

INITIAL STUDY

Taber Ranch Cell Tower Project

Parcel 048-100-044
Zone File # 2019-0015

Lead Agency



Yolo County Department of Community Services Planning Division

292 West Beamer Street
Woodland, CA 95695-2598

Technical assistance provided by



November 2019

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1. Introduction

This proposed Project (Taber Ranch Cell Tower) is a request for a Minor Use Permit for a new freestanding AT&T Mobility telecommunications facility at 16628 County Road (CR) 81, Capay, California. The proposed facility would improve wireless communication coverage along State Route (SR) 16 for residents, travelers, and emergency services. The facility would be located on a 35-foot by 30-foot lease area within an 83-acre parcel of a privately-owned ranch. The surrounding area consists of agricultural orchards and vineyards to the north, east, and west, with undeveloped hills to the south and a creek to the east.

2. Regulatory Framework

The Yolo County (County) Department of Community Services Planning Division has identified that the Taber Ranch Cell Tower Project meets the California Environmental Quality Act (CEQA) Guidelines Section 15378 definition of a Project. CEQA Guidelines Section 15378 defines a Project as the following:

“Project” means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

In accordance with CEQA (Public Resources Code Sections 21000-21177), this Initial Study has been prepared to determine potentially significant impacts upon the environment resulting from the construction, operation and maintenance of the Taber Ranch Cell Tower Project (hereinafter referred to as the “Project” or “proposed Project”). In accordance with Section 15063 of the State *CEQA Guidelines*, this Initial Study is a preliminary analysis prepared by the Yolo County Department of Community Services Planning Division as Lead Agency to inform the Lead Agency decision makers, other affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed Project.

3. Environmental Checklist

1. **Project Title:** Taber Ranch Cell Tower
2. **Lead Agency Name/Address:** Yolo County Department of Community Services
292 West Beamer Street
Woodland, CA, 95695
3. **Contact Person:** JD Trebec, Senior Planner
jd.trebec@yolocounty.org
(530) 666-8036
4. **Project Location:** The proposed Project is located at 16628 County Road 81, near the unincorporated Yolo County community of Capay. The Project is approximately 5.0 miles west of the town of Esparto, 14 miles northwest of the City of Winters, and 0.4 miles southwest of SR 16.

Latitude/Longitude: Latitude 38° 42' 00.58"/Longitude -122° 07'22.88"
Site Access: Site access would be from SR 16, turning south on CR 81, then west into the entrance of Taber Ranch
5. **Project Sponsor:** Complete Wireless Consulting, Inc.
Name and Address: Maria Kim
2009 V Street
Sacramento, CA 95818
6. **General Plan/Zoning Designation:** Agriculture (AG)/Agricultural Intensive (A-N)
7. **Project Description Summary:**

The proposed Project is an AT&T Mobility wireless communications facility. The Project will be located on a private ranch near the unincorporated community of Capay in Yolo County. The cellular tower would be 120 feet tall and designed as a faux water tank to fit in with the rural agricultural landscape of the surrounding area. The Project would be constructed on a 35-foot x 30-foot lease area, surrounded by a chain link fence for security purposes.

Details of the Project are further discussed in Section 4.
8. **Environmental/Existing Site Conditions:**

The proposed Project location is an undeveloped area of a privately-owned ranch. The Project would be built partway up a small hill, with one pond on either side (east and west) of the tower.
9. **Surrounding land uses and setting:**

Relation to Project	Land Use	Zoning	General Plan Designation
Project Site	Undeveloped Hill	Agricultural Intensive (A-N)	Agriculture (AG)
North	Orchard/Vineyards	Agricultural Intensive (A-N)	Agriculture (AG)
South	Undeveloped Hills	Agricultural Intensive (A-N)	Agriculture (AG)
East	Creek/Orchard/Vineyard	Agricultural Intensive (A-N)	Agriculture (AG)
West	Orchard/Vineyard	Agricultural Intensive (A-N)	Agriculture (AG)

10. Other public agencies whose approval is required:

This table lists the permits and approvals that may be required for project-related activities. All necessary permits/approvals would be obtained prior to construction to ensure compliance with all applicable regulations and requirements throughout the Project implementation.

Permits and Approvals That May Be Required

Agency/Department	Permit/Approval	Description
Federal		
U.S. Fish and Wildlife Service (USFWS)	Federal Endangered Species Act	Required if a project would result in take of a federally-listed species.
State of California		
Regional Water Quality Control Board (RWQCB)	NPDES Permit for construction dewatering	RWQCB approval is needed for general construction runoff and/or construction dewatering discharges under the National Pollutant Discharge Elimination System (NPDES).
	General Construction Permit and Clean Water Act Section 401 Permit	Project proponents are required to submit a Notice of Intent to the RWQCB for coverage under the General Construction Permit if project disturbance would be over 1 acre. Section 401 permits are necessary when Section 404 permits are required.
California Department of Fish and Wildlife (CDFW)	California Endangered Species Act Incidental Take Authorization	Required if a project would result in take of a State-listed species.
Regional		
California Air Resources Board (CARB) or Air Quality Management District (AQMD)	Portable Equipment Registration or Air Quality Permit to Operate	Portable equipment subject to local air quality permitting requirements, such as generators or air compressors, must either be registered under the CARB Portable Equipment Registration Program (PERP) or obtain a local air quality permit to operate.
Yolo-Solano Air Quality Management District (YSAQMD)	Record of Operating Hours	The operating hours of the diesel generator must be recorded and limited to 200 total hours of operation per year, including maintenance and testing hours.
Yolo Habitat Conservancy	Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP)	Ensures compliance with State and federal endangered species laws by administering takings permits with oversight from the CDFW and USFWS.

11. Have California Native American tribes traditionally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation?

On March 1, 2019, the County sent an invitation for early consultation on the decision to undertake the Project to tribes requesting notification in Yolo County. This notification, prepared in accordance with AB 52, was sent via email and addressed to the following individuals and tribes:

- Burnam Lowell, Sr., Tribal Historic Preservation Officer, Yocha Dehe Wintun Nation
- Charlie Wright, Chairman, Cortina Rancheria Band of Wintun Indians of California
- Randy Yonemura, Cultural Committee Chair, Ione Band of Miwok Indians
- Ralph Hatch, Executive Director, Wilton Rancheria
- Michael Mirelez, Cultural Resource Coordinator, Torres Martinez Desert Cahuilla Indians

In response to the invitation, the County received a letter from the Yocha Dehe Wintun Nation, dated March 14, 2019, expressing concern that the Project could impact unknown cultural resources and requesting a site visit. After the site visit on June 18, 2019, the County received a second letter dated June 19, 2019 requesting consultation and that more information on the Project timeline and details regarding ground disturbance and testing be sent to the Yocha Dehe Cultural Resources Department. This information was forwarded by email to the Yocha Dehe Cultural Resources Department on October 15, 2019.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact requiring mitigation to be reduced to a level that is less than significant as indicated in the checklist on the following pages.

- | | | |
|---|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture & Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials |
| <input checked="" type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> 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 project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the Proposed Project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- ☐ I find that the Proposed Project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** 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 or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the Proposed Project, nothing further is required.

JD Trebec, Senior Planner
Yolo County Department of Community Services
Planning Division

Date

4. Detailed Project Description

4.1 Project History and Background

AT&T Mobility is seeking to improve communication services in Yolo County by providing wireless coverage along SR 16 near the communities of Capay and Brooks. The area is a combination of flat and hilly farmland with mostly grape and olive crops. Surrounding land uses consist of agricultural and rural residences. To minimize potential visual impacts, the communications equipment will be hidden inside a faux water tower. Underground power lines will be installed within an existing roadway to power the facility and buried fiber optic lines will provide for remote communication and facility control (see Figures 1 and 2; all figures are at the end of the section in which they are referenced).

Complete Wireless Consulting, Inc. (Complete Wireless), working on behalf of AT&T Mobility, submitted a formal application dated February 28, 2019, to Yolo County for a Minor Use Permit for a new AT&T Mobility telecommunications facility at 16628 County Road 81 in Capay, California. The County sent a Notice of Incomplete letter to the Applicant dated March 22, 2019. On May 9, 2019, Complete Wireless submitted additional information, including a California Historical Resources Information System (CHRIS) records search summary and a Biological Assessment Inventory along with Preliminary Evaluation for Yolo HCP/NCCP (Form 2). A Cultural Resources Investigation of Proposed Wireless Telecommunications Service Facility AT&T CVL03477 “Taber Ranch – Armstrong” prepared by Carolyn Losée, RPA, dated May 9, 2019, was also submitted to the County.

4.2 Project Objectives and Need

The proposed facility is needed to bring improved wireless communication coverage along SR 16. This Project would expand AT&T’s network and improve call quality, signal strength, and wireless connection services in Yolo County. The improved wireless service would benefit residents, travelers, public services, and roadway safety in the area.

4.3 Project Components

AT&T Mobility proposes to install a new wireless communications facility (Taber Ranch Cell Tower), at 16628 County Road 81, Capay, California, that would be disguised to look like a water tank (i.e., a faux water tank).

The proposed Project consists of the following components (see Figure 3):

- Development of a 35-foot by 30-foot (1,050 square feet, or 0.024 acres) cell tower pad area that would be covered with gravel on portions not used for equipment installation
- Temporary disturbance area of approximately 10 feet beyond the 35-foot by 30-foot permanent disturbance area during construction for staging of equipment and fence installation
- Installation of a 120-foot-tall faux water tank telecommunications tower (cell tower) with footing depths a minimum of 26 feet and a maximum of 30 feet
- Installation of telecommunications equipment and shelter, and associated equipment at cell tower site
- Installation of pre-manufactured walk-in cabinet equipped with one externally mounted HVAC unit at cell tower site
- Installation of a 30-kW diesel backup generator placed at the base of the faux water tank

- Installation of a 6-foot-tall chain link fence, with a 12-foot-wide access gate, to surround the telecommunications site
- Trenching (3 feet deep) and installation of 2,644 feet (0.5 mile) of underground power line within a 10-foot-wide utility easement between the tower site and existing power pole/line to the northeast of tower site
- Installation of 17-inch by 30-inch traffic-rated power ground vault every 300 feet along the power line, or as required
- Installation of 200-amp service pedestal that is 32 inches (width) by 17.5 inches (depth) by 54 inches (height) to provide power and metering for commercial uses
- Installation of a set-up transformer that is approximately 24 inches (width) by 24 inches (depth) by 29 inches (height) to convert power, placed on a 3-foot by 3-foot concrete pad near existing power line utility pole
- Trenching (3 feet deep) and installation of 2,810 feet (0.54 mile) of underground fiber-optic cable line within a 30-foot-wide road and utility easement between cell tower site and existing aerial fiber-optic cable connection point to southeast of tower site along existing access road
- Improvement of existing access road to cell tower area from CR 81: conversion from a 20-foot-wide gravel road to a 20-foot-wide all-weather gravel access road
- Construction of 150 feet of 20-foot-wide access road from the existing access road to the proposed communications tower site.

Faux Water Tank Telecommunications Tower

Height

The proposed facility height complies with the County's development standards for wireless facilities in the Agricultural Intensive (A-N) zone. Because of the surrounding topography and breadth of the coverage area, the proposed facility needs an overall tower height of 120 feet for the signal to reach the intended service area (along SR 16, near the communities of Capay and Brooks). The proposed facility has been designed at its minimum functional height.

Design

Considering the rural agricultural character of the area and after thorough input from the property owner, a 120-foot-tall faux water tank, painted to match the color scheme of the nearby structures and landscape, was selected as the best design for the proposed facility.

4.4 Project Construction

Construction Schedule

Following receipt of applicable permits, completion of final engineering, and material procurement activities, construction of the proposed Project is estimated to start in late 2019 or early 2020. Construction is expected to take approximately 90 days. Construction would primarily occur Monday through Friday (5 days a week) between 8:00 a.m. and 7:00 p.m., in accordance with all applicable local noise and traffic ordinances.

Pre-Construction Activities

Access Road Improvement

Access to the proposed cell tower site would be from CR 81 via an existing access road used for farming activities. AT&T Mobility proposes to conduct road improvements and convert the existing road into a 20-foot-wide all-weather gravel access road. Additionally, 150 feet of access road from the existing access road to the proposed cell tower site would be constructed. The road would be 20 feet wide.

Equipment Staging Areas

Staging areas for contractor equipment and materials would be within the proposed permanent and temporary disturbance areas of the proposed cell tower site and the access easement.

If additional areas are needed, AT&T Mobility (with the assistance of a biologist), will review the Project area and locate staging areas that are in previously disturbed areas that would not have potential to affect wildlife habitat or species. All staging areas must be approved by Yolo County prior to use.

Establish Work Areas

Project site boundaries will be clearly delineated by stakes and/or flagging to minimize inadvertent degradation or loss of adjacent habitat during construction activities. Signs and/or fencing will be used to provide access restrictions for vehicles and equipment unrelated to Project construction.

The proposed permanent disturbance area is 0.024 acre (35-foot x 30-foot) for the cell tower pad and 0.069 acres (3,000 square feet) for the new road construction. There would also be additional temporary disturbance immediately surrounding the cell tower's permanent disturbance area (for access to the equipment area and fencing), and along the fiber optic line and underground electric line. The total area of temporary disturbance would be about 1.94 acres (84,340 square feet).

Construction Activities

Prior to the start of construction, and at least 48 hours before proceeding with any excavation or site work, the contractor would contact Underground Service Alert (USA). The contractor would verify all existing utilities, both horizontal and vertically, prior to the start of construction.

All equipment and materials would be installed according to manufacturer's recommendations unless specifically indicated otherwise, or where local codes or regulations take precedence. AT&T Mobility would construct the cell tower in the most energy-efficient manner using the most energy-conserving materials.

All construction activities could be done concurrently with the exception of building of the access road, which must be completed first because it would be needed to transport any materials to the site location. Construction activities would include:

- Grading associated with the road improvements
- General excavation and trenching
- Installation of the tower including foundation construction and assembly
- Utility run and fiber optic installation

Any excess soil spoils would be left on-site unless otherwise required by environmental regulations.

Erosion Control and Restoration

Best management practices (BMPs), as required by a stormwater pollution prevention plan (SWPPP), would be incorporated in the construction of the Project to minimize erosion. They would include silt fence or other sediment control devices that would be placed around construction sites to contain spoils from construction excavation activities.

Any drain disturbed during construction would be returned to its original condition prior to completion of work. The permanent disturbance area for the cell tower site would be graveled. Any damage to the existing access road would be repaired to the condition it was in prior to AT&T's construction.

Construction Workforce and Equipment

Construction is anticipated to take approximately 90 days. The crew size would range from two to ten individuals throughout the duration of the proposed Project construction. Construction activities will typically occur between 8 a.m. and 7 p.m. on weekdays.

Construction equipment that would be used for the Project includes:

- Utility pick-up trucks (approximately 5)
- Backhoe
- Concrete Trucks (approximately 6 deliveries)
- Drilling rig (for tower foundation)
- Concrete pump
- Skid steer tractor
- Dump truck
- Crane

Water Requirements

A water truck would be onsite during excavation activities for use in fugitive dust control. AT&T Mobility would comply with dust control measures required by the YSAQMD.

4.5 Operation and Maintenance

The HVAC unit would run as needed, dependent upon ambient temperature. It is possible during a heat wave that the HVAC unit may run continuous for 24 hours. Under normal operation, the HVAC unit functions like a residential unit turning on and off as needed to maintain the temperature set points.

A technician would visit the site approximately twice a month to check the facility and perform any necessary maintenance. The standby generator (for use during emergency power outages) would be operated for approximately 15 to 30 minutes every 1 to 2 months for maintenance purposes. Testing and maintenance would take place weekdays between 8:00 a.m. and 7:00 p.m.

4.6 Project Design Features

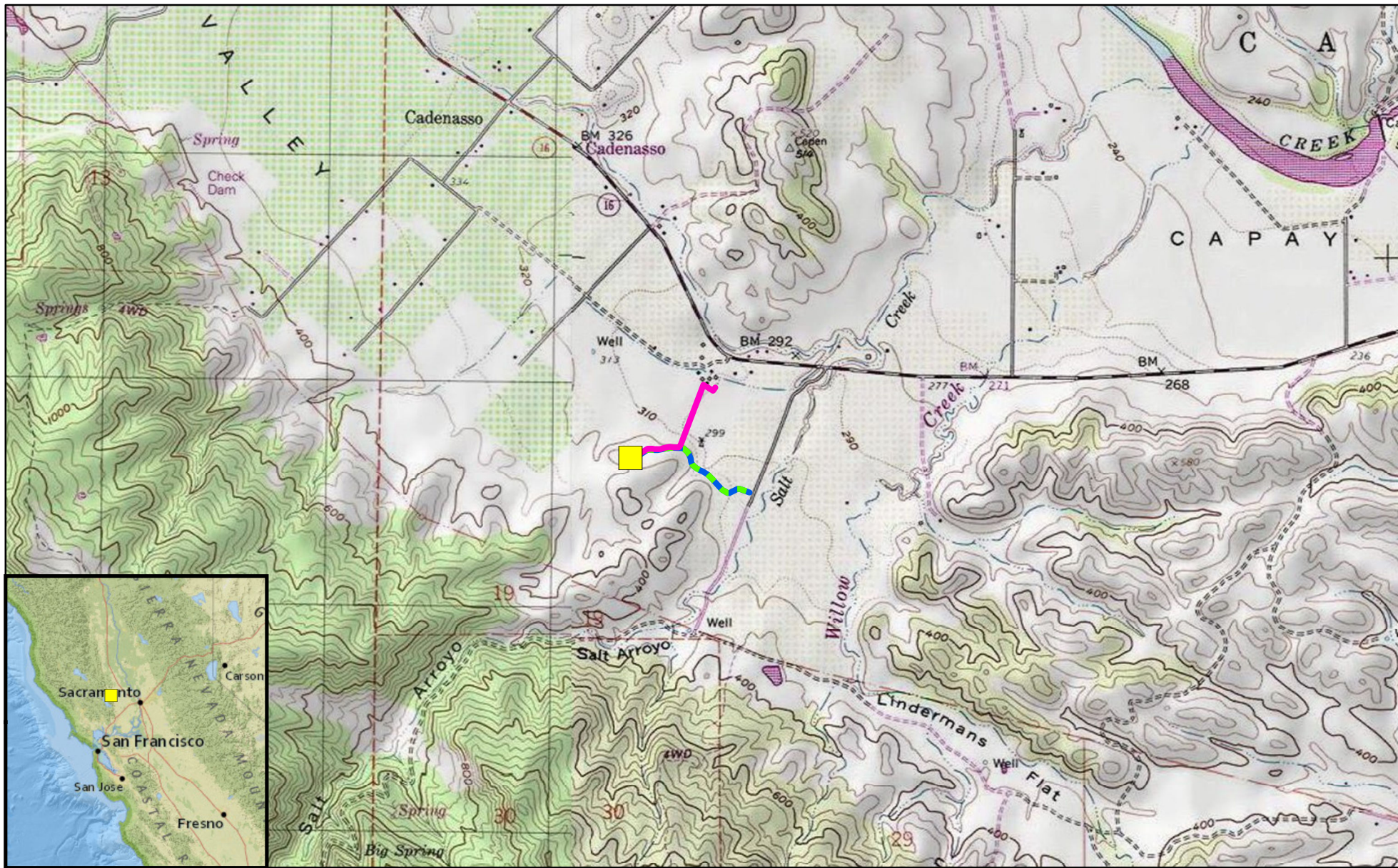
AT&T Mobility has proposed the following design features to minimize visual effects and increase safety at the Project site:

- Construct the tower as a faux water tank painted to match the color scheme of the nearby structures and landscape, taking into account the rural agricultural character of the area
- Lighting at the cell tower site would have two shielded, down-tilted lights on a timer at the front and back of the walk-in cabinet within AT&T's Project lease area;

- AT&T Mobility is consulting with the Federal Aviation Administration (FAA) and would implement any necessary requirements for aviation safety, such as red lighting on the water tower
- Security at the site would include a fence with a locked gate and remote monitoring

4.7 Yolo Habitat Conservation Plan/Natural Community Conservation Plan

This Project is covered under the Yolo HCP/NCCP and is required to comply with all applicable Avoidance and Minimization Measures (AMMs) required by that plan (Yolo Habitat Conservancy, 2018). The applicable AMMs applied to the Project, or required in the Conditions of Approval for the Project, are listed below, and in Section 5.4 (Biological Resources).



