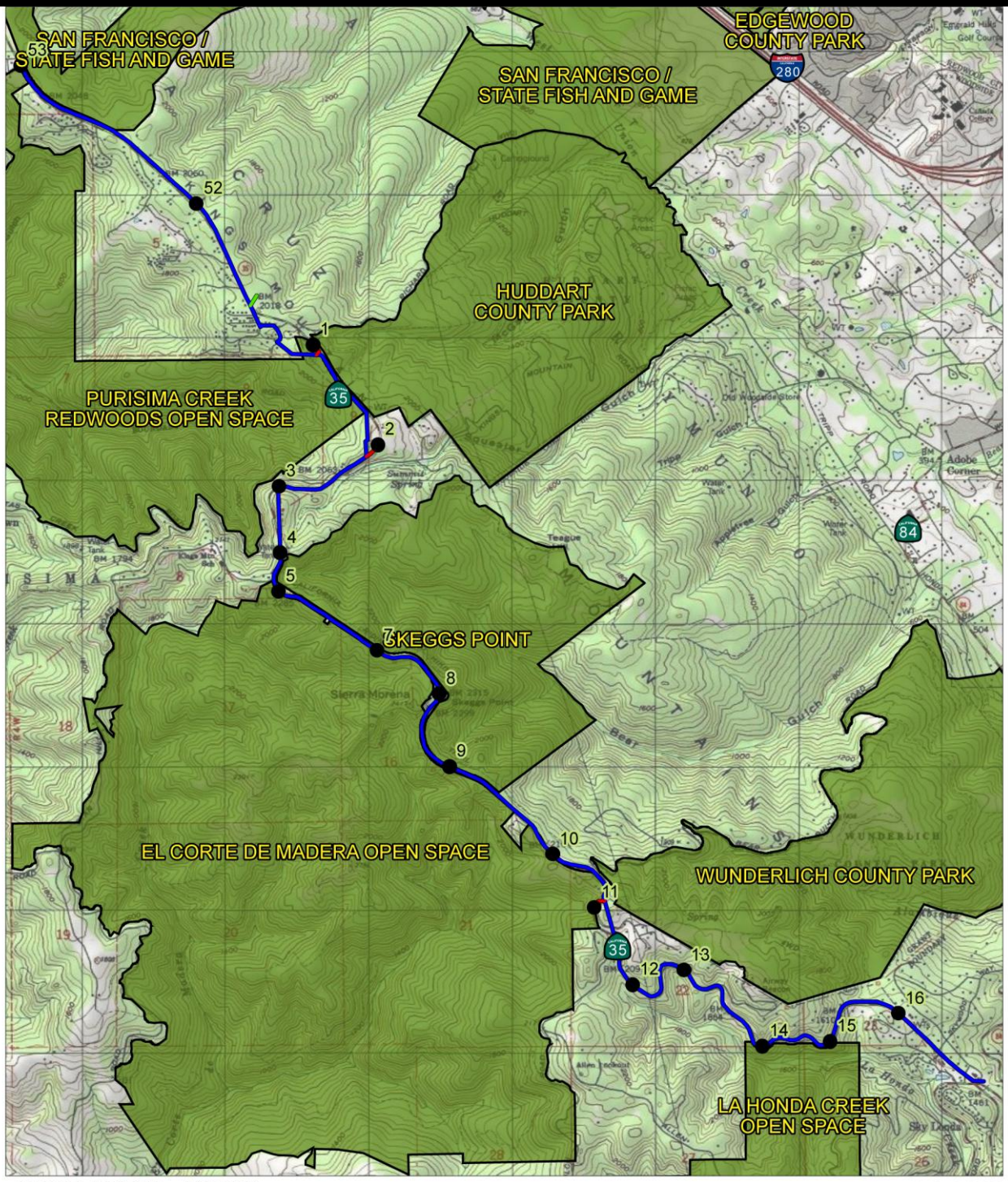
Henrik Ibsen Park

Henrik Ibsen Park is a private recreation area for members of the Sons of Norway organization. The 27-acre park facilities include a club house, restaurants, swimming pool, and a picnic area (Sons of Norway 2001).

Purisima Creek Redwoods Open Space Preserve

The Purisima Creek Redwoods Open Space Preserve includes redwoods, understory of ferns, and wildflowers. Views of the coast and Half Moon Bay are visible from the northern part of the preserve. The amenities within the 3,360-acre open space include hiking and riding trails, parking, and restrooms (MROSD 2011a).