0 1,500 3,000
Feet

- Taber Ranch Cell Tower Location
- Proposed Underground Power Route
- Trenching Installation of Fiber-Optic Cable
- Existing Access Road

Figure 1.
Project Vicinity

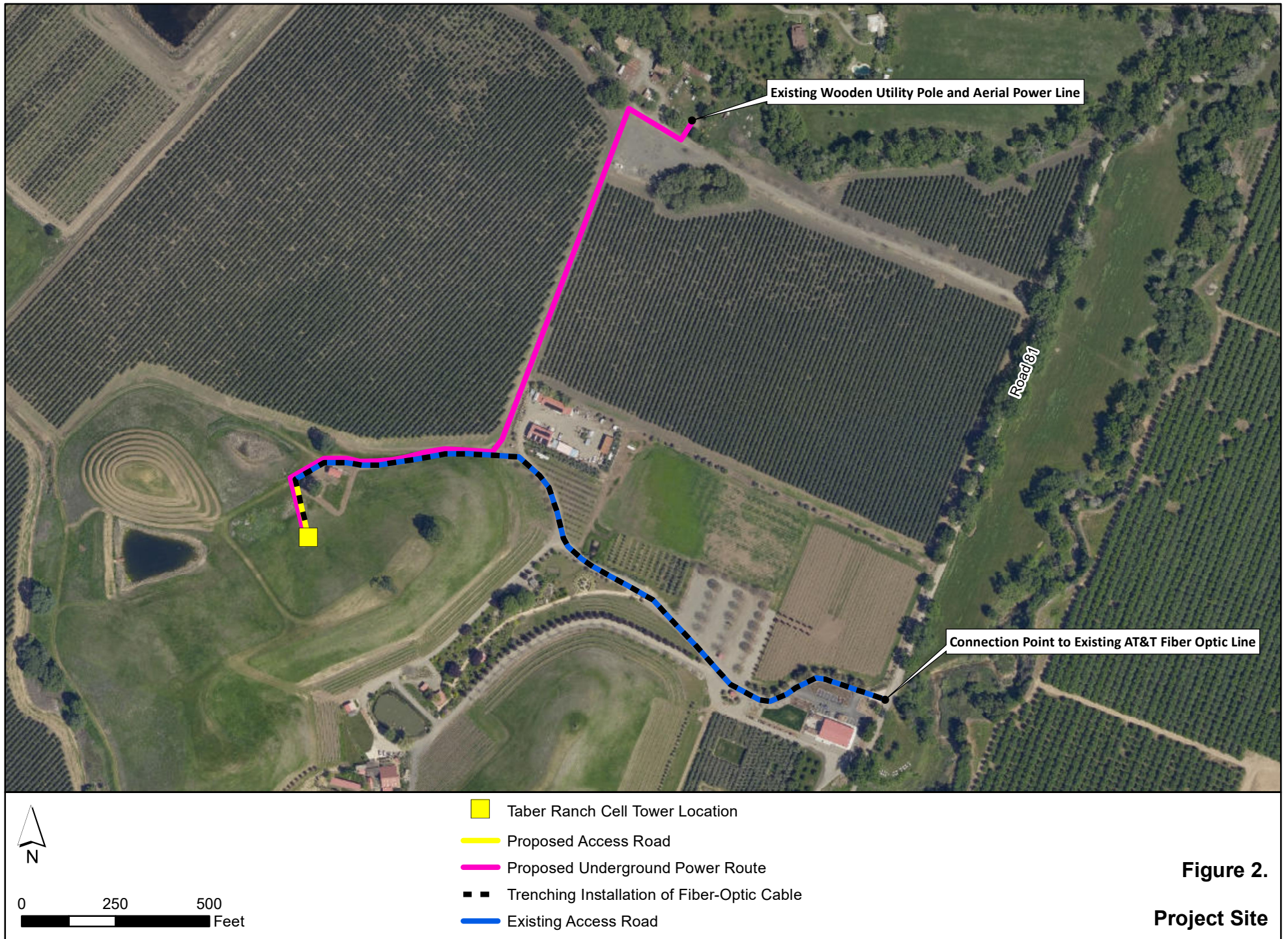
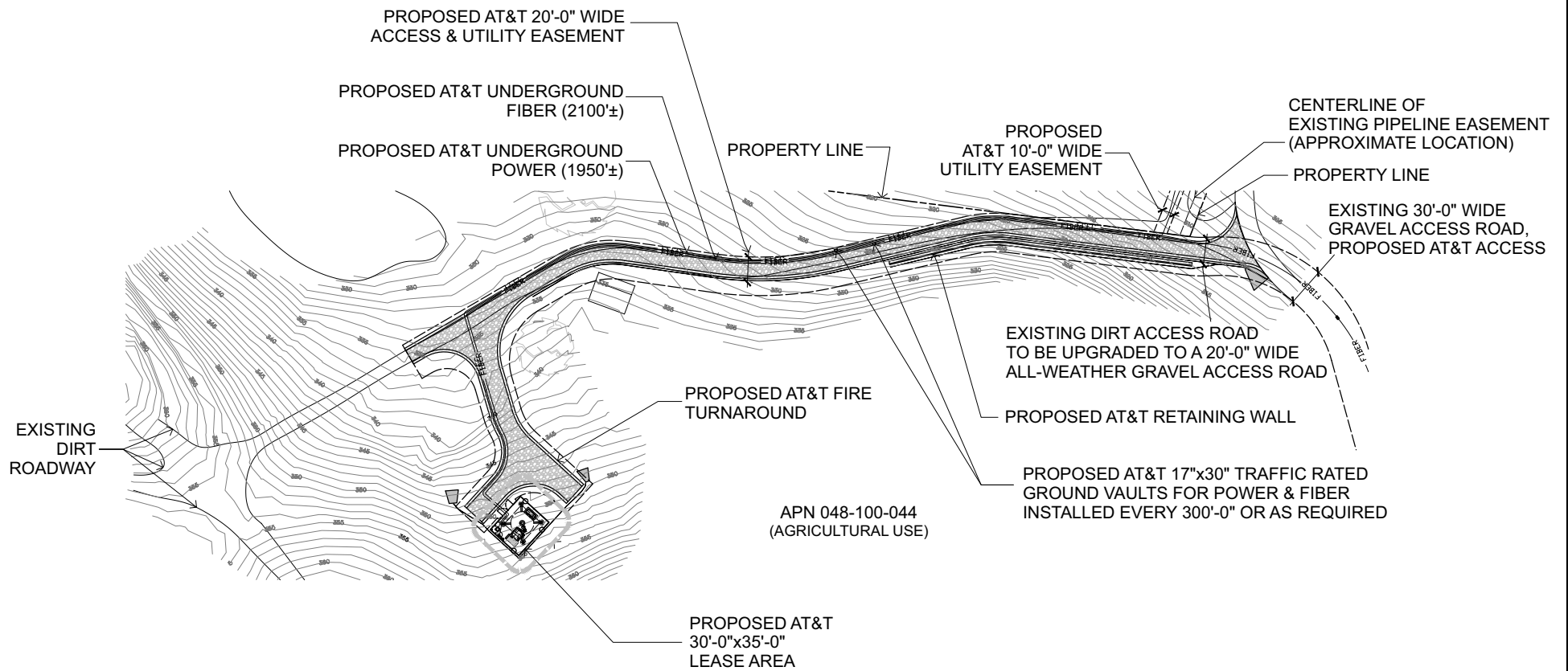


Figure 2.
Project Site



Source: AT&T, 2019.

0 50 100 200
Feet

Figure 3.
Enlarged Site Plan

5. Environmental Setting and Environmental Impacts

5.1 Aesthetics

AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Check ☐ if project is located within a view-shed of any Scenic Route listed in the General Plan

Environmental Setting

Aesthetics, as addressed in the CEQA, refers to visual considerations in the physical environment. Aesthetics analysis, or visual resource analysis, is a systematic process to logically assess visible change in the physical environment and the anticipated viewer response to that change. This Aesthetics section describes the existing landscape character of the Project area, existing views of the Project area from various on-the-ground vantage points, the visual characteristics of the proposed Project, and the landscape changes that would be associated with the construction and operation of the proposed Project, as seen from various vantage points.

The Project site is open space containing rolling hills and vegetation and is zoned Agricultural Intensive (A-N). Surrounding land uses consist of agricultural and rural residences. The existing landscape of the Project area is considered to have moderate to high visual quality and consists of a blend of open space, agricultural land, and rural residential development. Direct views of the Project site show a rolling hill covered in natural grasses with scattered mature trees. The open rolling topography and vibrant green (in winter and spring) to gold (in summer and fall) ground cover is the dominant visual characteristic of this location. (See photo inset).



There are no designated State Scenic Highways within Yolo County (Caltrans, 2019), with the exception of SR 128 that was made eligible to be designated as an official State “Scenic Highway” in July 2019. The nearest “eligible” State Scenic Highway is a segment of SR 16, which is located 0.38 miles northeast. This nearby portion of SR 16 is part of the segment designated by Caltrans as an “eligible” State Scenic Highway. SR 16,

from Capay to the Colusa County line, is a designated scenic highway in the Yolo Countywide General Plan (Yolo County, 2009).

Impact Analysis

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant. For purposes of determining significance under CEQA, a “scenic vista” is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the public. The Project area is considered to have moderate to high visual quality. The proposed Project is consistent with allowable uses within the Agricultural Intensive (A-N) zone and the proposed facility height also complies with the County’s development standards for wireless facilities in the A-N zone. Views of the site are primarily only available from adjacent agricultural uses, agricultural uses and rural residences located northwest/southeast, and intermittently from motorists on SR 16. Due to adjacent lands being developed with agricultural structures/uses, the proposed Project site is not considered a scenic vista because it does not provide sustained high value undisturbed landscape for the benefit of the public. As agricultural land, the site is zoned to allow for agricultural uses and development consistent with the proposed Project.

SR 16, a designated scenic route within the Project vicinity, would provide intermittent views of the site. Visual simulations of the proposed Project were prepared from four viewpoints; two were from along SR 16 (simulations 1 and 2), as shown in Appendix A. As shown, the Project would be barely visible from SR 16. The design of the proposed communication tower (a faux water tower) would blend with adjacent agricultural structures/uses and not contrast with the existing landscape. Less than significant impacts to designated scenic vistas would occur.

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

Less Than Significant Impact. As discussed, there are no designated State Scenic Highways within Yolo County (Caltrans, 2019) other than SR 128, which is more than 14 miles south of the Project. SR 16 located 0.38 miles northeast of the Project site is an “eligible” State Scenic Highway (Caltrans, 2019). SR 16 (from Capay to the Colusa County line) is a designated scenic highway in the Yolo Countywide General Plan (Yolo County, 2009). While the Project site would be intermittently visible from motorists on SR 16, the Project site is vacant and does not contain any rock outcroppings or historic structures. Furthermore, it would not require the removal of any trees. As discussed above under Question a) and shown in Appendix A, the Project would be barely visible from SR 16. The design of the proposed communication tower (a faux water tower) would blend with adjacent agricultural structures/uses and not contrast with the existing landscape. Less than significant impacts to a designated scenic vista would occur. Less than significant impacts to this designated local scenic route would occur.

c) Substantially degrade an existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. Because the site is adjacent to rural (non-developed) lands and the area contains very low residential density, the site is considered located within a non-urbanized area (Public Resources Code §21071(b)(1)(B)). The following analysis considers the potential for the Project to degrade the existing visual character or quality of public views of the site and its surroundings. As discussed, the Project area is considered to have moderate to high visual quality and consists of a blend of open space, agricultural land, and rural residential development. Direct views of the Project site show a rolling hill covered in natural grasses with scattered mature trees. Views of the site are primarily only available from adjacent agricultural uses, agricultural uses and rural residences located northwest/southeast, and

intermittently from motorists on SR 16. Therefore, the proposed Project is considered to have low visibility and not considered to be an aesthetics focal point. However, due to the elevated topography of the site compared to the immediately adjacent lands, views from the surrounding area have a clear line-of-sight to the Project from these adjacent viewsheds.

The visual character of the site would change due to the installation of a 120-foot-tall faux water tank telecommunications tower and associated aboveground infrastructure on the property. Visual simulations of the proposed Project were prepared from two adjacent viewpoints and from two viewpoints along SR 16, as presented in Appendix A. These simulations show existing and simulated (with Project) views from four nearby viewpoints. As shown in simulations 1 and 2, the Project would be barely visible from SR 16. The design of the proposed communication tower (a faux water tower) would blend with adjacent agricultural structures/uses and not contrast with the existing landscape from SR 16.

As shown in simulations 3 and 4, the Project would be visible from rural public roadways providing access to adjacent agricultural uses and viewsheds from these adjacent properties. Due to the necessary height of the proposed tower, the tower would increase the overall visibility of man-made development at these locations. A faux water tower was selected by AT&T Mobile to be the best design to blend with the existing landscape and adjacent uses. The tower would be painted to match the color scheme of the nearby structures and landscape. While the proposed new communications tower would be visible from location 3, its contrast would be lessened by adjacent vertical tree lines, vegetation, and the higher topography of hills spanning westward, which increase the horizon line. Similarly, from location 4, the new tower would be visible, but contrast would be lessened due to mature trees and development dominating foreground views. The new tower, while visible, blends into the landscape. While the new tower is expected to contribute to the overall presence of man-made structures in the landscape, due to the adjacent rolling topography and mature vegetation, the increased presence and contrast is not considered to be prominent and would be a less than significant impact to visual character and view quality.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. The proposed Project would have two, shielded, down-tilted lights on a timer within AT&T's Project lease area. AT&T Mobility is presently consulting with the FAA and would implement any necessary requirements, such as red lighting for aviation safety; however, any required FAA lighting would not create a new source of substantial light or glare. In regard to potential glare impacts, the communication tower would be painted to match the color scheme of the nearby structures and landscape. This would ensure the tower does not contain any reflective surfaces. All above-ground supporting infrastructure would not be of size, height, or material that could create substantial glare. No potential light or glare impacts would occur.

Mitigation Measures

No mitigation required.

Aesthetics Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

5.2 Agriculture and Forestry Resources

AGRICULTURE AND FORESTRY RESOURCES

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 With Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Check ☐ if project is located in the Important Farmlands Overlay

Environmental Setting

Over 93 percent of Yolo County is designated as farmland and open space. All 603,544 acres of agricultural land in Yolo County is located in unincorporated areas (Yolo County, 2009a). Almonds, tomatoes, wine grapes, rice and organic production are Yolo County's top five commodities according to gross value. Alfalfa hay, walnuts, sunflower seed, nursery products, and cattle round out the top ten commodities (Yolo County Department of Agriculture, 2019). The proposed Project site is zoned as Agricultural Intensive (A-N) (Yolo County, 2019) and is designated as Grazing Land under the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (DOC, 2019).

The parcel of land proposed for the Project is a private ranch that grows wine grapes, pomegranates, and almonds. It is also the site of the Taber Ranch Vineyard and Event Center with a tasting room and restored barn and outdoor gathering areas for events. The site chosen for the cell tower is not currently under agricultural production, but is surrounded by agriculture to the north, east, and west. The land for the Project is not under a Williamson Act Contract (Yolo County, 2009b).

Impact Analysis

- 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?*

No Impact. The Project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (DOC, 2019). The proposed site is classified as Grazing Land by the California DOC and is in close proximity to Prime Farmland to the north, west, and east (DOC, 2019). The permanent disturbance area of the Project would be 0.093 acres, and temporary disturbance would be up to 1.94 acres due to construction equipment and trenching work for the underground fiber optic cable and power line. This small footprint, along with the lack of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance at the Project site would not result in conversion of Farmland, as defined, to non-agricultural use.

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

Less than Significant Impact. The Project site is not under a Williamson Act Contract (Yolo County, 2009b). While the proposed site is zoned A-N, wireless communication towers are included as a Use Type in the Yolo County Zoning Code. Section 8-2.1102.c.4 of the Zoning Regulations clarifies that a large wireless facility, which has a height of over 80 feet, shall be approved on Agriculture parcels over 40 acres in area with a Minor Use Permit (Yolo County, 2014). The Project is located on a parcel that is 83 acres, well above the minimum threshold established in the Zoning Code.

Therefore, the Project would have a less than significant impact on 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))?*

No Impact. As stated above, the Project site is zoned A-N. None of the proposed Project activities would occur on land zoned as forest, timberland, or timberland production. The construction, operations and maintenance of the facility would not conflict with existing zoning of forest, timberland, or timberland production.

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

No Impact. See response to c) above.

- e) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

Less than Significant Impact. As identified in a), above, the Project site is designated as Grazing Land by the DOC and in close proximity to Prime Farmland to the north, west, and east.

No forest land is located at or near the Project site and construction and operation of the Project would not result in conversion or non-agricultural use of neighboring farmland. Due to the minimal permanent footprint of the Project (0.093 acres), which would be entirely within the Project site boundary, the Project would have a less than significant impact in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

Mitigation Measures

No mitigation required.

Agriculture and Forestry Services Impact Conclusions

No potentially significant adverse impacts are identified or anticipated, and no mitigation measures are required.

5.3 Air Quality

AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. **Would the project:**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The Proposed Project site would be an unmanned communications facility located within agricultural land approximately 0.4 miles southwest of SR 16, in Capay, California, approximately 1,800 feet away from the nearest residence.

The site is within the northwestern portion of the Sacramento Valley Air Basin, and within the jurisdiction of the YSAQMD. The geographic features giving shape to the Sacramento Valley are the Coast Range to the west, the Sierra Nevada mountain range to the east, and the Cascade Range to the north. These mountain ranges channel winds through the Sacramento Valley, but also inhibit the dispersion of air pollutant emissions.

The primary air pollutants of concern in the Project area and YSAQMD are ozone and fine particulate matter (YSAQMD, 2016). For ozone, the U.S. Environmental Protection Agency (USEPA) designates the Sacramento Metropolitan region as a severe nonattainment area for the 2008, 8-hour ozone National Ambient Air Quality Standard (NAAQS) in accordance with the Clean Air Act. Sources of ozone precursors in the Project area are subject to the ozone attainment strategies set forth within the Sacramento regional air quality management plans for NAAQS attainment.

The USEPA also includes the YSAQMD in the Sacramento federal nonattainment area for fine particulate matter 2.5 microns or less in diameter (PM_{2.5}), and Yolo County is also classified as a nonattainment area for the California ambient air quality standards for ozone and particulate matter 10 microns or less in diameter (PM₁₀). The YSAQMD is designated as being in attainment with the NAAQS for carbon monoxide (CO).

Evaluation of the following types of project-related air quality impacts relies on significance criteria made available by the YSAQMD.

- **Long-term Emissions of Criteria Air Pollutants** – Significance thresholds have been developed by YSAQMD for project-generated emissions of the criteria air pollutants of primary concern, which consist of ozone-precursor pollutants [reactive organic gases (ROG) and nitrogen oxides (NO_x)] and PM₁₀. Because PM_{2.5} is a subset of PM₁₀, a separate significance threshold has not been established. Operational impacts associated with the proposed Project would be considered significant if emissions would exceed YSAQMD-recommended significance thresholds.

- **Emissions of Criteria Air Pollutants** – Construction impacts associated with the proposed Project would be considered significant if emissions would exceed YSAQMD-recommended significance thresholds, without the incorporation of control measures.
- **Conflict with or Obstruct Implementation of Applicable Air Quality Plan** – Given the region’s non-attainment status for ozone and PM10, project-generated emissions of ozone precursor pollutants (i.e., ROG and NOx) or PM10 that would exceed the YSAQMD’s recommended project-level significance thresholds, would also be considered to potentially conflict with, or obstruct implementation of, regional air quality attainment plans.
- **Local Mobile-Source CO Concentrations** – Local mobile source impacts would be considered significant if the proposed Project would contribute to CO concentrations at receptor locations in excess of the CAAQS (i.e., 9.0 ppm for 8 hours, or 20 ppm for 1 hour).
- **Toxic Air Contaminants** – Exposure to toxic air contaminants would be considered significant if the probability of contracting cancer for the Maximally Exposed Individual (i.e., maximum individual risk) would exceed 10 in 1 million or would result in a Hazard Index greater than 1.
- **Odors** – Odor impacts would be considered significant if the proposed Project has the potential to frequently expose members of the public to objectionable odors.

In determining the significance of project-related air quality impacts, the YSAQMD recommends the use of the significance thresholds, as follows (YSAQMD, 2007):

- ROG: 10 tons/year (approximately 55 pounds/day)
- NOx: 10 tons/year (55 approximately pounds/day)
- PM10: 80 pounds/day
- CO: Violation of State ambient air quality standard

The proposed diesel generator would be exempt from YSAQMD permitting requirements by having a manufacturers maximum continuous rating of 50 brake horsepower or less (YSAQMD Rule 3.2, Section 105). However, operating hours must be recorded (YSAQMD Rule 2.32, Section 503, regarding Stationary Internal Combustion Engines). Emergency use engines are limited to 200 total hours of operation per year (including maintenance and testing hours), which exempts the engine from other requirements in YSAQMD Rule 2.32.

Impact Analysis

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

Less Than Significant. The sources of air pollutants associated with the proposed Project would be in the form of emissions from vehicles and diesel-powered equipment, primarily during approximately 90 days of construction, and also for occasional emergency generator use and for routine maintenance and upkeep. Vehicles would be used to deliver construction crews and materials, and diesel engine powered equipment would be used during construction. Construction activities for the proposed Project would be limited in duration and extent. The construction crew size would range from two to ten individuals. Following construction, the communications facility would be unmanned, and the standby generator would be used for testing and emergency power outages. Emissions due to construction and operation of the Project would be minor and would not conflict with or obstruct implementation of the applicable air quality plan.

- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

Less Than Significant. Construction activities would emit ozone precursors and particulate matter (PM10 and PM2.5), which are nonattainment pollutants in the region. Construction of the proposed Project would include the use of heavy machinery and require construction vehicles to travel to and from the site. The proposed Project would involve improvements to the access road, establishing the staging and work areas, grading, installing the foundation and utilities, and erecting the tower.

Criteria air pollutants of concern ozone precursors (ROG and NOx), PM10, and PM2.5 would be emitted from the operation of heavy-duty diesel-powered equipment and construction worker automobile trips. Dust would occur primarily from “fugitive” sources (i.e., emissions released from travel on paved and unpaved surfaces, grading and earth moving activities). Dust would be minimized through the use of a water truck and other standard dust control practices.

Unmitigated emissions would be less than the applicable thresholds of 10 tons per year (55 pounds per day) for ROG or NOx, and less than the threshold of 80 pounds per day for PM10. Construction and operation of the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment, and this impact would be less than significant.

- c) Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant. The proposed Project would not include any large sources of air pollutants, including CO or toxic air contaminants, that could generate substantial pollutant concentrations. Given the minimal emissions that would result from the Project and the distance to the nearest sensitive receptors, the proposed Project would not expose any sensitive receptors to substantial pollutant concentrations.

- d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Less Than Significant. Construction of the proposed Project would generate fugitive dust, as well as minor odors from heavy equipment, which would dissipate quickly. Operation and maintenance of the unmanned communications facility could result in minimal dust emissions or odors. No emissions sources would occur beyond the immediate vicinity of the Project site other than occasional trips made by motor vehicles. These emissions would not have an adverse effect on a substantial number of people, and this impact would be less than significant.

Mitigation Measures

No mitigation is required.

Air Quality Impact Conclusions

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

5.4 Biological Resources

BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

☒ Check if project is located in the Biological Resources Overlay or Contains habitat for any species listed in the California Natural Diversity Database

Environmental Setting

This section describes the biological resources that occur in the proposed Project area. It includes a description of the existing biotic environment, including common plants and wildlife, sensitive habitats, and special-status species and their locations in relation to the proposed Project. The following section presents analysis of potential impacts to biological resources and, where necessary, specifies mitigation measures to reduce potential impacts to less-than-significant. Information used in preparing this section was derived, in part, from the Applicant's Biological Resource Assessment for CCL03477 Taber Ranch Communications Tower Telecommunications Project (as revised), provided in Appendix B.

Vegetation Communities

The proposed Project footprint for the new cell tower is 30 feet by 35 feet (0.024 acre) in non-native annual grassland habitat. The associated existing access road, fiber optic line, and power line easement are in ruderal/disturbed habitat. Surrounding vegetation communities include agricultural lands, freshwater emergent wetland, non-native annual grassland, and ruderal/disturbed habitat.

Non-native Annual Grassland

This plant community is generally composed of introduced grasses and broadleaf weedy species, that quickly re-colonize disturbed areas. Common dominant and subdominant plant species that were observed within this vegetative community during biological surveys included: yarrow, fiddleneck, slender wild oat, purple false brome, black mustard, rattlesnake grass, ripgut grass, soft chess, morning-glory,

owl's clover, yellow-star thistle, Monterey centaury, bindweed, northern willow herb, broad-leaf filaree, red-stem filaree, California poppy, fennel, coastal tarweed, Mediterranean barley, hare barley, Italian ryegrass, bur clover, bristly ox tongue, common plantain, radish, dandelion, subterranean clover, and six-weeks fescue. Non-native annual grassland occurs within and adjacent to the cell tower Project site, and adjacent to the existing access road to the cell tower site.

Ruderal/Disturbed Lands

Ruderal vegetation type is comprised mostly of non-native weedy herbaceous forb plants. Disturbed areas are described as bare ground or areas that have been graded, graveled, or paved. Ruderal vegetation observed included wild oat, black mustard, ripgut brome, lambsquarter, common willow herb, California mustard, common mallow, and cheeseweed. Ruderal and disturbed areas are within the existing access road to the proposed cell tower site and within the agricultural lands through which the underground power line would be installed.

Agricultural Lands

Almond orchards and vineyards are adjacent to existing access road and on either side of the proposed underground power line installation route. Olive orchards are to the north and west of the proposed Project site.

Freshwater Emergent Wetland

Freshwater emergent wetlands are characterized by erect, rooted herbaceous hydrophytes. Dominant vegetation generally consists of perennial monocots up to 6.6 feet tall. All emergent wetlands are flooded frequently enough so that the roots of the vegetation prosper in an anaerobic environment. Freshwater emergent wetlands are in a pond located 246 feet west, and in another pond located 198 feet north of the proposed cell tower pad in the Project buffer area.

General Wildlife

A wide variety of wildlife resides or migrates through the Project area; however, the proposed Project is located on an active agricultural ranch that grows grapes, pomegranates, and almonds and is bordered on the north and west by olive orchards. The following common wildlife species are known from the surrounding habitats and could move through the Project area: western toad, Pacific tree frog, bullfrog, western fence lizard, red-winged blackbird, great blue heron, northern mockingbird, jack rabbit, gray fox, and coyote.

Special-Status Plants and Animals

Special-status species are defined as plants or animals that meet one or more of the following criteria:

- Have been designated as either rare, threatened, or endangered by CDFW or the USFWS, and are protected under the California or federal Endangered Species Act (CESA or ESA)
- Are candidate species being considered or proposed for listing under these same acts
- Are designated Species of Special Concern by CDFW
- Are fully protected by the California State Fish and Game Code, Sections 3511, 4700, 5050, or 5515
- Are classified as California Rare Plant Rank (CRPR) 1, 2, 3, or 4 by CDFW and the California Native Plant Society (CNPS)
- Are of express concern to resource/regulatory agencies or local jurisdictions
- Are listed on watch lists or provided with special conservation designations by professional working groups/societies (e.g., Western Bat Working Group)

Synthesis Planning biologist Cord Hute conducted botanical and biological surveys of the Project site on March 19 and July 10, 2019, that included analyses of on-site and buffer area habitats for suitability for special-status plant and animal species. A reconnaissance site visit was conducted by Aspen Environmental Group's environmental scientists, Jody Fessler and Amanda Wild, on May 24, 2019.

Special-Status Plants

The Project footprint does not contain habitat for any sensitive plants since it is in ruderal/disturbed and non-native annual grassland areas. Review of the USFWS (USFWS 2019), the CNPS (CNPS 2019), and the CNDDB (CNDDB 2019) revealed that one listed plant species/species of concern, Heller's bush-mallow (*Malacothamnus helleri*), has potential to occur in the general Project area; however, it grows in chaparral and riparian woodland, which does not exist at the Project site or adjacent to the Project site.

Special-Status Wildlife

California Red-legged Frog. The California red-legged frog is considered a Species of Special Concern by CDFW and is listed as federally threatened (USFWS, 1996). Critical habitat was designated in 2010 (USFWS, 2010). California red-legged frog breeds in wetlands, lakes, ponds, and other still or slow-moving sources of water that remain inundated long enough for larvae to complete metamorphosis, which typically occurs from 11 to 20 weeks after hatching (Storer, 1925). During summer months, California red-legged frog use available aquatic habitats such as springs and plunge pools within seasonal drainages, and may take refuge in rodent burrows and soil crevices within a few hundred feet of aquatic habitats. Adult California red-legged frog tend to be most active at night during wet weather, but they may make forays through upland areas at any time during the year (USFWS, 2002).

Potential aquatic foraging and breeding habitat suitable for this species was observed in a pond 198 feet north, and a pond 246 feet west of the proposed cell tower site. Additionally, the northern portion of the power line trench lies approximately 110 feet north of an area of ponded water that is potential aquatic breeding habitat for this species. Potential upland aestivation habitat was observed in the proposed tower site and in the buffer areas of the proposed tower site and the existing access route. No sign of this species was observed during biological surveys in the ponds adjacent to the Project site. American bullfrogs (*Lithobates catesbeianus*) were observed in the ponded water areas and are predators of California red-legged frogs. The presence of bullfrogs lowers the potential that California red-legged frogs are present in the aquatic habitat. The proposed Project site and buffer area has appropriate vegetative cover to serve as upland refugia habitat. No potential aestivation burrow sites were observed within the Project site or buffer area during biological surveys (Geist et al, 2019). This species has not been documented within the vicinity of the proposed Project site or the quad the Project site occurs within, as well as in adjacent quads (CDFW, 2019). This species could potentially use the habitat in the proposed Project site during movement and aestivation activities. The proposed Project site is not within designated critical habitat for the California red-legged frog.

Western pond turtle. The western pond turtle is a thoroughly aquatic species living in ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 feet elevation. This species needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 kilometer from water for egg laying. Two ponds immediately adjacent to the proposed Project site provide suitable aquatic habitat and adjacent upland areas provide habitat for egg laying. Turtles were observed during a site visit in another pond on the property, but not in the two ponds adjacent to the proposed Project.

Prairie Falcon. The prairie falcon occurs as an uncommon nesting species throughout a wide range in California and typically nests on sheltered cliff ledges. No suitable nest sites or nesting habitat for this

species were observed within the proposed Project site or buffer area, or within the general Project area. However, given that the species is wide-ranging in its foraging habits, and the Project site and buffer area provide an open habitat type that facilitates landing, foraging, and take-offs, it has some potential, albeit low, to occur on the sites. No individuals of this species were observed during surveys and has not been documented within the boundaries of the proposed Project site (CDFW 2019).

Swainson's Hawk. The Swainson's hawk breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. This species requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. Suitable nesting habitat is present to the south and southwest of the proposed Project site. One occurrence is documented to the northwest approximately two miles from the proposed Project site (CDFW 2019). Suitable foraging habitat is present at the proposed Project site and in the adjacent areas. No individuals were observed during surveys and the species has not been documented within the boundaries of the proposed Project site.

Table 5.4-1 lists special-status species potentially occurring within or near the proposed Project area (CDFW, 2019). Potential for occurrence is defined as follows:

- **Present:** Species or sign of its presence recently observed on the site.
- **Likely:** Species or sign not observed on the site, but reasonably certain to occur on the site based on conditions, species ranges.
- **Possible:** Species or sign not observed on the site, but conditions suitable for occurrence.
- **Unlikely:** Species or sign not observed on the site, outside of the known range, and conditions marginal for occurrence.
- **Not likely to occur:** Species or sign not observed on the site, outside of the known range, and conditions unsuitable for occurrence.

Table 5.4-1. Special-Status Species that Could Occur in the Project Vicinity

Species	Status	Habitat	Potential to Occur within Project Area
Plants			
Heller's bush-mallow <i>Malacothamnus helleri</i>	CRPR 3.3	Chaparral and riparian woodland. Elevation range: 305 to 635 meters. Blooms May to July.	Not likely to occur. No suitable habitat for this species at proposed Project site.
Fish			
Delta Smelt <i>Hypomesus transpacificus</i>	ST, FT	Small streams. Spawns in gravel riffle substrates near muddy backwaters.	Not likely to occur. No suitable habitat for this species at proposed Project site or adjacent buffer.
Amphibians/Reptiles			
California red-legged frog <i>Rana draytonii</i>	SSC, FT	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 water for larval development. Must have access to aestivation habitat, consisting of small mammal burrows and moist leaf litter.	Likely. Suitable aquatic habitat occurs adjacent to the proposed Project for foraging and breeding. Potential aestivation habitat within proposed Project footprint for cell tower pad. This species has not been documented within the general vicinity of the proposed Project site or buffer area and bullfrogs, which are a predator, are present.

Table 5.4-1. Special-Status Species that Could Occur in the Project Vicinity

Species	Status	Habitat	Potential to Occur within Project Area
Foothill yellow-legged frog <i>Rana boylei</i>	SC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Require at least 15 weeks to attain metamorphosis.	Not likely to occur. No suitable habitat for this species is present at the proposed Project site or buffer area.
Giant garter snake <i>Thamnophis gigas</i>	ST, FT	Prefers freshwater marsh and low gradient streams. Has adapted to drainage ditches and irrigation canals.	Not likely to occur. No suitable habitat for this species is present within the proposed Project site or buffer area.
Northwestern pond turtle <i>Actinemys marmorata</i>	SSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland.	Likely. Suitable aquatic habitat occurs adjacent to the proposed Project for foraging and breeding. Upland habitat for laying eggs. Turtles observed in other ponds on property.
Birds			
Bank swallow <i>Riparia riparia</i>	ST	Nests primarily in riparian and other lowland habitats in colonies. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, and oceans to dig nesting holes.	Possible in adjacent habitats for foraging. Suitable habitat exists with the ponds for foraging food and mud for nests.
Prairie falcon <i>Falco mexicanus</i>	SSC	Inhabits dry open terrain, either level or hilly, and forages in grasslands and a variety of habitats. Nests primarily on cliffs.	Likely. Suitable foraging habitat present at proposed Project site.
Swainson's hawk <i>Buteo swainsonii</i>	ST	Inhabits a wide variety of open habitats, ranging from prairie and shrub steppe to desert and intensive agricultural systems. Nest in a wide variety of trees and riparian forests.	Possible in adjacent off-site habitats. Suitable nesting habitat adjacent to proposed Project. Foraging habitat present at proposed Project site. CNDDB has record of species approximately 2 miles from proposed Project site.
Tri-colored blackbird <i>Agelaius tricolor</i>	ST	Inhabits marshes and croplands in California's Central Valley, including Yolo County	Possible in adjacent off-site habitats. Suitable habitat ponds adjacent to proposed cell tower pad.
Mammals			
American badger <i>Taxidea taxus</i>	SSC	Known throughout California in multiple habitat types. Requires relatively open, uncultivated ground. Preys primarily on burrowing rodents such as gophers and ground squirrels. Breeds in cavities of large trees, snags, stumps, and logs.	Possible in adjacent off-site habitats. Suitable habitat adjacent to proposed Project.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	SSC, FS	Throughout California in a wide variety of habitats. Known to roost in constructed structures such as buildings and mines.	Possible in adjacent off-site habitats. Suitable habitat near proposed Project in old farming structures. Potential foraging at proposed Project site and buffer. Known from nearby CNDDB record.
Western red bat <i>Lasiurus blossevillei</i>	SSC	Roosting habitat includes forests and woodlands from sea level up through mixed conifer forests.	Possible in adjacent off-site habitats. Suitable roosting habitat adjacent to proposed Project. Suitable foraging habitat at proposed Project site. Known from nearby CNDDB record.

Source: CDFW, 2019

STATUS CODES:

Federal Rankings:

FE – Federally Endangered

FT – Federally Threatened

FC – Federal Candidate for Listing

CH – Critical Habitat designated by USFWS

FS – Forest Service Sensitive Species – Klamath NF

D – Delisted

***State Rankings:**

SE – State Endangered

ST – State Threatened

SR – State Rare

SC – State Candidate for Listing

SSC – California Species of Special Concern

FP – Fully Protected in California

WL – CDFW Watch List

CRPR Rankings:

CRPR 1A – Presumed extinct in California

CRPR 1B – Rare or endangered in California and elsewhere

CRPR 2 – Rare or endangered in California, more common elsewhere

CRPR 3 – More information needed

CRPR 4 – Limited distribution (Watch List)

For each CRPR Ranking, the following sub-categories apply:

.1 = Seriously endangered in California (over 80 percent of occurrences threatened / high degree and immediacy of threat)

.2 = Fairly endangered in California (20 to 80 percent occurrences threatened)

.3 = Not very endangered in California (less than 20 percent of occurrences threatened or no current threats known)

Jurisdictional Waters

Two ponds with freshwater emergent wetlands are located 246 feet to the west and 198 feet north of the proposed cell tower pad in the Project buffer area. These ponds may meet the regulatory definition of wetlands as defined by Section 404 of the Clean Water Act, and “Waters of the State” under the jurisdiction of the RWQCB. The federal and State waters may also be subject to CDFW jurisdiction under Sections 1600 to 1616 of the California Fish and Game Code.

Regulatory Background

Federal

Endangered Species Act of 1973, U.S. Code, Title 16, Sections 1531 through 1543. The federal ESA and its subsequent amendments protect plants and wildlife (and their habitats) listed as endangered or threatened by the USFWS and National Marine Fisheries Service. Section 9 of the ESA specifically prohibits the taking of ESA-protected wildlife and lists prohibited actions. The ESA defines take as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct” (50 *Code of Federal Regulations* [CFR] 17.3). The ESA also governs the removal, possession, malicious damage, or destruction of endangered plants on federal land. Taking is allowed only when incidental to an otherwise legal activity through the ESA Section 7 process for federal agencies and through the ESA Section 10 habitat conservation plan process for private entities.

Migratory Bird Treaty Act, U.S. Code, Title 16, Sections 703 through 711. The Migratory Bird Treaty Act implements international treaties between the United States and other nations to protect migratory birds and their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized by regulation or permit. Examples of authorized activities include USFWS-issued permits to qualified applicants for falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. Regulations governing migratory bird permits are found in 50 CFR 13 – General Permit Procedures, and 50 CFR 21 – Migratory Bird Permits.

Invasive Species, Executive Order 13112. Executive Order 13112 directs federal agencies to prevent and control the spread of invasive plants and animals, and avoid direct or indirect impacts whenever there is a practicable alternative.

Bald and Golden Eagle Protection Act of 1940. The Bald Eagle Protection Act of 1940 (16 USC 668, enacted by 54 Stat. 250) protects bald and golden eagles by prohibiting the taking, possession, and commerce of such birds and establishes civil penalties for violation of this Act.

Clean Water Act. The Clean Water Act (CWA, 33 USC 1251, *et seq.*) establishes legal requirements for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

Section 401. Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the United States must obtain a State certification that the discharge complies with other provisions of the Clean Water Act. The RWQCBs administer the certification program in California.

Section 404. Section 404 establishes a permit program administered by the U.S. Army Corps of Engineers (USACE) regulating the discharge of dredged or fill material into waters of the United States, including certain wetlands. Implementing regulations by the USACE are found at 33 CFR Parts 320-330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines and were developed by the USEPA in conjunction with the USACE (40 CFR Parts 230). The Guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Plant Protection Act of 2000. Prevents importation, exportation, and spread of pests that are injurious to plants, and provides for the certification of plants and the control and eradication of plant pests. The Act consolidates requirements previously contained within multiple federal regulations including the Federal Noxious Weed Act, the Plant Quarantine Act, and the Federal Plant Pest Act.

State

California Endangered Species Act, Fish and Game Code Section 2050 *et seq.* The CESA provides that certain species of fish, wildlife, and plants that are of ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of California are of statewide concern and should be conserved, protected, and enhanced along with their habitats. The CESA establishes that it is the policy of California that State agencies should not approve projects as proposed that would jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat that would prevent jeopardy.

Furthermore, the CESA provides that reasonable and prudent alternatives shall be developed by CDFW with the project proponent and the State lead agency that are consistent with conserving the species, while at the same time maintaining the project purpose to the greatest extent possible.

Fully Protected Designations – California Fish and Game Code Sections 3511, 4700, 5050, and 5515. Prior to enactment of CESA and the federal ESA, California enacted laws to “fully protect” designated wildlife species from take, including hunting, harvesting, and other activities. Unlike the subsequent CESA and ESA, there was no provision for authorized take of designated fully protected species. Currently, 36 fish and wildlife species are designated as fully protected in California, including golden eagle.