Figure 3.14-1: Parks and Recreation Facilities in the Project Area



El Corte de Madera Creek Open Space Preserve

The area of the El Corte de Madera Creek Open Space Preserve protects mixed green and redwood forests, trails coastal and forest views, and unique sandstone formations. There are approximately 36 miles of multi-use trails available within the 2,817-acre open space (MROSD 2011b).

Teague Hill Open Space Preserve

Teague Hill Open Space Preserve primarily serves as a viewshed and wildlife habitat for the eastern side of the Santa Cruz Mountains and the San Francisco Peninsula. There is only one designated multi-use trail with the 626-acre preserve (MROSD 2011c).

La Honda Creek Open Space Preserve

La Honda Creek Open Space Preserve is home to a significant amount of wildlife, including raptors, deer, bobcats, and coyotes. It is located south of the southernmost tip of the project alignment and access requires a special permit. The preserve contains a well-known old-growth redwood tree named "Big Tree" (MROSD 2011d).

Wunderlich County Park

Wunderlich County Park is primarily composed of redwood forest, meadows, and oak forest. The park is located east of the southern end of the project alignment and offers a trail system for hikers and horseback riders (SMC Parks 2011b).

3.14.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) 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:				
i) Fire protection?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☒	☐
v) Other public facilities?	☐	☐	☐	☒

Discussion

a) 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:

i) Fire protection?

The proposed project would not require additional fire services in the area during construction and would not impact fire protection or fire suppression objectives. Though the heavily forested project area presents a risk for wildfires, implementation of APM's Hazards-4 and Hazards-5 would reduce the risk of wildfires to a less than significant level.

Access for emergency vehicles could potentially be obstructed by construction activities in the roadway. Implementation of APM Hazards-2, -4, -5 and APM Traffic-2 would reduce the risk of an emergency situation occurring during construction activities, and would ensure that emergency vehicles would have access to the project area at all times. The project would have a less than significant impact on local or regional fire protection with implementation of these APMs.

ii) Police protection?

The proposed project would not require additional police services during construction or during operation and maintenance because neither the construction site nor the finished project would be likely to attract vandals, nor would the project be considered a safety hazard once implemented.

Access for emergency vehicles could be obstructed by construction activities in the roadway. Implementation of APM Traffic-2 would require construction crews to place metal plates over open trenches for emergency vehicles to pass through construction sites without interruption. Impacts to police protection would be less than significant with implementation of APM Traffic-2.

iii) Schools?

The project would not generate population growth in the area, and thus would not result in an increase in student enrollment. Any construction workers not drawn from the local area would be

expected to commute from neighboring areas and would not likely relocate their families. No schools are located along the project alignment, and therefore, no schools would be affected by project construction or operation activities. Construction, operation, and maintenance of the proposed telecommunication facilities would have no impact to schools.

iv) Parks?

Construction. Recreationists visiting the open space preserves, public parks, and private recreational areas could be impacted or disturbed by the presence of construction activities or noise. Usage pattern changes could include avoidance of certain parks by the public for a few days during construction. Given the linear nature of the project and the proximity of the lines to the roadway and not throughout the parks, impacts to usage are unlikely. Construction impacts to parks would be less than significant.

Operation and Maintenance. Project operation would not result in permanent impacts to the surrounding park facilities. Maintenance activities for the proposed project would be similar in scope to construction activities and could temporarily impact or disturb recreationists visiting the surrounding parks. Impacts from maintenance activities would be temporary in nature and would result in a less than significant impact to park facilities.

v) Other public facilities?

There would be no impacts to public facilities not otherwise discussed in this section.

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3.15 Recreation

3.15.1 ENVIRONMENTAL SETTING

The proposed project would be located within existing transportation and utility corridors. . A number of recreational areas are adjacent to the project. These facilities provide opportunities for hiking, backpacking, and other recreational uses. Recreational facilities in the project vicinity are shown in Figure 3.1-1, and include the following:

- Huddart County Park
- Henrik Ibsen Park
- Purisima Creek Redwoods Open Space Preserve
- El Corte de Madera Creek Open Space Preserve
- Teague Hill Open Space Preserve
- La Honda Creek Regional Open Space
- Skeggs Point
- Wunderlich County Park

Additional descriptions of these facilities are provided in Section 3.14, Public Services. All of the areas listed above are recreational parks, excluding Skeggs Point which is a scenic overlook accompanied by a parking area that also provides access to El Corte de Madera Creek trails.