California Senate Bill 618 (signed by Governor Brown in October 2011) revised the Fish and Game Code sections above to authorize take of fully protected species, where pursuant to a Natural Conservation Community Plan, approved by CDFW. The legislation gives fully protected species the same level of

protection as is provided under the Natural Community Conservation Planning Act for endangered and threatened species.

Native Plant Protection Act, Fish and Game Code Sections 1900 through 1913. The Native Plant Protection Act prohibits the taking of listed plants from the wild and requires that State agencies use their authority to conserve endangered and rare native plants. In compliance with the Native Plant Protection Act and CEQA, CDFW would notify project proponents that a rare or endangered native plant is growing within project boundaries and provide information to the project proponents concerning the protection of such plants as may be appropriate. CDFW must also be given 10-day advance notification of a land use change to provide CDFW an opportunity to salvage listed plant species that might be destroyed.

Raptors, Fish and Game Code Section 3503.5. Section 3503.5 of the Fish and Game Code states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Disturbance during the raptor breeding season could result in the incidental loss of fertile eggs or nestlings, or lead to nest abandonment. Although no permits are issued for species protected under this code, coordination with CDFW is required.

Non-game and Migratory Birds, Fish and Game Code Sections 3513 and 3800. Sections 3513 and 3800 of the Fish and Game Code regulate unlawful take of non-game or migratory bird species. Disturbance during the breeding season could cause the incidental loss of fertile eggs or nestlings, or lead to nest abandonment. Although no permits are issued for species protected under these code sections, coordination with CDFW is required.

Lake and Streambed Alteration Agreements – California Fish and Game Code Sections 1600 to 1616. Under these sections of the Fish and Game Code, an applicant is required to notify CDFW prior to constructing a project that would divert, obstruct, or change the natural flow, bed, channel, or bank of a river, stream, or lake. Preliminary notification and project review generally occur during the environmental review process. When a fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Lake and Streambed Alteration Agreement (LSAA) that becomes part of the plans, specifications, and bid documents for the project. CDFW jurisdiction is determined to occur within the water body of any natural river, stream, or lake. The term “stream,” which includes creeks and rivers, is defined in Title 14, California Code of Regulations (CCR), Section 1.72.

California Porter-Cologne Water Quality Control Act. Pursuant to the California Porter-Cologne Water Quality Control Act, the State Water Resources Control Board (SWRCB) and the nine RWQCB may require permits (“waste discharge requirements”) for the fill or alteration of “Waters of the State.” The term “Waters of the State” is defined as “any surface water or groundwater, including saline waters, within the boundaries of the State” (California Water Code, Section 13050[e]). Although “waste” is partially defined as any waste substance associated with human habitation, the SWRCB interprets this to include fill discharge into water bodies. The SWRCB and the RWQCB have interpreted their authority to require waste discharge requirements to extend to any proposal to fill or alter “Waters of the State,” even if those same waters are not under the jurisdiction of the USACE. Pursuant to this authority, the SWRCB and the RWQCB may require the submission of a “report of waste discharge” under Water Code Section 13260, which is treated as an application for a waste discharge requirement.

Local

Yolo County 2030 Countywide General Plan. The Yolo County 2030 Countywide General Plan contains several policies to protect the environment and sensitive resources. These policies are provided below.

Policy CO-2.1 *Consider and maintain the ecological function of landscapes, connecting features, watersheds, and wildlife movement corridors.*

Policy CO-2.11 *Ensure that open space buffers are provided between sensitive habitat and planned development.*

Policy CO-2.22 *Prohibit development within a minimum of 100 feet from the top of banks for all lakes, perennial ponds, rivers, creeks, sloughs, and perennial streams. A larger setback is preferred. The setback would allow for fire and flood protection, a natural riparian corridor (or wetland vegetation), a planned recreational trail where applicable, and vegetated landscape for stormwater to pass through before it enters the water body. Recreational trails and other features established in the setback should be unpaved and located along the outside of the riparian corridors whenever possible to minimize intrusions and maintain the integrity of the riparian habitat. Exceptions to this action include irrigation pumps, roads and bridges, levees, docks, public boat ramps, and similar uses, so long as these uses are sited and operated in a manner that minimizes impacts to aquatic and riparian features.*

Yolo HCP/NCCP. The Yolo HCP/NCCP is a comprehensive, countywide plan that provides for the conservation of 12 sensitive species and the natural communities and agricultural land on which they depend. It includes a streamlined permitting process to address the effects of a range of future anticipated activities on these 12 species. The 12 species include the Palmate-bracted bird's beak, valley elderberry longhorn beetle, California tiger salamander, western pond turtle, giant garter snake, Swainson's hawk, white-tailed kite, western yellow-billed cuckoo, western burrowing owl, least Bell's vireo, bank swallow, and tricolored blackbird (Yolo Habitat Conservancy, 2018). This discretionary Project would be required to apply for coverage under the Yolo HCP/NCCP. All covered projects are expected to follow the AMMs identified in the plan to ensure impacts to biological resources are reduced. Applicable AMMs are:

General Project Design

AMM1, Establish Buffers

General Construction and Operations and Maintenance

AMM3, Confine and Delineate Work Area

AMM4, Cover Trenches and Holes during Construction and Maintenance

AMM5, Control Fugitive Dust

AMM6, Conduct Worker Training

AMM7, Control Night-Time Lighting of Project Construction Sites

AMM8, Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas

Sensitive Natural Communities

AMM9, Establish Buffers Around Sensitive Natural Communities

AMM10, Avoid and Minimize Effects on Wetlands and Waters

Covered Species

AMM14, Minimize Take and Adverse Effects on Habitat of Western Pond Turtle

AMM16, Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite

AMM20, Minimize Take and Adverse Effects on Habitat of Bank Swallow

AMM21, Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird

Impact Analysis

- 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 Wildlife or U.S. Fish and Wildlife Service?*

Less Than Significant with Mitigation Incorporated- Construction. The proposed Project is located adjacent to several ponds and the site contains suitable habitat for some special-status animals immediately adjacent to the work area, as well as within the work area. The ponds and emergent wetlands are considered sensitive natural communities under the Yolo HCP/NCCP. Special-status species potentially affected by the proposed Project are discussed below. Under the Yolo HCP/NCCP, the proposed Project is required to adhere to AMMs identified in the regulatory setting above (AMMs 1, 3 through 10, 14, 16, 20 and 21) to prevent substantial impacts to habitat and special-status species. Beyond this, several mitigation measures are identified below to protect sensitive aquatic habitats, the California red-legged frog, and protected migratory and raptor bird species to ensure impacts to sensitive or special-status species are less than significant.

Special-Status Plants

No special-status plants were identified or are known to occur at the Project site.

Special-Status Wildlife

Less Than Significant with Mitigation Incorporated – Construction. Special-status wildlife likely to occur at the proposed Project site or possible at adjacent sites include the California red-legged frog, northwest pond turtle, prairie falcon, bank swallow, Swainson's hawk, tricolored blackbird, American badger, Townsend's big-eared bat, and western red bat. The Northwest pond turtle, bank swallow, Swainson's hawk, and tricolored blackbird are covered species under the Yolo HCP/NCCP and subject to AMMs 14, 16, 20, and 21.

General design and construction avoidance and mitigation measures are required under the Yolo HCP/NCCP to prevent potential direct and indirect impacts to wildlife (including Yolo HCP/NCCP covered and non-covered special-status species), and their habitat. AMM1 (Establish Buffers), AMM3 (Confine and Delineate Work Areas), AMM4 (Cover Trenches and Holes During Construction and Maintenance), AMM5 (Control Fugitive Dust), AMM6 (Conduct Worker Training), AMM7 (Control Night-Time Lighting of Project Construction Sites), and AMM8 (Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas) would avoid or minimize direct and indirect impacts to habitat and special-status species such as vegetation removal, grading, excavating, accidental hazardous spills, sedimentation and erosion, drive and crush, or animals becoming entrapped in an open hole or trench.

Beyond the General Design and Construction AMMs, specific AMMs to avoid impacts to Yolo HCP/NCCP-covered Sensitive Natural Communities and special-status species at, or adjacent to, the Project site include AMM9 (Establish Buffers Around Sensitive Natural Communities), AMM10 (Avoid and Minimize Effects on Wetlands and Waters), AMM 14 (Minimize Take and Adverse Effects on Habitat of Western Pond Turtle), AMM16 (Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite), AMM20 (Minimize Take and Adverse Effects on Habitat of Bank Swallow), AMM21 (Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird). These measures require planning-level surveys, habitat identification, monitoring, and buffers to minimize potential impacts.

For special-status species not covered by the Yolo HCP/NCCP (including the California red-legged frog, Prairie falcon, American badger, Townsend's big-eared bat, and western red bat), the following mitigation

measures are also proposed: MM BIO-1 (Prevent Contamination of Sensitive Habitats), MM BIO-2 (Sediment Control), MM BIO-3 (Preconstruction Surveys), MM BIO-4 (Check Under Equipment and Stored Materials for Special-status Species), MM BIO-5 (Bird Nesting Surveys), and MM BIO-6 (California Red-legged Frog Construction Monitoring). Implementation of MM BIO-1 through MM BIO-6 would protect habitat and reduce potential impacts to special-status species to less than significant.

Additionally, implementation of MM HAZ-1 (Prepare and Implement Worker Environmental Awareness Program) and MM HAZ-2 (Prepare and Implement a Hazardous Materials and Waste Management Plan), would ensure impacts to special-status species habitat would be less than significant. For the full text of MMs HAZ-1 and HAZ-2, see Section 5.9 (Hazards and Hazardous Materials).

Nesting Birds

Less Than Significant with Mitigation – Construction. Potential nesting for birds in the project area includes trees, structures, and ground vegetation. Special-status birds and raptors with moderate or high potential to forage or nest in habitats adjacent to the Project include bank swallow (State Threatened), prairie falcon (State Species of Special Concern), Swainson's hawk (State Threatened), and tricolored blackbird (State Threatened). Nesting native birds, regardless of conservation status, are protected by State Fish and Game Code and the federal Migratory Bird Treaty Act. Adjacent woodland, wetland, and landscaped habitats could support a wide variety of nesting native birds. Implementation of the Yolo HCP/NCCP AMMs discussed previously would also prevent Project activities from directly impacting nesting birds (i.e., destroying eggs and/or injuring or killing ground-nesting species of baby birds during vegetation clearing, grading, and excavating). Application of the AMMs would also avoid indirect effects from disturbance activities, such as construction equipment noise, vibration, and human presence. Implementation of MM BIO-1 (Prevent Contamination of Sensitive Habitats), MM BIO-2 (Sediment Control), MM BIO-3 (Preconstruction Surveys), and MM BIO-5 (Bird Nesting Surveys), would reduce impacts to nesting birds to less than significant.

No Impact – Operations and Maintenance. During Project operation, it is anticipated that minimal maintenance of the proposed Project components would be required; therefore, minimal disturbance to special-status species would occur, and operation of the Project would result in no impact under this criterion, and thus, no mitigation is required.

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

Less Than Significant with Mitigation Incorporated – Construction. Despite required setbacks and protections required by Yolo HCP/NCCP AMM3 (Confine and Delineate Work Areas), AMM5 (Control Fugitive Dust), AMM8 (Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas), AMM9 (Establish Buffers Around Sensitive Natural Communities), and AMM10 (Avoid and Minimize Effects on Wetlands and Waters), the proposed Project could have a direct impact to freshwater emergent wetland habitat (ponds) immediately adjacent to the work area if BMPs identified in the SWPPP and sediment controls are not properly installed or maintained, construction equipment or materials do not stay within the delineated work area, or there is a hazardous material spill that left the Project work area. However, with the implementation of MM BIO-1 (Prevent Contamination of Sensitive Habitats), MM BIO-2 (Sediment Control), MM HAZ-1 (Prepare and Implement Worker Environmental Awareness Program), and MM HAZ-2 (Prepare and Implement a Hazardous Materials and Waste Management Plan), the impact would be reduced to less than significant.

No Impact – Operations and Maintenance. During Project operation, it is anticipated that minimal maintenance of the proposed Project components would be required; therefore, no disturbance to wetland habitat or other sensitive natural communities would occur, and operation of the Project would result in a less than significant impact under this criterion. Therefore, no mitigation is required.

- c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Less Than Significant with Mitigation Incorporated – Construction. As discussed previously, the proposed Project could have a direct impact to adjacent freshwater emergent wetland habitat (ponds) despite required setbacks and protections required by the Yolo HCP/NCCP if sediment controls are not properly installed or maintained, construction equipment or materials do not stay within the delineated work area, or there is a hazardous material spill that migrated beyond the Project work area. The Project would avoid potential impacts to wetlands and other jurisdictional waters with the additional implementation of MM BIO-1 (Prevent Contamination of Sensitive Habitats), MM BIO-2 (Sediment Control), MM HAZ-1 (Prepare and Implement Worker Environmental Awareness Program), and MM HAZ-2 (Prepare and Implement a Hazardous Materials and Waste Management Plan). Therefore, the impact would be reduced to less than significant.

No Impact – Operations and Maintenance. During Project operation, it is anticipated that minimal maintenance of the proposed Project components would be required and the diesel generator at the cell tower site would have secondary containment in case of a leak; therefore, no disturbance to wetlands would occur, and operation of the Project would result no impact under this criterion, and thus, no mitigation is required.

- 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?*

Less Than Significant with Mitigation Incorporated – Construction. The undeveloped area to the south is a wildlife corridor and is adjacent to the Project area; however, the Project footprint would be located within an existing working ranch that has regular disturbance (i.e., agricultural cultivation, mowing of nonnative grassland, public events, and weddings). Project construction would be temporary within a very small work area and would not impede the movement of wildlife in the adjacent wildlife corridor to the south.

Construction of the proposed Project includes digging a trench along the existing access road for the fiber optic line, and a trench along an existing easement and disturbed farm access for the underground electric line. These trenches have the potential to trap animal species migrating through the Project area during non-construction hours. However, the magnitude of this effect would be minor as the open trench would be temporary during construction and the Project would be required to comply with AMM7 (Control Night-time Lighting of Project Construction Sites) and AMM4 (Cover Trenches and Holes During Construction and Maintenance) so as not to attract migratory wildlife. Additionally, MM BIO-4 (Check Under Equipment and Stored Materials for Special-status Species) would provide proactive monitoring to reduce potential impacts to migratory wildlife to a less than significant level.

No Impact – Operations and Maintenance. During Project operation, it is anticipated that minimal maintenance of the proposed Project components would be required; therefore, no interference with the movement of wildlife would occur, and operation of the Project would result in no impact to wildlife movement under this criterion, and thus, no mitigation is required.

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

Less Than Significant Impact– Construction. The Yolo County 2030 Countywide General Plan Policy CO-2.22 prohibits development within a minimum of 100 feet from the top of banks for all lakes, perennial ponds, rivers, creeks, sloughs, and perennial streams. There are two ponds near the proposed cell tower pad, one located 246 feet west, and another pond located 198 feet north. Because of its distance from the ponds, the proposed Project would be consistent with the County General Plan. As described in d) above, the Project is also consistent with Policy CO-2.1 by not interfering with wildlife movement corridors. The proposed Project also complies with Policy CO-2.11 by ensuring that adequate buffers exist between the Project and sensitive habitat.

No Impact – Operations and Maintenance. During Project operation, it is anticipated that minimal maintenance of the proposed Project components would be required; therefore, operation of the Project would result in no impact under this criterion, and thus, no mitigation is required.

- 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?*

No Impact – Construction. The Yolo HCP/NCCP was adopted by the County and cities of Davis, Woodland, Winters, and West Sacramento to replace a system of separately permitting and mitigating individual projects with a conservation and mitigation program that comprehensively coordinates the implementation of permit requirements through the development of a countywide conservation strategy. This proposed Project is required through conditions of approval to follow the applicable AMMs listed in the Regulatory Background section above as well as apply for coverage under the plan; therefore, the Project would not conflict with the Yolo HCP/NCCP.

No Impact – Operations and Maintenance. During Project operation, it is anticipated that minimal maintenance of the proposed Project components would be required; therefore, no impacts to resources covered under the Yolo HCP/NCCP would occur, and operation of the Project would result in no impacts under this criterion, and thus, no mitigation is required.

Mitigation Measures

MM-BIO-1 Prevent Contamination of Sensitive Habitats. To prevent contamination of fuel into sensitive habitats, the following measures will apply:

- The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the State and U.S.
- Areas for fuel storage, refueling and servicing of construction equipment must be located in an upland location
- Wash sites must be located in upland locations to ensure wash water does not flow into the stream channel or adjacent wetlands
- All construction equipment must be in good working condition, showing no signs of fuel or oil leaks. All questionable motor oil, coolant, transmission fluid, and hydraulic fluid hoses, fittings and seals shall be replaced. The mechanical equipment shall be inspected on a daily basis to ensure no leaks. All leaks shall be repaired in the equipment staging area or other suitable location prior to resumption of construction activity

- Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation and/or within 100 feet of a waterway. If a spill occurs, no additional work shall occur within 100 feet of the waterway until: (1) the mechanical equipment is inspected by the contractor and the leak has been repaired, (2) the spill has been contained, and (3) CDFW and Yolo County are contacted and have evaluated the impacts of the spill.

MM BIO-2 Sediment Control. To avoid debris contamination into drainages and other sensitive wildlife habitats, silt fence or other sediment control devices will be placed around construction sites to contain spoils from construction excavation activities.

MM BIO-3 Preconstruction Surveys. Surveys for identified special-status species by qualified biologists shall be conducted at the appropriate times before construction starts to determine occupancy at the site. If no special-status species are found, no further action is required. If individuals are found, including plants or nesting birds, a buffer zone around the species or nest will be required at a sufficient distance to prevent take of individuals or until after the nesting season.

MM BIO-4 Check Under Equipment and Stored Materials for Special-status Species. Due to the potential for special-status species to occur, move through, or into the Project area, an on-site biological monitor, shall at a minimum, check the ground beneath all equipment and stored materials each morning prior to work activities and during ground-disturbing activities to prevent take of individuals. All pipes or tubing four inches or greater shall be sealed by the relevant contractor with tape at both ends to prevent animals from entering the pipes at night. All trenches and other excavations shall be backfilled the same day they are opened, or shall have an exit ramp built into the excavation to allow animals to escape.

MM BIO-5 Bird Nesting Surveys. If ground-disturbing activities occur during the breeding season of migratory avian and raptor species (February through mid-September), surveys for active nests will be conducted by a qualified biologist no more than 10 days prior to start of activities. Pre-construction nesting surveys shall be conducted for nesting migratory avian and raptor species in the Project site and buffer area. Pre-construction biological surveys shall occur prior to the proposed Project implementation, and during the appropriate survey periods for nesting activities for individual avian species. Surveys will follow required CDFW and USFWS protocols, where applicable. A qualified biologist will survey suitable habitat for the presence of these species. If a migratory avian or raptor species is observed and suspected to be nesting, a buffer area will be established to avoid impacts to the active nest site. Identified nests should be continuously surveyed for the first 24 hours prior to any construction-related activities to establish a behavioral baseline. If no nesting avian species are found, Project activities may proceed, and no further Standard Construction Conditions measures will be required. If active nesting sites are found, the following exclusion buffers will be established, and no Project activities will occur within these buffer zones until young birds have fledged and are no longer reliant upon the nest or parental care for survival.

- Minimum no disturbance of 250 feet around active nest of non-listed bird species and 250-foot no disturbance buffer around migratory birds
- Minimum no disturbance of 500 feet around active nest of non-listed raptor species

- One-half mile no disturbance buffer from listed species and fully protected species until breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.
- Once work commences, all nests should be continuously monitored to detect any behavior changes as a result of Project activities. If behavioral changes are observed, the work causing that change should cease and the appropriate regulatory agencies (i.e., CDFW, USFWS, etc.) shall be consulted for additional avoidance and minimization measures.
- A variance from these no disturbance buffers may be implemented when there is compelling biological or ecological reason to do so, such as when the Project area would be concealed from a nest site by topography. Any variance from these buffers is advised to be supported by a qualified wildlife biologist and is recommended that CDFW and USFWS be notified in advance of implementation of a no disturbance buffer variance.

MM BIO-6 California Red-legged Frog Construction Monitoring. The Project proponent shall implement the following Standard Construction Conditions to prevent mortality of individual red-legged frog that may be found migrating across or aestivating on the proposed Project site during proposed Project activities.