3.15.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) 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?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

a) 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?

The project would not result in population growth and would not attract additional visitors to the area because the project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of these facilities would occur or be accelerated. A maximum of 12 construction workers would be active on site during the approximately 3 months of construction. These workers would likely reside in the project region, and they would have a negligible impact on the use of recreational facilities.

Recreationists visiting the open space preserves, public parks, and private recreational areas could be impacted or disturbed by the presence of construction activities or noise during the construction phase of the project. Usage pattern changes could include avoidance of certain parks by the public for a few days during construction activities, or the use of other parks. Given the linear nature of the project and the proximity of the telecommunication lines to the roadway and not throughout the parks, impacts to recreational usage are unlikely. The project would not cause the deterioration of existing parks and facilities.

b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

The proposed project does not include the construction or expansion of recreational facilities. The project would be located within existing transportation and utility corridors and therefore would not significantly increase the use or require the construction or expansion of surrounding parks and recreational facilities.

3.16 Transportation and Traffic

3.16.1 ENVIRONMENTAL SETTING

Roadways and Highways

The proposed project alignment is located within the rights-of-way of SR 35, various County roads, and an existing utility corridor. SR 35 is a two-line highway that extends north from the junction of State Route 17 (SR 17) and Summit Road to State Route 1 (SR 1) in San Francisco. Within the project area, SR 35 follows a ridgeline in the Santa Cruz Mountains through a mostly rural area of the County. The route is both a designated State Scenic Highway and Skyline State Scenic Corridor, as designated by San Mateo County.

Arterial access to the northern portion of the project area is provided by SR 92, which connects to SR 1 on the west and Interstate 280 (I-280) on the east and intersects with SR 35 north of the proposed project area. Arterial access to the southern portion of the project area from SR 1 and I-280 is provided by SR 84, which intersects with SR 35 near the southern terminus of the project alignment. Local access to the project area is provided by various collector roads in the vicinity, including Phleger Road, Purisima Creek Road, Tunitas Creek Road, Kings Mountain Road, Bear Gulch Road, Swett Road, and others. Local and access roadways are shown in Figure 3.16-1.

Roadway Segment Level of Service Standards

The segment of SR 35 in the vicinity of the proposed project is a designated Congestion Management Program (CMP) roadway segment pursuant to the San Mateo County/City Association of Government's (C/CAG's) adopted 2009 CMP (C/CAG 2009). A significant impact on a CMP road segment is determined to occur when traffic violates the established level of service (LOS) adopted for that particular segment, as defined in the 2009 CMP. The current LOS standard for SR 35 between SR 92 and SR 84 is LOS B.

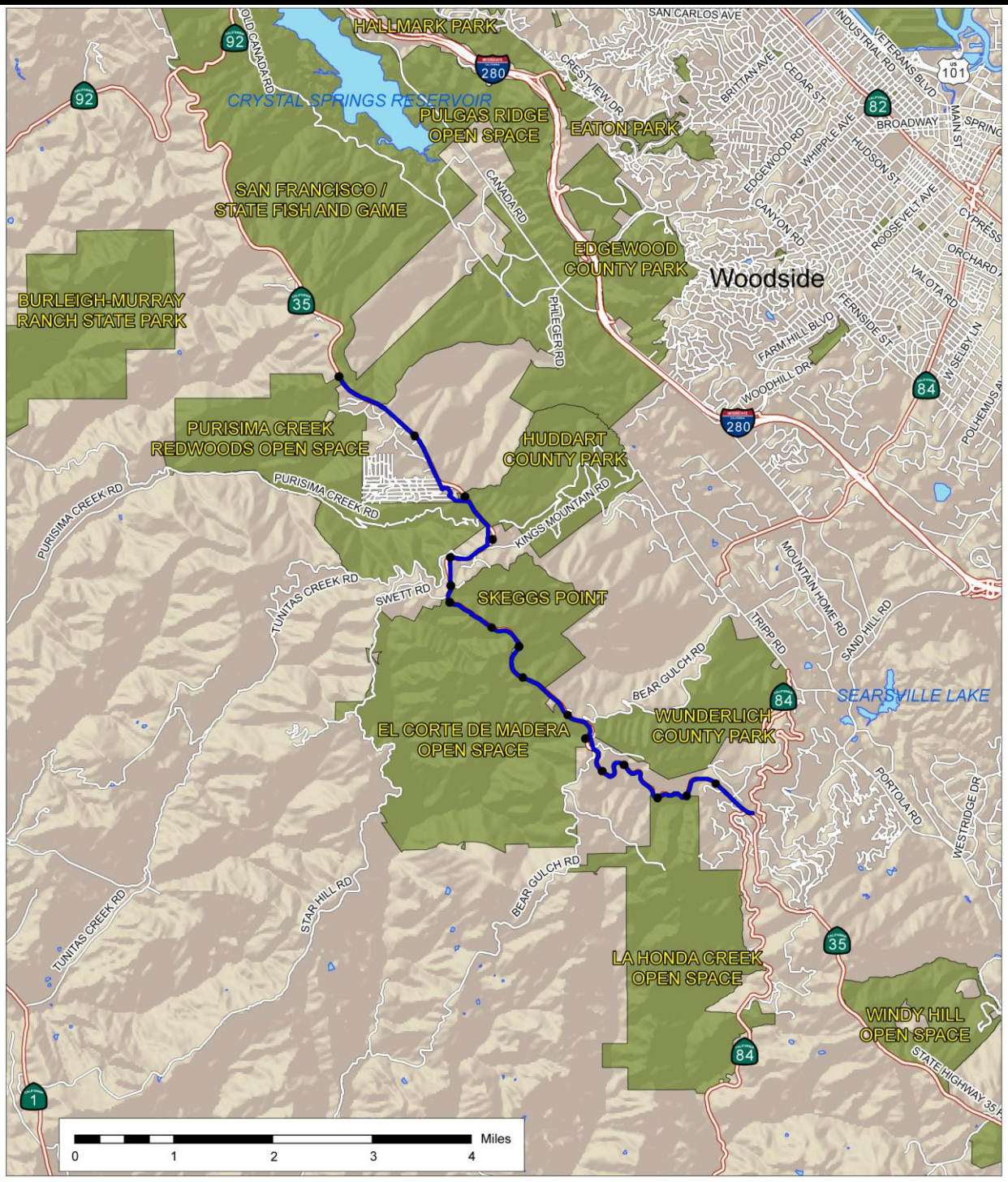
Existing Traffic Volumes and Level of Service

Traffic counts conducted in 2009 for the intersection of SR 35 and SR 84 (near the southern terminus of the project alignment) and at the intersection of Kings Mountain Road and SR 35 (near the northern terminus of the project alignment) were obtained from Caltrans (Caltrans 2010b). The annual average daily count for vehicles at these intersections was 1,950 vehicles at the intersection of SR 35 and SR 84, and 1,500 vehicles at the intersection of SR 35 and Kings Mountain Road. Based on level of service calculations derived from 2009 traffic volume and average speed data and using the methodologies presented in Appendix B of the San Mateo County 2009 CMP, the C/CAG has determined that the worst operation for SR 35 in either direction between SR 92 and SR 84 is LOS B (C/CAG 2009). This indicates that the segment of SR 35 in the project vicinity is currently operating in compliance with the established 2009 CMP standard, including during peak travel times.

Transit

Limited bus service is available in the project vicinity. SamTrans Bus Route 85 serves the communities of Menlo Park, Portola Valley, Woodside, and Portola, with a designated stop at the

Figure 3.16-1: Local and Arterial Access Roadways



SOURCE: ESRI 2011 and ISD 2011

Scale: 1:100,000

LEGEND

- Proposed Project Route
- Node
- Park or Recreation Area

RMT ENERGY construction ▲ engineering

Skylonda commercial center at the intersection of SR 35 and SR 84. The service currently operates on weekdays between the hours of 7:20-8:25 a.m. and 12:20-4:24 p.m. No weekend or holiday service is available.

Bikeways and Pedestrian Facilities

No bicycle or pedestrians facilities are currently located along the project alignment; however, recreational bicyclists do share the road with motorists on SR 35 in the project vicinity. Bicycle facilities in San Mateo County are designated in accordance with the *2000 Comprehensive San Mateo County Bicycle Route Plan* (C/CAG 2000).This plan proposes designation of a Class I (on-street) bicycle facility along the entire extent of SR 35 between SR 92 and SR 84. No pedestrian facilities are currently proposed for the segment in an approved plan.