- Preconstruction surveys shall be completed within 48 hours prior to commencement of any earth-moving activity, construction, or vegetation removal within Project sites, whichever comes first. The preconstruction survey shall include two nights of nocturnal surveys in areas of suitable habitat.
- If any frogs are encountered during the surveys, all work in the work area shall be placed on hold while the findings are reported to the CDFW and USFWS and it is determined what, if any, further actions must be followed to prevent possible take of this species.
- Where construction will occur in frog habitat where frogs are potentially present, work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat areas. A qualified biologist will assist in determining the boundaries of the area to be fenced in consultation with the Yolo County, USFWS, and CDFW. All workers will be advised that equipment and vehicles must remain within the fenced work areas.
- The USFWS authorized biologist will direct the installation of the fence and will conduct biological surveys to move any individuals of these species from within the fenced area to suitable habitat outside of the fence. Exclusion fencing will be at least 24 inches in height. The type of fencing must be approved by the authorized biologist, the USFWS, and CDFW. This fence should be permanent enough to ensure that it remains in good condition throughout the duration of the construction on the Project site. It should be installed prior to any site grading or other construction-related activities are implemented. The fence should remain in place during all site grading or other construction-related activities. The frog exclusion fence could be “silt fence” that is buried along the bottom edge.
- If any individuals of these species are found within an area that has been fenced to exclude these species, activities will cease until the authorized biologist moves the individuals.

- If any of these species are found in a construction area where fencing was deemed unnecessary, work will cease until the authorized biologist moves the individuals. The authorized biologist in consultation with USFWS and CDFW will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist.
- Any individuals found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities.
- Clearance surveys shall occur on a daily basis in the work area.
- The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed.
- To ensure that diseases are not conveyed between work sites by the authorized biologist, or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force will be followed at all times.
- Project construction activities shall be limited to daylight hours, except during an emergency, to avoid nighttime activities when frogs may be present. Because dusk and dawn are often the times when frogs are most actively foraging and dispersing, all construction activities should cease one half hour before sunset and should not begin prior to one half hour after sunrise.
- Traffic speed should be maintained at 10 miles per hour or less in the work area.

Biological Resources Impact Conclusions

The required Yolo HCP/NCCP AMMs would prevent or prevent potential direct and indirect impacts to wildlife (including covered and non-covered special-status species), nesting birds, and emergent wetlands from construction activities. Additionally, implementation of the mitigation measures noted above (MM BIO-1 through MM BIO-6), and MMs HAZ-1, and HAZ-2 would reduce any potential indirect biological impacts to less than significant levels.

5.5 Cultural Resources

CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Check if project is located in the Cultural ☐ overlays or cite results of cultural resource review.

Environmental Setting

Cultural resources reflect the history, diversity, and culture of the region and people who created them. They are unique in that they are often the only remaining evidence of activity that occurred in the past. Cultural resources can be natural or built, purposeful or accidental, physical or intangible. They encompass archaeological, traditional, and built environmental resources, including buildings, structures, objects, districts, and sites.

Information presented in this section was gathered from a report entitled *Cultural Resources Investigation of Proposed Wireless Telecommunications Service Facility AT&T CVL03477 "Taber Ranch – Armstrong"* (Losée 2019) by Archaeological Resources Technology (ART). It was provided to Yolo County as Confidential Appendix C.

Cultural Setting

Three kinds of cultural resources, classified by their origins, are considered in this assessment: prehistoric, ethnographic, and historic.

Prehistory

Human populations have occupied the southern San Joaquin Valley for at least 10,000 years (Moratto, 1984). However, little is known about the prehistory of the region. In part, this is the result of natural processes that have buried or eroded many sites. The most recent synthetic discussion of the archaeology and culture-historical sequence of the southern San Joaquin Valley comes from Jones and Klar's (2007) review of California archaeology.

Paleo-Indian (11,550 to 8550 cal BC). The Paleo-Indian period begins with the first human occupation of California. Sites from this time period are characterized by lanceolate bifaces. Paleo-Indian finds are rare and mostly consist of isolated artifacts without clear stratigraphic associations but are understood to represent the earliest occupants New World.

Lower Archaic (8550 to 5550 cal BC). The Lower Archaic is characterized by widespread erosion which created a clear stratigraphic boundary between the Late Pleistocene and Holocene. It is primarily represented by isolated finds of distinctive stemmed projectile points and other flaked stone tools such as stone crescents.

Middle Archaic (5550 to 550 cal BC). The Middle Archaic (Windmill Pattern) is marked by a dramatic increase in temperatures that resulted in the shrinking and complete disappearance of regional lakes. In general, this time period is associated with a shift to mortar and pestle, more intensive subsistence

practices, greater residential stability, the increasing importance of fishing, basketry, simple pottery and clay objects, and the establishment of extensive exchange networks for obsidian and for *Olivella* shell beads. These sites have evidence of year-round occupation and a distinct pattern of extended burial treatment.

Upper Archaic (550 cal BC to AD 1100). The Upper Archaic was cooler and wetter than the Middle Archaic. Subsistence practices within the valley emphasized a heavy reliance on acorns; at the valley edge acorns were supplemented with pine nuts. Specialized craft production became more common and expanded to include production of bone tools, shell beads, obsidian tools, and ground stone. Upper Archaic sites in the Sacramento Delta are characterized by large mounded villages, flexed burials and a long-term residential pattern, which may have replaced the earlier Windmill Pattern.

Emergent (cal AD 1100 to 1769). During this time (also called the Augustine Pattern), large populous mound villages were established along river channels and sloughs. These communities invested in the construction of fish weirs and became increasingly dependent on fishing, small seeds, and plant harvesting. The local production of shell beads also became common, indicating the adoption of beads as a monetized system of exchange. Between AD 1100 and 1300 the bow and arrow replaced the atlatl.

Ethnography

The Project area is located within the traditional territory claimed by the California Native American group known as the Patwin, or southern Wintu. The Patwin inhabited lands that include almost the entire Yolo County. As with most of the hunting-gathering groups of California, the tribelet represented the basic social and political unit. Typically, a tribelet headman would reside in a major village where ceremonial events were often held. The position of tribelet headman was patrilineally inherited among the Patwin. The headman's main duties involved administering ceremonial events and economic activities, although village elders had considerable influence over political matters. The Patwin constructed four types of structures, all occurring in or around the villages: dwellings, ceremonial dance houses, sweat houses, and menstrual huts. All of these were semi-subterranean, earth-covered structures. The Patwin economy was based principally on the use of natural resources from the riparian corridors, wetlands, and grasslands adjacent to the Sacramento River and along drainages of the North Coast Range. The family was the basic subsistence unit that used this resource mosaic.

The Patwin relied on riparian and wetland resources, and fish, shellfish, and waterfowl were important sources of dietary protein. The majority of important plant resources in the Patwin diet came from the grasslands of the Sacramento River floodplain and the woodlands of the Coast Range foothills. Acorns were a staple food of all of the Patwin tribelets. The processed meal was then used to make a gruel or bread. A number of seed plants were also important secondary food sources, such as sunflower, wild oat, alfalfa, clover, and bunchgrass.

Historic Background

The historic period of California can be broken into three periods: the Spanish Period, the Mexican Period, and the American Period.

Spanish Period (1769 to 1821). Starting in 1769 at what would become San Diego, Spain sought to reinforce its claims to California, as a territory of Mexico, by establishing a series of missions to pacify and Christianize the Indians, with the object of making them stable, tax-paying citizens of Mexico. The Central Valley was explored by Spaniards as early as 1808. During the early 1800s, the region was also explored by hunters and trappers who found the banks of the rivers and streams rich with beaver and otter. They used to "cache" their pelts near Cache Creek, hence the name.

Mexican Period (1821 to 1848). Mexico gained her independence from Spain in 1821, and Alta California became one of the provinces of the new Republic of Mexico. After the government secularized the missions, starting in 1834, the Mexican governors of California began making large rancho grants of former mission lands to Mexican citizens, particularly to soldiers and members of prominent families who had financed various government initiatives. The Project area was encompassed by Rancho Canada de Capay a 40,079-acre rancho awarded by Governor Pío Pico to three brothers Santiago, Nemicio, and Francisco Berreyesa in 1846. The rancho occupied the Capay Valley on both sides of Cache Creek.

American Period (1848 to the Present). California became part of the United States as a consequence of the 1846–1847 Mexican War and was admitted as a state in 1850. The Gold Rush transformed Yolo County from an isolated farming community to a booming agricultural region, as disenchanted miners realized they could make a greater fortune through farming and ranching rather than gold prospecting. The Capay Valley and the Project area are involved in farming and ranching during this period.

Capay Valley. In 1858 the land speculators Arnold and Gillig purchased 13,760 acres of the Berryessa grant and began to subdivide the land into parcels of 200 to 3800 acres. Gillig planted grain, grapevines, and fruit trees northwest of Capay and established the County's first winery in 1860. In 1877, the Vaca Valley and Clear Lake Railroad Company (later the Southern Pacific Railroad) was built from Winters into the Capay Valley. The new line assisted farmers who were starting to cultivate fruit and nut orchards in the northwest region of the County. In 1887, the Capay Valley Land Company was developed to divide the valley into parcels to sell to potential fruit farmers. Livestock production and grazing also became a main economic staple. That same year local farmers formed the Rumsey Ditch Association to build and operate an eight-mile irrigation canal from Cache Creek above Rumsey to the vicinity of Guinda. In 1914, the Yolo Water and Power Company completed a concrete dam across the outlet of Clear Lake that feeds into Cache Creek, improving storage capacity for flood control and irrigation downstream. In 1928, electric power came into the valley and was extended to outlying areas over the next decade. Starting in 1931, SR 16 was built in Rumsey canyon, and by 1934 transportation was opened up to SR 20. In 1937, the railroad tracks were removed in the valley. Rail service ceased north of Esparto in 1941.

Taber Ranch – History of Project Area. Harmon J. Taber purchased the current Project area as part of a 343-acre ranch in 1867. The ranch was later expanded to include 500 acres. The Taber family planted quince, olive, palms, almonds, and had a vineyard. In the 1990s, the Project area was encompassed by the 88-acre ranch owned by Martin Armstrong, who converted the land to a vineyard, tasting room, and event center.

Regulatory Background

Numerous laws, ordinances, regulations, and standards on federal, State, and local levels seek to protect and manage cultural resources.

Federal

Because the Project requires a permit from the Federal Communications Commission, the Project is an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA).

National Historic Preservation Act of 1966, As Amended, sets forth the responsibilities that federal agencies must meet in regard to cultural resources. Federal agencies must conduct the necessary studies and consultations to identify cultural resources that may be affected by an undertaking, evaluate cultural resources that may be affected to determine if they are eligible for registration in the National Register of Historic Places (NRHP)—that is, whether identified resources constitute historic properties—and assess whether such historic properties would be adversely affected. Historic properties are resources that are

listed on, or eligible for listing on, the NRHP (36 CFR 800.16[l][1]). A property may be listed in the NRHP if it meets criteria provided in the NRHP regulations (36 CFR 60.4). Typically, such properties must also be 50 years or older (36 CFR 60.4[d]).

2004 Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission (Nationwide PA)

Section 106 consultation for FCC undertakings takes place under one of two nationwide programmatic agreements (PA). The Nationwide PA is a broadly applicable agreement that streamlines the Section 106 review of FCC actions. The FCC delegates its authority to initiate and conduct Section 106 consultation to its applicants. The applicants may, use the services of a consultant to perform the more routine tasks in the consultation process. The PA specifies the process for determining an appropriate Area of Potential Effect as well as specifying that the professionals that conduct the work must meet the Secretary of Interior Qualifications specific to the resource in question.

State

There are numerous State regulations and policies that direct management of cultural resources on State lands and by State agencies. The following is a discussion of the most pertinent laws affecting the Project and impact analysis from a State perspective. These laws identify four types of resources: historical resources, unique archaeological resources, human remains and tribal cultural resources.

Historical Resources

Under CEQA, cultural resources listed in, or determined to be eligible for listing in, the Center for Regional Heritage Research (CRHR) or a local register meet the CEQA definition of “historical resources” and must be given consideration in the CEQA process. For this Initial Study, effects on historical resources may be considered project impacts. Under 14 CCR, Chapter 11.5, properties listed on, or formally determined to be eligible for listing in, the NRHP are automatically eligible for listing in the CRHR. A resource is generally considered to be historically significant under CEQA if it meets the criteria for listing in the CRHR. These criteria are essentially the same as the eligibility criteria for the NRHP. In addition to being at least 50 years old, a resource must meet at least one (and may meet more than one) of the following four criteria:

- Criterion 1, is associated with events that have made a significant contribution to the broad patterns of our history;
- Criterion 2, is associated with the lives of persons significant in our past;
- Criterion 3, embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values; or
- Criterion 4, has yielded, or may be likely to yield, information important to history or prehistory.

In addition, historical resources must also possess integrity of location, design, setting, materials, workmanship, feeling, and association.

Unique Archaeological Resources

Additionally, CEQA states that it is the responsibility of the lead agency to determine whether the project will have a significant effect on “unique” archaeological resources. An archaeological artifact, object, or site can meet CEQA’s definition of a unique archaeological resource even if it does not qualify as a historical resource (Public Resources Code [PRC] 21083.2[g]; 14 CCR 15064.5[c][3]). An archaeological artifact, object, or site is considered a unique archaeological resource if “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 (PRC 21083.2[g]):

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.
- If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require that reasonable efforts be taken to preserve these resources in place or provide mitigation measures.

Human Remains

Public Resources Code, Section 5097.98(b) and (e) requires a landowner on whose property Native American human remains are found to limit further development activity in the vicinity until he/she confers with the Native American Heritage Commission-identified Most Likely Descendants (MLD) to consider treatment options. In the absence of MLDs, or of a treatment is acceptable to all parties, the landowner is required to reinter the remains elsewhere on the property in a location not subject to further disturbance. Section 5097.99 establishes as a felony the acquisition, possession, sale, or dissection with malice or wantonness Native American remains or funerary artifacts. Finally, Section 5097.991 establishes as State policy the repatriation of Native American remains and funerary artifacts.

Health and Safety Code, Section 7050 makes it a misdemeanor to mutilate, disinter, wantonly disturb, or willfully remove human remains found outside a cemetery and further requires a project owner to halt construction if human remains are discovered and to contact the County coroner.

Local

2030 Countywide General Plan for Yolo County

Policies, procedures and professional performance standards related to cultural resources are contained within the Land Use and Community Character Element, and the Conservation and Open Space Element of the Yolo County General Plan.

Approach to Analysis of Cultural Resources and Previous Cultural Resources Studies

Cultural Resources Study Area

The CEQA study area for direct effects to cultural resources includes the 0.024-acre cell tower pad, the new 20-foot gravel access road, the 0.501-mile powerline trench, the 0.532-mile fiberoptic line trench, and the 3-foot by 3-foot concrete pad at the existing power pole/line. The CEQA study area for indirect effects to cultural resources includes a 0.5-mile buffer around the direct effects study area. Indirect effects would primarily be associated with the introduction of the new 120-foot-tall cell tower.

Cultural Records Search Results

Two record searches were performed at the CHRIS Northwest Information Center (NWIC), Sonoma State University, Sonoma, California, on April 3, and April 19, 2019. The search entailed a review for all previously recorded cultural resources within a 0.5-mile radius of the CEQA study area for direct effects.

The records search at the CHRIS NWIC revealed that the Project area had not been surveyed previously. However, 7 previous projects had been conducted within the 0.5-mile research radius. These studies indicate that during the prehistoric era habitation/use sites were common in environmental settings similar to that of the proposed Project area in Capay Valley. During the historic-era record search the area was used for agriculture and grazing.

Two resources are present within the record search area (CEQA study area for indirect effects): Taber's Corner Historic District (P-57-000486) and the Vaca Valley & Clear Lake Railroad (P-57-000509). In addition, the native Yocha Dehe Wintun villages of Tokti, Lopa, Dihila and Sicha were mapped in the Cache Creek area during the historic era.

Overall, the record search results indicate that the cultural sensitivity of the Project area is high for both history and prehistory.

Vaca Valley & Clear Lake Railroad (P-57-000715). A segment of a larger railroad-related district is present within the CEQA study area for indirect effects. This railroad grade was built as part of the Vaca Valley and Clear Lake Railroad (1878-1886), that was later purchased and expanded by Southern Pacific Railroad (1886-1957). Tracks in the project vicinity were removed in the 1940s. The line served as the primary source of transportation for local agricultural products to market in Sacramento. This segment is also a contributor to the Taber's Corner Historic District (below).

Taber's Corner Historic District (P-57-000486/ CA-YOL-0205H). This resource is entirely encompassed by the CEQA study area for indirect effects. As currently defined, this resource is a CRHR/NRHP historic district with 22 contributing elements, eligible for the CRHR/NRHP at the local level under Criteria 1/A for the contribution to the history of the Capay Valley. The period of significance is between 1870s when the Taber family purchased the ranch and the 1940s. The contributing elements include: almond orchard, well, washhouse, garage, grain barn, cow barn, manager's cabin, sheep shed, harvester barn, privy, bunkhouse, pumphouse, blacksmith's shop, shop, almond processing shed, woodchopper's cabin, Merlin J. Taber, Sr. residence, flagpole, Merlin J. Taber, Sr. shed, Merlin J. Taber, Sr. garage, Ann and Merlin J. Taber, Jr. residence, and a railroad grade (also part of P-57-000715, described above). The boundary of the district is drawn around this cluster of 22 buildings and structures. The newly identified resources — a barn and mule shed — are considered additional contributors to this district.

Pedestrian Survey

On April 17, 2019 Carolyn Losée, MA, RPA conducted an intensive reconnaissance level pedestrian survey of the CEQA study area for direct effects. The survey was conducted by walking 1- to 3-meter wide transects. The cultural resources specialist examined the ground surface for the presence of prehistoric artifacts, historic-era artifacts, sediment discolorations that could indicate the presence of cultural features, and depressions or other features that could indicate the presence of structures or foundations. Ground visibility along the planned utility trench route was excellent because it follows an existing dirt road. However, ground visibility in the proposed cell tower location was poor, averaging 10 percent visibility. To address this issue, a hoe was used at approximately 3-meter intervals to expose the soil for examination. No evidence of archaeological materials was identified.

However, an examination of the CEQA study area of indirect effects resulted in the identification of two historic structures associated with the Taber's Corner Historic District (P-57-000486). Architectural historian Dana E. Supernowicz, MA recorded and evaluated these newly identified resources.

Armstrong Ranch Wedding Barn – This stick-framed, transverse-crib barn is an extensively remodeled example of a common California style transverse-crib barn. Character defining features of the barn include

the moderately steep gable roof, re clad with new corrugated metal, and the corrugated metal siding. The longest axis of the barn faces southeast to northwest with a hay hood on the southeast facing gable end. The barn was built in 1921 within the boundaries of the Taber Ranch and served the Taber family as a feed storage location for livestock. It is currently used as an event center. This resource is considered a contributor to the Taber's Corner Historic District (P-57-000486/ CA-YOL-0205H) which is eligible for the CRHR/NRHP. However, given the extensive remodeling of the structure and changes to the local setting, the resource is not considered eligible in its own right.

Armstrong Ranch Mule Shed – The mule shed is to the northeast of the barn. It is characterized by its rectangular massing, moderately steep gable roof clad with corrugated metal, and corrugated metal siding. The shed has a single pen or shed-roof extension along its northeast elevation. The shed was likely built in the 1920s within the boundaries of the Taber family ranch and reportedly was used to house mules for use in the nearby orchards and cultivated fields. Today the building is used by event center staff. This resource is considered a contributor to the Taber's Corner Historic District (P-57-000486/ CA-YOL-0205H), which is eligible for the CRHR/NRHP. However, given the extensive remodeling of the structure and changes to the local setting, the resource is not considered eligible in its own right.

Impact Analysis

- a) *Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

Less Than Significant with Mitigation Incorporated. Two CRHR/NRHP-eligible historic districts are present within the CEQA study area for indirect effects Taber's Corner Historic District (P-57-000486/ CA-YOL-0205H) and the Vaca Valley & Clear Lake Railroad (P-57-000715). No direct effects to these resources are anticipated. These resources and their contributors, including the Armstrong Ranch Wedding Barn and Mule Shed, could be subject to indirect effects associated with the installation of the 120-foot-tall cell tower. However, the facility design as a water tower, blends in with the other changes to the rural setting that have taken place in the Project vicinity since the 1940s. As such, the construction of the cell tower would not result in an adverse change to the significance of a historical resource.