3.16.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 standard 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.,	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 facilities?	☐	☐	☒	☐

Discussion

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 standard and travel demand measures or other standards established by the county congestion management agency for designated roads or highways?

Construction. Construction of the proposed project would temporarily increase traffic along SR 35 in the project area, both in terms of construction vehicle trips and temporary lane closures. Sources of vehicular traffic during the construction phase of the project would include construction worker commute trips, project equipment deliveries, and hauling of materials such as concrete and wood poles.

Project construction traffic would be temporary and short-term in nature and would result in minor increases in traffic relative to existing volumes on SR 35 in the project vicinity. As such, this traffic would not be expected to degrade traffic operations on SR 35 such that it would exceed the County's adopted standard of LOS B. Project construction traffic also would not degrade performance of the circulation system in light of the performance goals and policies established by the County for mass transit and non-motorized travel, as no bicycle or pedestrian facilities are currently located along the project alignment. The existing bus service that terminates at the intersection of SR 35 and SR 84 would not be affected. However, construction vehicles entering or exiting the project area could require temporary lane closures or cause temporary delays of through traffic in the project vicinity, which could adversely affect local traffic circulation.

Project construction activities, including trenching and boring activities and the installation of the 17 proposed new wooden poles and nodes, would likely require temporary lane closures on SR 35. Only one lane closure would occur at a time, and a lane closure would last no more than one day in any one location. The maximum length of temporary lane closures, including the tapers at either end of each closed segment, would be approximately 350 feet in special circumstances such as a curve, and approximately 220 feet along the straight portions of the road. Delays as a result of lane closures on SR 35 would typically average 3 to 5 minutes. Delays could also occur on access driveways in the project vicinity that are obstructed by construction activities. The impacts from the increase in traffic and congestion caused by these temporary lane or driveway closures would be reduced to a less-than-significant level with the implementation of Mitigation Measure Traffic-1, APM Traffic-1, and APM Traffic-2.

> **Mitigation Measure Traffic-1:** Lane closures will be limited to non-peak travel periods (between 9 AM and 4 PM on weekdays) to minimize traffic delays on SR 35.
>
> **APM Traffic-1:** Project traffic control measures will conform to the specifications of Caltrans and San Mateo County. The contractors retained for project construction will follow Caltrans' Standard Plan T13 ("Traffic Control System for Lane Closure On Two-Lane Conventional Highways") to manage traffic during the construction of the Project and to ensure that construction activity will not create unsafe traffic conditions. The Plan will include the use of portable warning signs, flaggers, and cones/barricades that will separate the construction activities from traffic.
>
> **APM Traffic-2:** Complete closure of any residential or commercial driveway shall not occur during project construction. If the Project requires work across any driveways during trenching or excavation, large metal plates shall be placed across the trenches or excavated areas in order to allow ingress and egress for local residents, business owners, and emergency vehicles.

Operation and Maintenance. Operation of the lines would have no impact on traffic. Maintenance of the proposed project would require use of a small fleet of maintenance vehicles, typically mid- to full-size pick-up trucks, to facilitate travel to and from the project alignment during periodic maintenance visits. Such visits would involve repairs related to equipment malfunctions, electrical outages, and/or fiber interruptions, and would occur five to six times per year under normal conditions. Given the small number of vehicles needed to facilitate travel and the relative infrequency of maintenance visits, the increase in traffic on SR 35 would not be expected to degrade traffic operations on SR 35 such that it would exceed the County's adopted standard of LOS B. Project operation would also not be expected to degrade performance of the circulation system in light of the performance goals and policies established by the County for mass transit and non-motorized travel. Therefore, operational impacts would be less than significant.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

The facilities are located in remote locations along the SR 35 transportation corridor and would not result in a change in air traffic patterns.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed project would not result in new transportation design feature hazards because the project would not result in any changes to the existing roads. The new telecommunication facilities would be located overhead in a corridor with existing lines, or would be installed underground. Therefore, the project would have no impact on hazards due to a design feature.

e) Result in inadequate emergency access?

During project construction, emergency access in the area could be affected by temporary lane closures and construction-related traffic that could delay or obstruct the movement of emergency vehicles. This impact is considered less than significant with implementation of APMs Traffic-2 and Traffic-3.

> **APM Traffic-3:** In the event of an emergency, project activities will be suspended in order to allow through access on SR 35 for emergency vehicles and operations.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The proposed project would not conflict with any adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, and would not decrease the performance or safety of such facilities. Temporary lane closures during project construction could result in short delays for bicycle traffic on SR 35. These temporary lane closures would have a less than significant impact on bicycle access through SR 35.

3.17 Utilities and Service Systems

3.17.1 ENVIRONMENTAL SETTING

The project area is located within an existing transportation and utility corridor. The corridor contains several utility systems including water, electricity, telephone, and natural gas. There are no storm water facilities located within the project alignment on SR 35, nor is there a sewer system; the residences in the project area have septic systems.

San Mateo County has eight active, permitted solid waste facilities that would be able to service the project (CalRecycle 2011). Water required for dust suppression during construction activities would be supplied by the municipal system through fire hydrants. The quantity of water extracted would be metered and the applicant would pay San Mateo County for the water use. No groundwater resources would be used for the project during construction.

3.17.2 ENVIRONMENTAL IMPACTS

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 stormwater 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	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The project would result in the generation of wastewater only during construction activities. Portable toilets would be used during construction and would be supplied through a contractor who would also maintain the toilets and provide daily disposal. Quantities of wastewater generated would be minimal and the project would not exceed wastewater treatment requirements of the RWQCB. The project would have a less than significant impact on wastewater treatment requirements.

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?

The project would not require nor result in the construction of new water or wastewater treatment facilities or expansion of existing facilities as the water needs and wastewater disposal requirements for the construction phase of the project would be minimal and temporary. Operation and maintenance of the project would not require any water or wastewater disposal. The project would have a less than significant impact on such facilities.

c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

All excavation activities would take place within existing transportation and utility corridors. The erosion control measures identified in APM Hydrology-1 would insure that construction of the project would not lead to a significant increase in stormwater runoff either during construction or after construction activities are complete. Operation of the project would not impact or otherwise require stormwater drainage since the project would not change surface flows or increase impermeable surfaces in the project area. The proposed project would not require new or expanded storm water facilities and would have a less than significant effect on existing storm water facilities.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The project would use water for dust suppression and boring and trenching activities during construction, as necessary. This water would be purchased from the San Mateo County municipal water supply through the use of metered fire hydrants in the project area. Operation and maintenance of the project would not require any water supply given the nature of the project as a telecommunications project. The project would not require new or expanded water entitlements. The project would have a less than significant impact on water supplies.

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?

The project would result in the generation of wastewater only during construction activities. Portable toilets would be used during construction, the contents of which would be removed from the site for treatment and disposal through a contractor. Wastewater generation would be minimal and the project would have a less than significant impact on the wastewater treatment provider's capacity.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Waste generated by the project would primarily consist of incidental waste (food wrappers, drink containers, etc.) generated by workers during construction activities, and this waste would be transported offsite daily and disposed of properly through the County's municipal waste collection system. This amount of waste would be minimal and would have a less than significant impact on landfill capacity.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

The project would produce solid waste during construction and would comply with all statutes and regulations related to solid waste. Impacts in regard to solid waste would be less than significant.

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3.18 Mandatory Findings of Significance

Checklist

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
Does the project:				
a) 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) 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) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

a) 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?

The proposed project does not 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 or restrict the range of a rare or endangered plant or animal, or eliminate important examples of major periods of California history or prehistory. The project would be located within existing roadway and utility rights-of-way, and would not be located near any waterways. Ground

disturbing activities would be located in areas that have been previously disturbed, and would be unlikely to contain either special status species or cultural resources.

Nevertheless, the proposed project does have the potential to impact special status plant and wildlife species and wetland habitats. Potential impacts associated with the proposed project would be mitigated to less than significant levels with the implementation of mitigation measures Biology-1 through Biology-4 and APM Biology-1. These measures would require pre-construction surveys for special status plant and animal species and specific protection measures for any such species found to be present at the site, implementation of specific best management practices to protect wildlife during construction, and pre-construction surveys for nesting birds, marbled murrelets, and other special status bird species. APMs Hazards-1 and Hydrology-1 would also be implemented to ensure that no hazardous materials or sediment-laden construction run-off reaches any stream courses or wetlands adjacent to the project alignment.