However, previously unknown buried historical resources could be discovered and damaged, or destroyed, during ground-disturbing work, which would constitute a potentially significant impact. In particular, utility trenching within the boundaries of the Taber's Corner Historic District (P-57-000486/ CA-YOL-0205H) could impact historic-era archaeological resources, and utility trenching within 100 feet of a drainage could impact buried prehistoric resources. Implementation of MM CR-1 and MM CR-2 would ensure that ground-disturbing activities in sensitive areas would be monitored by qualified personnel and that any inadvertent discovery of historical resources, unique archaeological resources or tribal cultural resources would be protected, evaluated and treated, thereby reducing this impact to less than significant.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

Less Than Significant with Mitigation Incorporated. No unique archaeological resources have been identified in the proposed Project area; however, previously unknown buried archaeological resources could be discovered and damaged, or destroyed, during ground-disturbing work. Implementation of MM CR-1 and MM CR-2 would ensure that ground-disturbing activities in sensitive areas would be monitored by

qualified personnel and that any inadvertent discovery of historical resources, unique archaeological resources or tribal cultural resources would be protected, evaluated and treated, thereby reducing this impact to less than significant.

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

Less Than Significant with Mitigation Incorporated. There is no indication that human remains are present within the Project area. The limited nature of the proposed ground disturbance in an already disturbed area makes it unlikely that human remains would be unearthed during construction. However, it is possible that previously unknown human remains could be discovered and damaged or destroyed during ground disturbance, which would constitute a significant impact absent mitigation. Implementation of MM CR-3, which requires protection and appropriate disposition of human remains, would reduce this potential impact to a less than significant level.

Mitigation Measures

MM CR-1 Cultural Resources Monitoring. All utility trenching and other ground-disturbing construction activities within the boundaries of the Taber's Corner Historic District (P-57-000486/ CA-YOL-0205H) and within 100 feet of a drainage shall be monitored by a cultural resources specialist supervised by a Secretary of the Interior qualified archaeologist. At the request of AB 52 consulting tribes, a tribal monitor shall also be present in these locations. Upon completion of construction, a brief letter report presenting the results of the monitoring efforts shall be prepared. After Yolo County reviews and approves the final report, the report shall be submitted to the CHRIS NWIC.

MM CR-2 Inadvertent Discovery of Historical Resources, Unique Archaeological Resources or Tribal Cultural Resources. If previously unidentified cultural resources are identified during construction activities, construction work within 50 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist assesses the significance of the resource. The archaeologist, in consultation with the County, the State Historic Preservation Officer, any interested Tribes, and any other responsible public agency, shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be eligible to the National or California Registers, qualify as a unique archaeological resource under CEQA (PRC §21083.2), or are determined to be tribal cultural resource as defined in PRC §21074.

MM CR-3 Treatment of Human Remains. All human remains discovered are to be treated with respect and dignity. Upon discovery of human remains, all work within 50 feet of the discovery area must cease immediately, nothing is to be disturbed, and the area must be secured. The County Coroner's Office must be called. The Coroner has two working days to examine the remains after notification. The appropriate land manager/owner of the site is to be called and informed of the discovery. It is very important that the suspected remains, and the area around them, are undisturbed and the proper authorities called to the scene as soon as possible, because it could be a crime scene. The Coroner would determine if the remains are archaeological/historic or of modern origin and if there are any criminal or jurisdictional questions.

After the Coroner has determined that the remains are archaeological/historic-era, the Coroner would make recommendations concerning the treatment and disposition of the

remains to the person responsible for the excavation, or to his or her authorized representative. If the Coroner believes the remains to be those of a Native American, he/she shall contact the Native American Heritage Commission (NAHC) by telephone within 24 hours.

The NAHC would immediately notify the person it believes to be the most likely descendant (MLD) of the remains. The MLD has 48 hours from the time they are given access to the site to make recommendations to the landowner for treatment or disposition of the human remains. If the descendant does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from further disturbance. If the landowner does not accept the descendant's recommendations, the owner or the descendant may request mediation by NAHC.

According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and willful disturbance of human remains is a felony (Section 7052).

Cultural Resources Impact Conclusions

Two sensitive CHRH/NRHP eligible resources are present within the indirect effects study area but would not be subject to adverse direct or indirect effects from this Project. Portions of the Project area are highly sensitive for buried historic-era and prehistoric-era archaeological resources. Monitoring and treatment of any resources inadvertently discovered in these areas, as required by MM CR-1 through MM CR-3, would reduce these potential impacts to a less than significant level.

5.6 Energy

ENERGY

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

In 2017, Yolo County consumed a total of 1,749 million kWh of electricity, ranking 25th in total consumption in the State (CEC, 2017). The County sources its power from fuels including fossil fuels, natural gas, hydroelectric facilities, solar energy, hydrogen fuel, and biofuels. Utility service in the County is provided by Pacific Gas and Electric (PG&E) (Yolo County, 2009).

The existing site is a ranch and vineyard that offers wine tasting and an event venue. The site consists of several buildings that consume energy for the current operation. Given the nature of the Project, the sources of energy that would be most relevant are electricity and diesel fuel for the operation of the new tower and transportation fuel for vehicle trips associated with Project construction and operation.

Regulatory Background

Yolo County General Plan

Policy CO-7.3 Requires all projects to incorporate energy-conserving design, construction, and operation techniques and features into all aspects of the project including buildings, roofs, pavement, and landscaping.

Impact Analysis

a) *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?*

Less Than Significant. Construction of the telecommunications tower would use fossil fuels to provide energy for the vehicles and equipment required for transport of materials, site grading, foundation excavation, construction, and tower installation. The energy required for construction would be temporary, with construction scheduled for approximately 90 days. The materials for construction, such as concrete, steel, and other manufactured materials, also require energy to manufacture, process, and transport.

Utilities are established in the Project area, and an underground power line would be installed from a pre-existing transformer and run to the site location. After construction, the tower would require energy for operation and lighting. One light would be installed for maintenance purposes. Operation and lighting would be the only source of permanent increase in energy consumption of the proposed Project. The 4-ton Marvair ComPac I Air Conditioner chosen for operation of the Project has an energy efficiency ratio of 9.25 (Marvair Airxcel, Inc., 2019). The generator selected for installation is a 2.4 L, 30 kW diesel generator that would only operate in the event of a power outage and for the routine maintenance runs of 15 to 30 minutes, up to twice a month.

Any energy impacts of the proposed telecommunication tower would be less than significant due to the relatively short construction period, and operation activities would not use energy in an inefficient, wasteful or unnecessary manner.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The Project would require energy for construction and operation and maintenance of the facility. However, the energy consumption would be minimal, as stated above in section a). Policy CO-7.3 requires all Projects to incorporate energy-conserving design, construction, and operation techniques into all aspects of the Project. AT&T Mobility would construct the cell tower in the most energy-efficient manner using the most energy-conserving materials. Additionally, AT&T Mobility would comply with any specific standards set forth by Yolo County. Activities and components of the proposed telecommunication tower would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Mitigation Measures

No mitigation required.

Energy Impact Conclusions

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

5.7 Geology and Soils

GEOLOGY AND SOILS

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on geologic units 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Check if project is located in the Geologic Hazards ☒ or Paleontologic Resources ☐ Overlay District:

Environmental Setting

The Capay Valley area is a combination of flat and hilly farmland with mostly grape and olive crops. Land uses surrounding the Project site consist of agricultural and rural residences, and an event center. The Project will be located near the base of a small hill. Two artificial ponds are located nearby, at the base of the hill. Construction would include improvement of the existing access road leading to the cell tower from CR 81 and conversion of that road from a 20-foot-wide gravel road to a 20-foot-wide all-weather gravel access road. Construction of a new 150 feet of 20-foot-wide access road from the end of the existing access road to the proposed communications tower site will also be required. Underground power lines will be installed within an existing roadway to power the facility and buried fiber optic lines will provide for remote communication and facility control. The fiber optic lines will be installed within another existing roadway (see Figure 2). Trenching for the underground lines will be no deeper than three feet. The main Project feature is the construction of a 120-foot-tall faux water tank telecommunications tower (cell tower). It will require footing depths to support the faux water take structure having a minimum of 26 feet and a maximum of 30 feet deep.

Seismicity

Seismic faults can be classified as historically active, active, potentially active, or inactive, based on the following criteria (CGS, 2007):

- Faults that have generated earthquakes accompanied by surface rupture during historic time (approximately the last 200 years) and faults that exhibit a seismic fault creep are defined as Historically Active.
- Faults that show geologic evidence of movement within Holocene time (approximately the last 11,000 years) are defined as Active.
- Faults that show geologic evidence of movement during the Quaternary time (approximately the last 1.6 million years) are defined as Potentially Active.
- Faults that show direct geologic evidence of inactivity during all of Quaternary time or longer are classified as Inactive.

Yolo County has Holocene, Quaternary, and Pre-Quaternary faults within its borders (Yolo County, 2009). The Hunting Creek Fault and the Dunnigan Hills Fault are the two main faults identified in the 2030 Countywide General Plan. The Dunnigan Hills Fault, located 14 miles east of the Project site and running west of I-5 between Dunnigan and northwest Yolo, is a Late Quaternary fault and has not been active in historic times. The Hunting Creek Fault, located 17.5 miles west of the Project site and extending through Napa and Lake counties, is a Holocene time fault and is in a sparsely populated area of the County (DOC, 2019, Fault Activity Map). The Hunting Creek Fault is the only fault in the County subject to surface rupture. Yolo County has a low probability for earthquake hazards, but it is subject to seismic activity both within and near the County (Yolo County, 2009). Major faults in the Coast Ranges and Sierra Nevada foothills are capable of producing earthquakes that could affect Yolo County Residents (Yolo County, 2009).

Landslides

Landslides are a risk associated with seismic activity, weak materials, stream and coastal erosion, and heavy rainfall. A landslide is the natural process of rapid downslope movement of soil, rock, and rock debris as a mass. The risk and rate of landslides are affected by the type and extent of vegetation, slope angle, degree of water saturation, strength of the rocks, and the mass and thickness of the deposit. The primary risk area for landslides and mudslides in Yolo County is Capay Valley, north of the Project site, due to the poorly consolidated marine sediments located on either side of the rapidly moving Cache Creek. Land and mudslides are not a serious risk in other portions of the County (Yolo County, 2009).

Soils

Soil surveys for Yolo County conducted by the US Department of Agriculture, Soil Conservation Service have identified general soil types found in the County. Yolo County hosts an array of soil types that benefit the widespread agriculture throughout the County. Soils within the proposed Project area reflect the underlying rock type, the extent of weathering of the rock, the degree of slope, and the degree of human modification. The proposed Project site is characterized by the soils in Table 5.7-1, Soils in the Project Disturbance Area.

Paleontological Resources

There is no detailed geologic mapping available for the Project area. The best available mapping is at a scale of 1:100,000 (Graymer et al., 2002). This mapping shows that the valley floor part of the project lies in Quaternary alluvium, but the part on the low hill is in the Tehama Formation. The Quaternary alluvium could have higher potential for paleontological resources at depth, but have low potential for paleontological resources at the three-foot depth of trenching for the power and fiber optic lines. The Tehama Formation is a non-marine sedimentary formation of Pliocene age (5.3 to 2.6 million years). An online database from the University of California Museum of Paleontology (UCMP) shows that their

collection includes proboscideans, ground sloths, peccaries, canids, rodents, shrews, turtles, minnows, and abundant horse fossils from this formation. The available database for the UCMP paleontology collections indicates that the institution has 45 localities in that formation 36 of which are represented by actual fossils in their collection. The names of some of the localities suggest that they lie near the Project (Cache Creek, Cache Creek Aggregates). Vander Hoof (1933) described some of the species found in the Tehama Formation. Thus, the Tehama Formation must be rated as having high potential for paleontological resources.

Table 5.7-1. Soils in the Project Disturbance Area

Name	Type	Percent Slope	Drainage
BdF2 – Balcom-Dibble complex	Clay Loam	30-50	Well Drained
BrA - Brentwood silty clay loam	Silty Clay Loam	0-2	Well Drained
Ck – Clear Lake clay	Clay	0-1	Poorly Drained

1 - California Soil Resource Table
2 - USDA NRCS Representative Soil Features

Impact Analysis

a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

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

Less Than Significant Impact. The Project is not located within an Alquist Priolo Earthquake Fault Zone (DOC, 2019a). Additionally, the rural site location is 1,800 feet away from the nearest residential unit (Bollard, 2019), and is primarily surrounded by grasslands and vineyards. The closest potentially active fault, the Hunting Creek Fault, is located 17.5 miles west of the Project site, and has not been active in the past 11,000 years (DOC, 2019b). Yolo County has a low probability for earthquake hazards, but there is potential for the site to experience ground shaking due to earthquake activity from faults in Napa and Lake counties or from the Sierra Nevada and Coastal ranges (Yolo County, 2009). The Project would be designed and engineered in accordance with Uniform Building Code requirements to mitigate potential impacts and ensure they would be less than significant to people who may happen to be near the cell tower during any seismic activity. No other structures are near the proposed cell tower. Therefore, potential impacts would be less than significant.

- ii. *Strong seismic ground shaking?*

Less Than Significant Impact. Potential earthquake damage on the Project site would likely occur as a result of ground shaking and seismically related structural failures. The degree of this type of hazard is controlled by the nature of the underlying soil and rock materials, the magnitude of and distance from the quake, the duration of ground motion and the physical characteristics of the affected structure. Seismically induced shaking and some damage would be expected to occur during a major event, but damage would be no more severe in the Project area than elsewhere in the region. The telecommunications tower Project would be designed, engineered, and built in accordance with Uniform Building Code requirements to mitigate potential impacts and ensure they would be less than significant to people who may happen to be near the cell tower during any seismic event. Therefore, potential impacts would be less than significant.

iii. Seismic related ground failure, including liquefaction?

Less Than Significant Impact. The Project site has not been evaluated by the United States Geological Survey (USGS) for liquefaction susceptibility (DOC, 2019, Earthquake Zones of Required Investigation). However, the risk for liquefaction is expected to be higher in the Great Valley portion of Yolo County, particularly along floodplains where the sediments are sandier (Yolo County, 2009). The proposed Project requires minimal grading of the surface and placement of concrete pads as foundation. Therefore, potential impacts would be less than significant.

iv. Landslides?

Less Than Significant Impact. The proposed Project site is subject to Moderate Landslide Susceptibility (Yolo County, 2009). The BdF2 soil type that the tower would be built upon is very well drained, limiting the risk of a landslide. Additionally, the location of the tower pad would be on a moderate slope of 11 percent, also limiting the risk. The new road construction from the existing access road to the proposed Project site would be a slope of 13 percent. As stated above in i), the Project is 1,800 feet away from the nearest residence and is primarily surrounded by grasslands and vineyards. Therefore, the impact would be less than significant.

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

Less Than Significant Impact. The Project would require minimal grading for the 11 to 13 percent and relatively small 0.093-acre permanent footprint of the cellular tower and new road. Temporary disturbance, due to the installation of the underground fiber optic cable and underground power line, would be up to 1.94 acres in the worst-case scenario. To minimize potential impacts related to soil erosion and soil loss, a SWPPP would be designed and implemented for the Project (see Section 5.10, Hydrology and Water Quality). Final Project design and construction would be subject to the requirements of the SWPPP, thereby ensuring that potential impacts would be less than significant.

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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. The Project is not located in an area of unstable geologic materials. Furthermore, the Project is not expected to significantly affect the stability of the underlying materials, which could potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. Construction of the Project would not create a significant risk to people or structures from an unstable geologic unit or unstable soil.

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?

Less Than Significant Impact. The Yolo County GIS Database identifies the Project site soil as “normally expansive.” However, the Project would be constructed in accordance with Uniform Building Code requirements, and a site-specific geotechnical investigation would be required as part of the building permit process. Final Project design would incorporate any design recommendations from the geotechnical investigation, thereby ensuring that potential impacts would be less than significant

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 Impact. The telecommunications tower would be unmanned except for the bi-monthly maintenance that would consist of an employee on site for 15 to 30 minutes during each maintenance check. Wastewater would not be generated during construction, operation, or maintenance of the tower. Therefore, a wastewater system or septic tank would not be required for the Project.

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

Less Than Significant Impact with Mitigation. The Quaternary alluvium has low potential for paleontological resources. The Tehama Formation, which underlies the monopole and tower footholds, has high potential for paleontological resources. Thus, trenching for power and optic lines and boring for footings could directly or indirectly destroy a unique paleontological resource. The rodent, shrew, and minnow fossils known from the formation are small enough to be classified as microvertebrate fossils. These require mitigation techniques not required by the larger organisms.

Mitigation Measures

Trenching for power and optic lines and boring for footings could have a significant Impact on paleontological resources; therefore, these mitigation measures are recommended:

MM PAL-1 Prepare and Implement a Paleontological Resource Mitigation Plan. Prior to approval of the final construction plans for the proposed Project, the proponent shall retain a qualified professional paleontologist as defined in the paleontological resource mitigation guidelines of the Society of Vertebrate Paleontology (2010). The Qualified Paleontologist shall prepare a paleontological resource mitigation plan. The plan will include the following items:

- A survey of the Project footprint, particularly where it overlies the Tehama Formation, to locate and collect any significant fossils at the surface that could be damaged or destroyed by construction-related activities.
- Procedures for monitoring the trenching or boring activities in the Tehama Formation.
- Procedures for testing the sediments removed by trenching or boring for the presence of microvertebrate fossils.
- Procedures for processing a bulk sample of sediment to recover microvertebrate fossils, should the testing yield positive results. These procedures shall be consistent with the guidelines of the Society for Vertebrate Paleontology (2010).
- A program for preparing, identifying, and reporting any significant fossils recovered.
- A curation agreement with a qualified repository for curation of the significant fossils recovered. The Project proponent shall bear the curation costs, should any significant fossils be recovered.

Geology and Soils Impact Conclusions

Monitoring and treatment of any paleontological resources inadvertently discovered in these areas, as required by MM PAL-1, would reduce potential impacts to a less than significant level.

5.8 Greenhouse Gas Emissions

GREENHOUSE GAS EMISSIONS

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Background

Greenhouse gases (GHGs) provide what is commonly known as the “greenhouse effect” that allows heat radiated from the Earth’s surface to warm the atmosphere. Globally, the presence of GHG affects temperatures, precipitation, sea levels, ocean currents, wind patterns, and storm activity. GHG sources are both anthropogenic and natural. Human activity directly contributes to emissions of six primary anthropogenic GHGs: carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The most important and widely occurring anthropogenic GHG is CO₂, primarily from the combustion of fossil fuels as a source of energy. Because GHGs are relatively stable in the atmosphere and essentially uniformly dispersed throughout the troposphere and stratosphere, the climatic impact of GHG emissions does not depend on the location of the emissions.

Yolo County adopted its Climate Action Plan in 2011 as an implementation measure of the General Plan. The Climate Action Plan includes emissions inventories for 1990 and 2008, projections for future years, reduction goals, and implementation measures. The inventories include only unincorporated land, and therefore, do not include the four incorporated cities, University of California at Davis, special districts, State- or federally owned land, or trust land (Yolo County, 2011). The 2008 inventory of community-wide sources for unincorporated Yolo County is presented in Table 5.8-1.

Table 5.8-1. Unincorporated Yolo County GHG Inventory (2008)

Sector	MTCO ₂ e per year (2008)
Agriculture	297,341
Transportation	105,253
Energy	181,447
Solid Waste	6,871
Wastewater	974
Stationary Source	30,583
Mining & Construction	29,271
Total	651,740

Note: MTCO₂e = metric tons of carbon dioxide equivalent.
Source: Yolo County, 2011.

Impact Analysis

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

Less Than Significant. Minor GHG emissions would result during construction of the proposed Project in the form of mobile emissions from fossil fuel-powered trucks and heavy equipment. The quantity of emissions from these temporary sources would be small, and the potential impact on the environment would be less than significant. Once completed, operation and maintenance of the proposed Project would consume fossil fuels as necessary for technicians using vehicles to access the site and for site power, including the use of electricity from the grid and diesel fuel during emergency power outages. The resulting

quantities of GHG emissions would be minor, and the impact on the environment would be less than significant.

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

Less Than Significant. The proposed Project would generate a negligible amount of GHG emissions and would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Mitigation Measures

No mitigation is required.