The project also has the potential to disturb cultural resources during ground disturbing construction activities. Mitigation measure Cultural Resources-1 and APMs Cultural Resources-1 and Cultural Resources-2 would be implemented to reduce these potential impacts to a less than significant level by requiring pre-construction training for all construction personnel in the identification and protection of cultural resources, and implementation of specific protection measures should a cultural or paleontological resource be discovered during construction activities.

b) 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.)

The installation of a telecommunications system involves temporary construction impacts that are not considered significant and would not contribute to cumulative impacts in the local communities. San Mateo County staff has indicated that there are no pending projects in the project vicinity that would result in a cumulatively significant construction impact. Operation and maintenance activities would have negligible traffic and air quality impacts. The project's contribution to cumulative environmental impacts for both construction and operation activities would therefore be less than significant.

c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Project-related environmental impacts have been identified for the following resource areas with potential to cause direct or indirect impacts upon human beings:

- Aesthetics
- Air Quality/Greenhouse Gases
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials

- Hydrology and Water Quality
- Noise
- Transportation and Traffic

Implementation of all mitigation measures and APMs in this document, in addition to adherence to all applicable regulations, would reduce these potential impacts to less than significant levels.

The project would have a beneficial effect on residents in the area by providing additional telecommunication services.

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4: References

C/CAG (City/County Association of Governments of San Mateo County). 2009. Final Congestion Management Program for 2009.

_____. 2000. San Mateo County Comprehensive Bicycle Route Plan.

California Department of Conservation. 2007. Alquist-Priolo Earthquake Fault Zone Maps. http://www.quake.ca.gov/gmaps/ap/ap_maps.htm. Accessed: August 26, 2011.

California Department of Fish and Game. 2011. Sacramento, California Natural Diversity Database (CNDDB) Dataset.

California Department of Water Resources. 2011. Basins and Subbasins of the San Francisco Bay Hydrologic Region. http://www.water.ca.gov/pubs/groundwater/bulletin_118/basindescriptions/2-9.03.pdf. Accessed: August 26, 2011.

CalRecycle. 2011. Solid Waste Information Systems Facility/Site Listing Database. Website: http://www.calrecycle.ca.gov/SWFacilities/Directory/search.aspx. Accessed: June 15, 2011.

Caltrans (California Department of Transportation). 1998. Technical Noise Supplement, Traffic Noise Analysis Protocol. October 1998.

_____. 2010a. Officially Designated State Scenic Highways: http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm. Accessed: July 29, 2011.

_____. 2010b. 2009 Traffic Volumes on the California State Highway System. Website: http://traffic-counts.dot.ca.gov/2009all/2009TrafficVolumes.htm. Accessed: July 15, 2011.

_____. 2011. Caltrans Standard Environmental Reference - Chapter 27: Visual & Aesthetics Review http://www.dot.ca.gov/ser/vol1/sec3/community/ch27via/chap27via.htm. Accessed: July 29, 2011.

CARB (California Air Resources Board). 2008. Climate Change Scoping Plan. December.

_____, CCAR (California Climate Action Registry), ICLEI (International Council for Local Environmental Initiatives), and TCR (The Climate Registry). 2010. Local Government Operations Protocol, Version 1.1. May.

_____. 2011. iADAM Air Quality Data Statistics. Website: http://www.arb.ca.gov/adam/. Accessed: July 29, 2011.

CDC (California Department of Conservation). 2008a. San Mateo County Important Farmland. Website: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/smt08.pdf. Accessed: June 14, 2011.

_____. 2008b. Sacramento, California Williamson Act and Farmland Mapping & Monitoring Program Datasets.

CDTSC (California Department of Toxic Substances Control). 2011. DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List). Website: http://dtsc.ca.gov/SiteCleanup/cortese_List.cfm. Accessed: August 1, 2011.

BAAQMD (Bay Area Air Quality District). 2011. CEQA Air Quality Guidelines. Updated May 2011.

Brabb, E. E., R.W. Graymer, and D.L. Jones. 1998. Geology of the onshore part of San Mateo County, California: A Digital Database. U.S. Geological Survey Open-file Report OF 98-137.

ESRI (Environmental System Research Institute, Inc.). 2011. Redlands, California GIS Basemap Datasets.ExteNet Systems (California) LLC and Synthesis Environmental Planning. 2010. Proposed Highway 35 Fiber-Fed Distributed Antenna Communications System Proponent's Environmental Assessment. Project No. EXT0001.

FEMA (Federal Emergency Management Agency). 1996. Washington D.C. FEMA Q3 100 Year Flood Hazard GIS Dataset.