Greenhouse Gas Emissions Impact Conclusions

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

5.9 Hazards and Hazardous Materials

HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Existing and past land use activities are commonly used as indicators of sites where hazardous material storage and use may have occurred or where potential environmental contamination may exist. For example, many historic and current industrial sites have soil or groundwater contaminated by hazardous substances. Other hazardous materials sources include leaking underground tanks in commercial and rural areas, contaminated surface runoff from polluted sites, and contaminated groundwater plumes. Current and former agricultural properties commonly have herbicide, pesticide, and/or fumigant soil contamination.

Taber Ranch, the proposed Project site, was established by the Taber Family in 1867 and planted with quince, olive, palms, grapevines, and almonds; the Ranch also raised livestock. In the 1990s, the Project area was encompassed by the 88-acre ranch owned by Martin Armstrong, who converted the land to a vineyard, tasting room, and event center. The property has several man-made ponds and is bordered by Salt Creek to the southwest and an unnamed stream to the east. There are two man-made ponds located 198 feet north and 246 feet west from the proposed Project location. The Ranch is neighbored to the north, east, and west by other ranches and agricultural production, which is typical of unincorporated Yolo County. South of the property are undeveloped hills, classified as Grazing Land.

Esparto elementary, middle, and high schools are all located (by road) between 6.3 and 6.5 miles southeast of the Taber Ranch proposed Project location. The nearest private airstrip is G3 Ranch Airport-63CL, a privately owned and used unpaved airstrip located 2 miles northwest of the proposed Project site. The nearest public airport is the Watts-Woodland Airport (O41) in the Monument Hills area, about

15 miles southeast of the Project, west of the City of Woodland; followed by the Yolo County Airport (KDWA), about 23 miles southeast of the Project site in unincorporated Yolo County, west of the City of Davis. The Sacramento International Airport is about 32 miles east of the Project.

There are several forms of hazardous materials in Yolo County; common products such as gasoline, paint solvents, household cleaning products, and refrigerants are categorized as hazardous materials and present throughout the County. “Brownfield” sites are those where expansion or redevelopment is complicated by real or perceived contamination from prior or current uses. Yolo County has several brownfield sites in the community of Esparto that are polluted with hazardous substances (Yolo County, 2009). Superfund sites are significantly contaminated properties as designated by the federal USEPA list. Yolo County contains one superfund site at the UC Davis landfill, 33 miles (by car) from the Project location.

Impact Analysis

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

Less Than Significant with Mitigation Incorporated. Construction of the telecommunications tower may require the use and transportation of small amounts of hazardous materials such as vehicle fuels, hydraulic fluid, lubricants or solvents. During construction, other vehicle and maintenance fluids may be stored at the construction staging area in construction vehicles. No acutely hazardous materials would be used. Spills or releases of hazardous materials could occur due to improper handling and/or storage practices during construction activities potentially causing soil or groundwater contamination, or contamination of the Salt Creek, the nearby manmade ponds, or the unnamed stream running along the east border of the property.

Operation and maintenance of the facility requires the use of a backup emergency diesel generator with a 190-gallon fuel tank. Implementation of MM BIO-1 (Prevent Contamination of Sensitive Habitats), MM HAZ-1 (Prepare and Implement Worker Environmental Awareness Program), and MM HAZ-2 (Prepare and Implement a Hazardous Materials and Waste Management Plan) would reduce the potential impacts to the public or environment due to the routine transport, use, or disposal of hazardous materials to less than significant.

- 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?*

Less Than Significant with Mitigation Incorporated. Accidental spills of hazardous materials could occur as a result of improper handling and/or storage practices during construction or operation and maintenance activities, potentially causing soil or groundwater contamination, or contamination of the nearby creek, stream, and ponds. However, as discussed above, implementation of MM BIO-1 (Prevent Contamination of Sensitive Habitats), MM HAZ-1 (Prepare and Implement Worker Environmental Awareness Program), and MM HAZ-2 (Prepare and Implement a Hazardous Materials and Waste Management Plan) would be required to minimize the potential impact from the accidental release of hazardous materials to the environment. Following mitigation, impacts would be less than significant.

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

No Impact. The nearest school is located 6.3 miles from the proposed Project site. Therefore, no hazardous emissions would be emitted, nor any hazardous or acutely hazardous materials, substances, or waste would be handled within one-quarter mile of an existing or proposed school.

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

No Impact. A review of the Department of Toxic Substances Control Cortese List revealed that there are no known hazardous material or environmentally contaminated sites within 20 miles of the proposed Project site.

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

No Impact. As stated previously, the nearest public airport (Watts-Woodland Airport) is located about 15 miles southeast of the Project site. AT&T Mobility is consulting with the FAA and would implement any necessary requirements, such as red lighting for aviation safety. The Project would not result in a safety hazard for people residing or working in the Project area.

f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

No Impact. Oversize truck trips are expected to deliver large pieces of construction equipment and communications tower materials to the site during construction. However, as discussed in Section 5.17 (Transportation, response d), due to the low volume, traffic along State and local roadways would not be impacted by these trips. During both construction and operation and maintenance, the Project would not have an impact on emergency access or limit access in any way. The purpose of the construction of the tower is to improve communication throughout the area, and thus, facilitate improved emergency access. Therefore, the Project would not physically interfere with an adopted emergency response plan or emergency evacuation plan.

g) *Expose people or structure, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

Less Than Significant Impact with Mitigation. The proposed Project site would be located in an area of moderate fire hazard severity zone (CAL FIRE, 2007). The undeveloped hills to the south of the Project site are classified as very high fire severity (CAL FIRE, 2007). Construction activities could increase the risk of wildland fires at the Project site and the bordering grassy hills to the south. Ignition sources could include sparks from welding or from metal striking metal or stone, parking vehicles over dry vegetation, and improperly discarding smoking materials. To reduce the wildfire risk, the Project would implement standard California Department of Forestry and Fire Protection (CAL FIRE) prevention protocols and prepare and follow a fire prevention plan, as described in MM WF-1 (Prepare and Implement a Fire Management Plan). With this mitigation applied, the Project would have a less than significant impact to wildland fire risk.

Mitigation Measures

MM HAZ-1 Prepare and Implement Worker Environmental Awareness Program. A project-specific WEAP shall be prepared and submitted to Yolo County for approval prior to construction. The WEAP shall include, at a minimum, the following provisions related to hazards and hazardous materials:

- A presentation shall be prepared and used to train all site personnel prior to the commencement of work. A record of all trained personnel shall be kept.

- Instruction on compliance with proposed Project mitigation measures.
- A list of phone numbers of the Yolo County personnel associated with the proposed Project (archaeologist, biologist, environmental coordinator, and regional spill response coordinator).
- Instruction on the individual responsibilities under the Clean Water Act, the Project SWPPP, site-specific BMPs, and the location of Material Safety Data Sheets for the Project.
- Worker Training on Emergency Release Response Procedures to include hazardous materials handling procedures for reducing the potential for a spill during construction, and hazardous material clean up procedures and training to ensure quick and safe cleanup of accidental spills.
- Instructions to notify the foreman and regional spill response coordinator in case of a hazardous materials spill or leak from equipment, or upon the discovery of soil, groundwater, or surface water contamination. The foreman or regional spill response coordinator shall have authority to stop work at that location and to contact the Certified Unified Program Agency (CUPA) immediately if unanticipated visual evidence of potential contamination or chemical odors are detected. Work would be resumed at this location after any necessary consultation and approval by the CUPA or other entities, as specified by the CUPA.
- Instruction that noncompliance with any laws, rules, regulations, or mitigation measures could result in being barred from participating in any remaining construction activities associated with the proposed Project.

MM HAZ-2

Prepare and Implement a Hazardous Materials and Waste Management Plan. Prior to approval of the final construction plans for the proposed Project, an existing AT&T Mobility hazardous materials management plan, or if no such plan is in place, a Project-specific Hazardous Materials and Waste Management Plan for the construction phase of the proposed Project shall be prepared and submitted to Yolo County for review and approval prior to construction. The Plan will be prepared to ensure compliance with all applicable federal, State, and local regulations. The Hazardous Materials and Waste Management Plan will reduce or avoid the use of potentially hazardous materials for the purposes of worker safety, protection from soil, groundwater, and surface water contamination, and proper disposal of hazardous materials. The plan will include the following information related to hazardous materials and waste, as applicable:

- A list of the hazardous materials that will be present on-site and in the local construction yard during construction, including information regarding their storage, use, and transportation
- Any secondary containment and countermeasures that will be required for on-site and construction yard hazardous materials, as well as the required responses for different quantities of potential spills
- A list of spill response materials and the locations of such materials at the proposed Project site and in the local construction yard during construction. Additionally, the Plan shall designate that spill response materials be kept onsite for all activities performed near a stream or pond

- Written procedures for fueling and maintenance of construction vehicles and equipment would be prepared prior to construction. The Plan shall include the following procedures:
 - Construction vehicles shall be fueled and maintained offsite at the construction yard or at local fuel stations. Construction vehicles operated near to, or adjacent to, the stream channel or pond shall be inspected and maintained daily to prevent leaks.
 - Construction equipment such as drill rigs and excavators shall be fueled offsite when feasible. When refueling offsite is not feasible, onsite refueling of the equipment by refueling vehicles or fuel trucks shall follow specified procedures to prevent leaks or spills. Procedures will require refueling be located a minimum of 150 feet from a stream channel or pond and the use of spill mats, drop cloths made of plastic, drip pans, or trays to be placed under refueling areas to ensure that fuels do not come into contact with the ground. Spill cleanup materials shall be kept readily available on the refueling vehicles.
 - Drip pans or other collection devices would be placed under equipment, such as motors, pumps, generators, and welders, during operation and at night to capture drips or spills. Equipment would be inspected and maintained daily for potential leakage or failures.
- A list of the adequate safety and fire suppression devices for construction activities involving toxic, flammable, or exposure materials
- A description of the waste-specific management and disposal procedures that will be conducted for any hazardous materials that will be used or are discovered during construction of the proposed Project
- A description of the waste minimization procedures to be implemented during construction of the proposed Project

Hazards and Hazardous Materials Impact Conclusions

Construction of the proposed Project would require the use and transportation of small amounts of hazardous materials such as vehicle fuels, hydraulic fluid, lubricants or solvents. Accidental spills of these hazardous materials could cause soil or groundwater contamination, or contamination of the nearby creek, stream, and ponds which could result in a significant impact. Compliance with MM HAZ-1 and MM HAZ-2 would reduce that risk below the level of significance.

In addition, construction in an area of moderate fire hazard severity zone could result in wildfires. Preparation of a fire prevention plan and compliance with standard CAL FIRE prevention protocols as described in MM WF-1 (Prepare and Implement a Fire Management Plan) would reduce that risk, see Section 5.20 (Wildfire).

5.10 Hydrology and Water Quality

HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) 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; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The major watersheds and surface water features in Yolo County include Cache Creek, Putah Creek, the Sacramento River, and the Yolo Bypass. Cache Creek, located 1.7 miles away, runs nearest to the location of the proposed Project. An additional extensive network of sloughs, irrigation canals, and drainage ditches are located throughout the County. Yolo County does not have any natural lakes. Drainage facilities in the unincorporated County are limited, often resulting in localized flooding. Agricultural land often uses on-site ditches to convey water to existing roadside ditches.

The proposed Project vicinity has several bodies of surface water including man-made ponds, Salt Creek to the southwest, and an unnamed stream to the east. The two man-made ponds nearest the proposed cell tower are located 198 feet north and 246 feet west of the proposed tower pad location.

Groundwater

The County has an extensive system of both shallow and deep aquifers. Domestic and agricultural land uses rely on groundwater to supply their water needs. Wells in the County are increasingly tapping deeper aquifers, contributing to issues of subsidence and contamination. The primary source of groundwater recharge is applied irrigation water and rainfall. Recharge occurs naturally and through the release of stored water from the Indian Valley Reservoir into Cache Creek during low flows.

Groundwater pollution potential is evaluated on the DRASTIC index range; this range is based on factors such as depth to water, soils, topography, and hydraulic conductivity. The proposed Project location has a medium groundwater pollution potential of 120 to 139 (Yolo County, 2009).

Water Quality

The quality of surface water in Yolo County varies and is likely to be diminished after major storms. Chemicals such as boron, diazinon, mercury, and unknown toxics are pollutants found in Yolo County waterways.

Regulatory Background

The CWA (33 U.S.C. Section 1251 *et seq.*), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the US. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water. Those discharges are regulated by the NPDES permit process (CWA Section 402). NPDES permitting authority is delegated to, and administered by, California's nine RWQCBs. In addition, the SWRCB regulates the NPDES stormwater program. The proposed Project is under the jurisdiction of the Central Valley Regional Water Quality Control Board and the SWRCB.

Projects that disturb one or more acres are required to obtain NPDES coverage under the California General Permit for Discharges of Storm Water Associated with Construction Activity. The Construction General Permit requires the development and implementation of a SWPPP. The SWPPP describes BMPs the discharger will use to protect stormwater runoff. The SWPPP must contain a visual monitoring program and a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs.

Impact Analysis

- a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

Less Than Significant with Mitigation Incorporated. During construction of the proposed Project, there would be a potential for spills of oil, grease, or other pollutants associated with the use of vehicles, equipment, and materials used in construction, as well as the potential for increased erosion and sedimentation associated with soil disturbance. Any spill of a hazardous or potentially hazardous material, including oil or grease, would be immediately addressed in accordance with standard construction BMPs. The risk of degraded surface or groundwater quality would likely only be pertinent if a precipitation event were to occur during soil-disturbing activities or a spill. Implementation of MM HAZ-1 (Prepare and Implement Worker Environmental Awareness Program) and MM HAZ-2 (Prepare and Implement a Hazardous Materials and Waste Management Plan) would reduce potential water contamination impacts to a less than significant level.

- b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

Less Than Significant Impact. The telecommunications tower does not require a permanent, long-term water source. Water would be used for dust-management during construction and would be obtained from offsite water sources. Water would be transported in a truck and delivered to the Project site for use. Overall, the Project would not decrease groundwater supplies or interfere with groundwater recharge.

c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?*

I. *Result in substantial erosion or siltation on – or off-site;*

Less Than Significant Impact. The proposed Project would cause temporary disturbance of up to 1.942 acres and permanent disturbance of 0.093 acres. Minimal grading would be needed for construction of the site due to its small size and the moderate 11 to 13 percent slope of the pad and new road area. The small disturbance zone and minor earthwork would not cause substantial erosion or siltation on- or off-site. Erosion control measures would be implemented for exposed surfaces subject to soil erosion. As required by the SWPPP, BMPs to reduce erosion and transport of soil particles into the drainage course would also be employed. Impacts related to erosion or siltation would be less than significant.

II. *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site;*

Less Than Significant Impact. The proposed Project has a very small permanent disturbance area of 0.093 acres. The concrete pad (8 feet x 14 feet) and the footings of the faux water tower are the main impervious layers that would be installed, and they are not large enough to cause a significant change in the drainage pattern at the Project site. Therefore, impacts would be less than significant.

III. *which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or*

No Impact. Water would be used as dust control during construction of the Project but would not be used in excess so as to avoid contributing to runoff. This would be a relatively small amount of water for the Project's footprint of up to 1.94 acres of temporary disturbance. Long-term, water would not be needed for operation or maintenance of the facility.

The Project would not create or contribute runoff water or provide substantial additional resources of polluted runoff. As there are no existing or planned stormwater drainage systems at the Project site, the Project would have no impact on a stormwater drainage system.

v. *impede or redirect flood flows?*

Less Than Significant Impact. The nearest flood hazard zone from the proposed Project site is 0.34 miles (1,797 feet) away (FEMA, 2019). The proposed concrete pad would be very small, 35 feet by 30 feet, and requires minimal grading. The new road would require minimal grading and would follow the natural slope of the hillside. Therefore, the total permanent disturbance area (0.093 acres) would not be likely to impede or redirect flood flows, and the impact would be less than significant.

d) *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

No Impact. The closest lake, Lake Berryessa, is 8.1 miles away and separated by a mountainous region, limiting any effects from seiche. Additionally, the Project would not be located in a tsunami zone. The Project's permanent footprint (0.093 acres) is very small, and the Project would be located at an elevation of 350 feet, eliminating the risk of inundation. Therefore, there would be no impact or risk of release of pollutants due to Project inundation.

- e) *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Less Than Significant with Mitigation Incorporated. The proposed Project is under the jurisdiction of the Central Valley Regional Water Quality Control Board. The Central Valley Regional Water Quality Control Plan covers all the drainage basin areas for the Sacramento and San Joaquin rivers, extending approximately 400 miles from the California-Oregon border to the headwaters of the San Joaquin River. This plan describes the beneficial uses to be protected in these waterways, water quality objectives to protect those uses, and implementation measures to make sure those objectives are achieved. Compliance with NPDES, and other applicable regulations, would be required. It is expected that the proposed Project would follow all applicable permits and regulations.

As stated above in c), the Project would have a very small temporary and permanent footprint. The cell tower would have small footings and a concrete pad (8 feet x 14 feet) that are part of the permanent disturbance. Project activities would not include any discharge of water that could impact water quality. There is a potential for spills of oil, grease, or other water contaminants associated with the use of vehicles, equipment, and materials used in construction, as well as the potential for increased erosion and sedimentation associated with soil disturbance. Implementation of MM HAZ-1 (Prepare and Implement Worker Environmental Awareness Program) and HAZ-2 (Prepare and Implement a Hazardous Materials and Waste Management Plan) would reduce potential water quality impacts that could conflict with the Water Quality Control Plan to less than significant.

Additionally, the proposed Project would not conflict with or obstruct the Yolo County 2006 Groundwater Management Plan.

Mitigation Measures

No additional mitigation measures are required beyond MM HAZ-1 MM HAZ-2 discussed above.

Hydrology and Water Quality Impact Conclusions

Construction of the proposed Project would require the use of small amounts of hazardous materials such as vehicle fuels, hydraulic fluid, lubricants or solvents. Accidental spills of these hazardous materials could cause groundwater contamination, or contamination of the nearby creek, stream, and ponds which could result in a significant impact. Construction also has the potential for increased erosion and sedimentation associated with soil disturbance, which could result in a significant impact. Compliance with MM HAZ-1 and MM HAZ-2 would reduce those risks below the level of significance. In addition, compliance with MM HAZ-1 and MM HAZ-2 would reduce potential water quality impacts, that could conflict with the Water Quality Control Plan, to less than significant.

5.11 Land Use and Planning

LAND USE PLANNING

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Yolo County has a strong focus on protecting its agricultural and open space reserves, commodities, and identity. The County resists urbanization with the goal of maintaining its rural character. The 2030 County-wide General Plan outlines the following strategies for the development vision for growth in the coming years:

1. Modest managed growth within specified existing unincorporated communities, where accompanied by improvements to existing infrastructure and services, as well as by suitable new infrastructure and services.
2. Opportunities for revenue-producing and job-producing agricultural, industrial and commercial growth in limited locations and along key transportation corridors.
3. Thresholds that allow for effective and efficient provision of services, consistent with rural values and expectations.
4. New emphasis on community and neighborhood design requirements that reflect “smart growth” principles and complement the character of existing developed areas.

The proposed Project would be located on private land zoned as A-N (Yolo County, 2019). The surrounding land is also zoned as A-N (Yolo County, 2019). All construction disturbance would be within the Project site and localized around the work area only.

Impact Analysis

a) *Physically divide an established community?*

No Impact. The Project would not be located within an established community but is instead located on private land. The telecommunications tower would be built with the intent of improving cellular communication through the designated area of unincorporated Yolo County. All construction disturbance would be within the private land of the Project site and localized around the work area only. Site access would be provided from CR 81 and farm roads located on the private property. Therefore, no aspect of the Project would divide an established community.

b) *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

No Impact. The Yolo County Zoning Ordinance allows communication towers as a qualified Use Type in A-N zoned areas. Therefore, there are no impacts due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Mitigation Measures

No mitigation is required.