FHWA (Federal Highway Administration). 1983. Visual Impact Assessment for Highway projects (FHWA-HI-88-054). Washington, D.C.

ISD (San Mateo County Information Services Department). 2011. San Mateo, California San Mateo County GIS Datasets.

MROSD (Midpeninsula Regional Open Space District). 2011a. Purisima Creek Redwoods Open Space Preserve. Website: http://www.openspace.org/preserves/pr_purisima.asp. Accessed: June 14, 2011.

_____. 2011b. El Corte de Madera Creek Open Space Preserve. Website: http://www.openspace.org/preserves/pr_ecdm.asp. Accessed: June 14, 2011.

_____. 2011c. Teague Hill Open Space Preserve. Website: http://www.openspace.org/preserves/pr_teague_hill.asp. Accessed: June 14, 2011.

_____. 2011d. La Honda Creek Open Space Preserve. Website: http://www.openspace.org/preserves/pr_la_honda.asp. Accessed: August 25, 2011.

Natural Resource Conservation Service (NRCS). 2008. Watershed Boundary Dataset.

_____. 2011. Custom Soil Resource Report for San Mateo Area, California; and San Mateo County, Eastern Part, and San Francisco County, California. Accessed: August 25, 2011.

Parus Consulting, Inc. 2011. Updated review of the California Natural Diversity Database (CNDDB). Website: http://www.dfg.ca.gov/biogeodata/cnddb/. Accessed: July 25, 2011.

Peak and Associates, Inc. 2010. Cultural Assessment Report for the Proposed King's Mountain Highway 35 Fiber-Fed Distributed Antenna Communications System Project. Prepared for Synthesis Environmental Planning, Novato, California. On file at Synthesis Environmental Planning.SMC (San Mateo County) Community Response Team (CERT). 2009. http://www.co.sanmateo.ca.us/vgn/images/portal/cit_609/61/0/1358593409smccert_faq.pdf Accessed: August 26, 2011.

SMC (San Mateo County). 1986a. General Plan – Mineral Resource Map.

_____. 1986b. General Plan - Existing Rural Land Use Map.

_____. 1986c. San Mateo County General Plan Policies. November.

_____. 1986d. Zoning Regulations. July.

_____. 1988. Standards for Architectural and Site Control within the Skyline Scenic Corridor.

_____. 1998. Local Coastal Program Policies, 1998 Update.

SMC (San Mateo County) Health System. Silver Dragon Drill/Strategic National Stockpile (SNS) FAQ. 2009. http://www.co.sanmateo.ca.us/vgn/images/portal/cit_609/60/63/1358593413silverdragoniii_faq.pdf. Accessed: August 26, 2011.

SMC Parks (San Mateo County Parks). 2008. Huddart and Wunderlich Parks Master Plan. Harris Design & Print. San Francisco. CA. http://www.co.sanmateo.ca.us/vgn/images/portal/cit_609/11/4/1344050026RevisedFinalPlan10-15-08TEXT.pdf

_____. 2011a. Huddart Park. Website: http://www.co.sanmateo.ca.us/portal/site/parks/menuitem.f13bead76123ee4482439054d17332a0/?vgnextoid=407bc8909231e110VgnVCM1000001d37230aRCRD&cpsextcurrchannel=1. Accessed: June 14, 2011.

_____. 2011b. Wunderlich Park. Website: http://www.co.sanmateo.ca.us/portal/site/parks/menuitem.f13bead76123ee4482439054d17332a0/?vgnextoid=648bc8909231e110VgnVCM1000001d37230aRCRD&cpsextcurrchannel=1 Accessed: August 25, 2011.

SMC Sheriff (San Mateo County Sheriff). 2011a. Contact Us. Website: http://www.smcsheriff.com/communities-we-serve. Accessed: June 14, 2011.

_____.2011b. Area Office of Emergency Service/Homeland Security.http://www.smcsheriff.com/divisions/operations-division/area-office-emergency-services/homeland-security. Accessed: August 26, 2011.

Sons of Norway. 2001. Henrik Ibsen Lodge #7. Website: http://www.norwegianclub.org/ibsen/. Accessed: June 14, 2011.

US DOT (U S Department of Transportation). 2006. Transit Noise and Vibration Impact Assessment. May 2006.

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This section lists the individuals who either prepared or participated in the preparation of this IS/MND.

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