Land Use and Planning Impact Conclusions

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

5.12 Mineral Resources

MINERAL RESOURCES

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Yolo County has two primary mineral resources, mined aggregate and natural gas. There is a total of 6 aggregate mines and 25 natural gas fields throughout the county. Yolo County is one of the 28 counties in California that produce gas and oil. Mineral Resource Zones (MRZs) are used by the State to define areas containing valuable mineral deposits. The MRZs are shown in Table 5.12-1 (Yolo County, 2009):

Table 5.12-1. SMARA Mineral Resource Zone Categories

MRZ-1	Areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
MRZ-2	Areas underlain by mineral deposits where geologic data shows that significant measured or indicated resources are present. Such areas contain discovered mineral deposits that are either measured or indicated reserves as determined by such evidence as drilling records, sample analysis, surface exposure, and mine information; or such areas may be inferred reserves or deposits that are presently sub-economic as determined by limited sample analysis, exposure, and past mining history.
MRZ-3	Areas containing known mineral deposits that may qualify as mineral resources. Further exploration work within these areas could result in the reclassification of specific localities into the MRZ-2 category.
MRZ-4	Areas where geologic information does not rule out either the presence or absence of mineral resources. The distinction between the MRZ-1 and MRZ-4 categories is important for land use considerations. It must be emphasized that MRZ-4 classification does not imply that there is little likelihood for the presence of mineral resources, but rather there is a lack of knowledge regarding mineral occurrence. Further exploration work could well result in the reclassification of land in MRZ-4 areas to MRZ-3 or MRZ-2 categories.

Source: Department of Conservation State Mining and Geology Board, Guidelines for Classification and Designation of Mineral Lands.
SMARA = Surface Mine and Reclamation Act of 1975

The County holds 1,458 acres of MRZ-1; 18,452 acres of MRZ-2; and 8,220 acres of MRZ-3 (Yolo County, 2009). The Project site is not located in any MRZs or gas fields (Yolo County, 2009).

Impact Analysis

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 Impact. The proposed Project site is not within an MRZ or a gas field. Therefore, the Project would not have an impact on loss of availability of these resources.

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 Impact. The Yolo County General Plan identifies mined aggregate and natural gas as the important mineral resources found in the County. As stated above, the Project is not within a resource recovery site and would not result in the loss of availability of such sites.

Mitigation Measures

No mitigation is required.

Mineral Resources Impact Conclusions

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

5.13 Noise

NOISE

Would the project result in:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Community Noise. The most basic unit of noise measurement is the decibel (dB); this is a unit of measurement that indicates the relative amplitude of a sound. Decibels are logarithmic units that can be used to conveniently compare wide ranges of sound intensities. The A-weighted sound level (dBA) is the primary method for characterizing sound in the State. This scale of frequency sensitivity accounts for the frequency response of the human ear and correlates well with subjective reactions to noise (Yolo County, 2009).

The variability in noise levels can be very high from day-to-day and between day and night. For simplicity, sound levels are usually best represented by an equivalent level over a given time period (Leq) or by an average level occurring over a 24-hour day-night period (Ldn). The Leq, or equivalent sound level, is a single value (in dBA) for any desired duration, which includes all of the time-varying sound energy in the measurement period, usually one hour. The L50, is the median noise level that is exceeded fifty percent of the time during any measuring interval. The Ldn, or day-night average sound level, is equal to the 24-hour A-weighted equivalent sound level with a 10-decibel penalty applied to nighttime sounds occurring between 10:00 p.m. and 7:00 a.m. The Community Noise Equivalent Level (CNEL) is a measure of the cumulative noise exposure in a community, with a 5-dB penalty added to evening (7:00 pm-10:00 pm) and a 10-dB addition to nocturnal (10:00 pm-7:00 am) noise levels (Yolo County, 2009).

Community noise levels are usually closely related to the intensity of human activity. Noise levels are generally considered low when below 45 dBA, moderate in the 45 to 60 dBA range, and high above 60 dBA. In wilderness areas, the Ldn noise levels can be below 35 dBA. In small towns or wooded and lightly used residential areas, the Ldn is more likely to be around 50 or 60 dBA. Levels around 75 dBA are more common in busy urban areas, and levels up to 85 dBA occur near major freeways and airports. Although people often accept the higher levels associated with very noisy urban residential and residential-commercial zones, they nevertheless are considered to be adverse to public health.

Noise Environment in the Project Area. Yolo County's rural setting and predominantly agricultural character generally afford a quieter environment. The ambient noise levels in the Project vicinity are a result of surrounding farming activities and traffic. The primary sources of noise related to farming activity in Yolo County are nighttime diesel pump operations, nighttime harvesting, crop-dusting aircraft, and bird deflection devices (Yolo County, 2009). Typical noise levels from tractors as measured at a distance of

50 feet range from about 78 dBA to 106 dBA L_{max} (the maximum A-weighted noise level during the measurement period) with an average of about 84 dBA L_{max} (Yolo County, 2009). Noise levels such as these are considered to be reasonably representative of noise levels from other wheeled and tracked farm equipment (Yolo County, 2009).

SR 16 is north of the proposed Project site and undeveloped hills are to the south. SR 16 provides the major connection from Interstate 5 through Woodland, and northwest through the Capay Valley. Noise levels at 100 feet from the roadway centerline are approximately 65 dBA L_{dn} along SR 16, between CR 87 and CR 78. (Yolo County, 2009).

Noise Sensitive Areas. The Project site would be located in the unincorporated community of Capay, Yolo County and is approximately 1,800 feet away from the nearest residential receptor¹ (Appendix D).

Regulatory Background. Noise data was gathered from the Environmental Noise Assessment completed by Bollard Acoustical Consultants, Inc. on February 6, 2019 (Appendix D). Yolo County has not adopted a noise ordinance that sets specific noise levels for different zoning districts or for different land uses in the unincorporated area. However, the State of California Department of Health Services developed recommended Community Noise Exposure standards, that are set forth in the State's General Plan Guidelines (2003). These standards are also included in the Yolo County 2030 Countywide General Plan and used to provide guidance for new development projects. The recommended standards provide acceptable ranges of decibel (dB) levels. The noise levels are in the context of Community Noise Equivalent Level (CNEL) measurements, which reflect an averaged noise level over a 24-hour or annual period. "Normally acceptable" noise levels are defined as 80 to 85 dB CNEL for outdoor noise levels in agricultural areas (Yolo County, 2009).

Impact Analysis

- a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Less Than Significant. Construction activities associated with the Project would generate temporary noise due to the transportation and use of heavy construction equipment, which may include use of utility pick-up trucks, backhoe, concrete trucks, drilling rig, concrete pump, skid steer tractor, crane, and dump trucks. Table 5.13-1 shows the Maximum Noise Levels of the construction equipment that would be used for the Project. The transportation of this equipment would result in a relatively high single event noise exposure potential causing a maximum of 96 dBA L_{max} at 50 feet, but the effect on longer term (hourly or daily) ambient noise levels would be minimal (Yolo County, 2009). Site access would be from CR 81 where it meets the entrance of Taber Ranch. From

Table 5.13-1. Typical Construction Equipment Maximum Noise Levels

Type of Equipment	Range of Maximum Sound Levels (dBA at 50 ft)	Suggested Maximum Sound Levels from Analysis (dBA at 50 ft)
Utility Pick-Up Truck	81-87	85
Backhoe	81-90	86
Concrete Truck	83-94	88
Drilling Rig	83-99	96
Concrete Pump	68-80	77
Skid Steer Tractor	77-82	80
Crane	81-85	85
Dump Truck	83-94	88

¹ The location of the telecommunications tower was moved 200 feet after the noise study provided in Appendix D was prepared. Distance measurements have been adjusted to reflect the new location.

there, construction access would be provided through internal farm roads. Maximum noise levels (not the average) during construction are expected to be about 96 dBA at 50 feet (this is associated with the drill rig). Noise levels decrease by approximately 6 dBA for each doubling of distance between a fixed noise source and the receptor. The nearest residential receptor is located approximately 1,800 feet away and, therefore, may experience a maximum exterior noise level of up to 66 dBA_{Lmax} during Project construction. However, this is based on a “worst case” instantaneous peak noise level, while the overall average noise levels during the course of a typical day of construction would be much lower.

It is expected that the short duration of construction activities would be audible during daytime hours in the vicinity of the nearest residences. General construction activities would be limited to an 11-hour timeframe (8 a.m. to 7 p.m.) on weekdays.

Long-term noise levels would be generated from two main sources: the externally mounted HVAC unit of the walk-in cabinet and the emergency diesel generator. Based upon the noise level data obtained from the manufacturer, the 4-ton Marvair ComPac I Model ACPA42ACA HVAC has a reference noise level of 60 dB at a distance of 30 feet (Bollard, 2019). The HVAC system would run as needed dependent upon ambient temperature. For noise assessment purposes, it is assumed to run up to 24 hours per day.

The emergency generator is a Generac Industrial Power Systems Model SD030, and according to the manufacturer has a reference noise level of 68 dB at a distance of 23 feet (Bollard, 2019). The generator would be used as a back-up power source in case of a power-outage, but it would be tested on a regular basis, up to two times per month, during daytime hours, for approximately 15 minutes in duration. Both sources of noise are fixed, and therefore, decrease at a rate of approximately 6 dBA for every doubling of distance. The nearest residence, at a distance of 1,800 feet is expected to have exposure to a combined noise level of 33 dBA from operation of the facility, and this level would be well within the CNEL requirements (Bollard, 2019). Accordingly, a substantial temporary or permanent increase in ambient noise levels would not occur, and this impact would be less than significant.

b) Generation of excessive groundborne vibration of groundborne noise levels?

No Impact. Groundborne vibration is a result of vibrating objects coming in to contact with the ground, and that vibration radiating through the ground to nearby buildings. The Yolo County General Plan EIR sets the threshold for annoyance due to vibration in residential settings at 70 VdB (vibrations from noise levels). Groundborne vibration is almost never annoying to people who are outdoors. The equipment that would be used for construction is listed in Table 5.13-1. The activities that would be most likely to cause groundborne vibration would be the passing of heavy trucks on uneven surfaces. Loaded trucks have a typical vibration level of 86 VdB at 25 feet (Yolo County EIR, 2009). The impact from construction-related vibrations would be confined to the immediate area around activities and would be short-term. The nearest residence to the proposed Project is 1,800 feet away, reducing any effects of groundborne vibration or noise levels. Therefore, there would be no impact under this criterion.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The nearest airport is located 2.1 miles northwest of the proposed Project site. G3 Ranch Airport-63CL is a privately owned and used unpaved airstrip. As stated above in part a), the temporary and permanent noise levels from the Project would be well within the CNEL requirements and would not impact this or any other airports or airstrips. No excessive noise would result from Project construction or operations that could impact people residing or working near the airstrip. As such, there would be no impact under this criterion.

Mitigation Measures

No mitigation required.

Noise Impact Conclusions

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

5.14 Population and Housing

POPULATION AND HOUSING

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The Project site is located in the unincorporated Yolo County community of Capay, which is characterized by scattered rural residences. As of January 2019, the population in Yolo County, including the cities of Davis, West Sacramento, Winters, and Woodland, was estimated at 222,581, with a 0.6 percent population growth from January 1, 2018 (CDEF, 2019). The proposed Project site is located on land zoned A-N, and the immediate surrounding area consists of very few residences.

Impact Analysis

a) *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

No Impact. There would be no direct population growth induced by this Project because it does not involve the construction of new residences or businesses, nor does it provide long-term jobs. Construction needs are not expected to require relocation of workers to the area. The approximately 10 Project construction personnel are expected to be mostly derived from the local labor pool. As of 2016, there were 3,600 construction workers residing within the incorporated and unincorporated areas of Yolo County (CEDD, 2019). The operations and maintenance of the cell tower will be performed by existing AT&T Mobility employees. Therefore, the proposed Project would not result in an increase in population levels nor a decrease in available housing.

The goal of the Project is to improve telecommunications in unincorporated Yolo County, benefitting emergency response, travelers, and residences in the area. Increased communication could potentially facilitate development or increased employment opportunities in the regional workforce, but since the tower is located in a rural area, any potential development in the Project area would be minimal.

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

No Impact. The proposed Project would not displace any existing people or housing and would not require the construction of replacement housing. The construction would occur for approximately 90 days and would not require permanent location of workers to the Project area.

Mitigation Measures

No mitigation required.

Population and Housing Impact Conclusions

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

5.15 Public Services

PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

According to the County of Yolo 2030 Countywide General Plan, a large number of fire districts and the Rumsey Tribe provide fire protection, rescue, emergency medical services, and hazardous material response within the unincorporated areas of Yolo County. The Project site would be in the Capay Valley Fire District, nestled between two fire stations, Yocha Dehe Fire Department (3.7 miles) and Esparto Fire Department (6.3 miles). Law enforcement services in Yolo County are provided by the County Sheriff-Coroner. This department patrols the County, administers the County Jail and work program, provides animal control services, and serves as the County Coroner. The department has 276 full-time employees, plus 28 extra-help employees (Yolo County, 2009).

The Project would reside in the Esparto Unified School District, which consists of one elementary school, one junior high school, a high school in the town of Esparto, and a high school in the community of Madison.

There are six parks in the western part of Yolo County. The Esparto Community Park and Tuli Mem Park and Aquatic Center are located in the town of Esparto. The one-acre Esparto Community Park serves the community with picnic tables, barbecues, a playground, and other park facilities. The 8.67-acre Tuli Mem Park and Aquatic Center in Esparto opened this year providing a youth baseball/softball field, a soccer/football field and a full outdoor basketball court; a pedestrian bridge, walking trail and a central gathering area with picnic tables, and other park facilities for the community. The Aquatic Center contains a wading pool and an eight-lane swimming pool.

Other parks located in the Capay Valley include Capay Open Space, Vernon Nichols Community Park in Guinda, Valley Vista Regional Park, and Cache Creek Canyon Regional Park. These parks total approximately 1,334 acres of land along Cache Creek providing opportunities to swim, fish, hike, camp, picnic and enjoy the scenic beauty of the Capay Valley.

The nearest hospital is Woodland Memorial Hospital (20 miles away), although a health clinic is planned for the town of Esparto 6 miles away.

Impact Analysis

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*

Less Than Significant. Though the surrounding area is primarily agricultural and grasslands, California Department of Forestry and Fire Protection (CAL FIRE) designates the Project site as a Moderate Fire Hazard Severity Zone (CAL FIRE, 2007). The nearest fire department is located 3.7 miles from the proposed Project site. Construction and implementation of the proposed Project could increase the risk for fire, and thus the demand for fire services, due to the electrical distribution lines and the diesel generator with a 190-gallon fuel tank that would be stored onsite as a backup generator to supply power to the cell tower in the event of a power outage. The Project would meet current building and fire codes and comply with all County Fire requirements at the site to reduce the risk of fire. The fire risk would not create the need for new or physically altered fire protection facilities. In addition, the Project would not affect the ability of fire personnel to respond to fires. The Project is not expected to induce population growth in the Project area or affect service ratios, response times, or other performance objectives for fire response services. Therefore, the impact on fire protection services would be less than significant.

ii. *Police protection*

Less Than Significant. The proposed Project would not require police services during construction or operation and maintenance beyond routine patrols and response at the level currently provided. As with fire protection services discussed above, the construction and operation of the proposed Project would not induce growth in the Project area, result in a need for additional police facilities, or significantly affect response times or other service performance. Any potential impacts to police protection services would result in a less than significant impact.

iii. *Schools*

No Impact. The proposed Project would not be expected to result in an increase in population within the area. Construction is expected to take approximately 90 days and would not require the permanent relocation of workers to the proposed Project area. All the construction personnel (approximately 10 workers) would most likely be sourced from the existing local labor force. There would not be an expected increase in families or in school-age children as a result of the temporary construction workers who would not likely migrate to the area.

iv. *Recreation/Parks*

No Impact. The required construction workforce for the Project would likely be hired from the available regional workforce. Although some workers may use recreational areas during Project construction, increased use would be minimal and/or temporary and would not contribute substantially to the physical deterioration of existing facilities. No impacts would occur.

v. *Other public facilities*

No Impact. Project construction has the potential to temporarily increase the number of people in communities in the Project vicinity. However, public facilities, such as local area emergency medical facilities, are expected to adequately handle a potential small, temporary increase in the local population. Therefore, there would be no impacts on other public facilities.

Mitigation Measures

No mitigation required.

Public Services Impact Conclusions

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

5.16 Recreation

RECREATION

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Yolo County has six parks located in the Capay Valley. Three of these are County “resource” parks including regional and open space parkland. Resource parks refer to parks and trails that are much larger in size than a community park. These parks are intended to provide recreational areas for both the County population and outside visitors (Yolo County, 2009). These parks include Capay Open Space, Valley Vista Regional Park, and Cache Creek Canyon Regional Park totaling approximately 1,313 acres of land along Cache Creek for activities such as swimming, fishing, hiking, camping, picnicking, and enjoying the scenic beauty of the Capay Valley.

Community parks include Esparto Community Park and Vernon Nichols Park in Guinda. The one-acre Esparto Community Park has a playground, barbecue, picnic tables and restroom. Vernon Nichols Park provides the same facilities along with a baseball field and access to Cache Creek for fishing and swimming. Additionally, the 8.67-acre Tuli Mem Park and Aquatic Center in Esparto opened this year providing a youth baseball/softball field, a soccer/football field and a full outdoor basketball court, a pedestrian bridge, walking trail and a central gathering area with picnic tables, a wading pool, an eight-lane swimming pool, and other park facilities for the community. It is owned by the Esparto Unified School District and maintained by the Esparto Community Services District.

Of the many parks and recreational facilities located in Yolo County, those closest to the proposed Project site include the 41-acre Capay Open Space Park and Trail System (4.5 miles) and the Esparto Community Park (6.3 miles). These parks are owned and maintained by Yolo County (Yolo County, 2009).

Impact Analysis

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The temporary Project construction time would be approximately 90 days, throughout which there would be a maximum of 10 construction workers. This would have no effect on the access or use of recreational facilities such that would cause substantial physical deterioration of the facility.

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

No Impact. The Project does not include any use of recreational facilities or require construction or expansion of facilities that might have an adverse physical effect on the environment.

Mitigation Measures

No mitigation required.

Recreation Impact Conclusions

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

5.17 Transportation

TRANSPORTATION

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Vehicles associated with the proposed Project would use regional and local roadways, primarily Interstate 505 (I-505) and SR 16 for accessing the site. Direct site access would occur via CR 81, which connects to SR 16. At the intersection of SR 16 and I-505, average daily traffic (ADT) volumes on I-505 were 11,200 vehicles per day as of 2017 (Caltrans, 2017). At the intersection of SR 16 and CR 89, ADT volumes were 10,700 vehicles per day as of 2017 (Caltrans, 2017).

Mass Transit

The nearest mass transit system is the YoloBus system, with service between Woodland, Esparto, and Cache Creek Casino and Resort. Buses leave Woodland County Fair Mall hourly from 4:55 a.m. to 8:55 a.m., 12:55 p.m. to 4:55 p.m., and 8:55 p.m. to 11:55 p.m. There is an additional trip at 5:45 a.m., 1:45 p.m., and 9:45 p.m. The nearest bus stop to the Project is the Cache Creek Casino and Resort (3 miles). (YoloBus, 2018).

Bicycle

Designated bicycle (and pedestrian) pathways are not located along roadways accessing the proposed Project site. It is possible that bicyclists use the shoulders of SR 16 in the Project vicinity; however, cyclists are not expected to be present frequently, given the distance to the nearest major population centers.

Impact Analysis

- a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Less than Significant Impact. The proposed Project would result in temporary traffic trips during construction and minimal traffic trips (twice per month) for maintenance of the cell tower. Vehicle trips during construction would consist of materials and equipment deliveries in addition to construction worker commutes. Material and equipment deliveries would likely be distributed throughout the workday. Commuter trips are assumed to come from the local area and would be congregated at the beginning and end of the workday. While both temporary and permanent traffic trips would occur on State and local roadways, the Project would not generate a large traffic volume to conflict with a program, plan, ordinance or policy addressing the circulation system.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant. As discussed in CEQA Guidelines Section 15064.3 (b), a qualitative analysis of construction traffic vehicle miles travelled (VMT) may be appropriate. As discussed above in section a), construction worker commuter trips (10 people) are expected to come from the local area. Some truck trips containing materials may travel long distances to reach the Project site. These long-distance trips may require high VMT to access the Project site, but they would be temporary and very limited in volume due to the limited materials required for construction of the Project. At this time, there are no known applicable VMT thresholds of significance for temporary construction trips that may indicate a significant impact. The operation and maintenance of the facility would require very few (two per month) vehicle trips and would primarily come from the local area. The significance threshold for operations workforce for small projects is 110 vehicle trips per day (OPR, 2018). This is significantly higher than what would be generated by operation traffic. Therefore, the proposed Project would not affect existing transit uses or corridors, and would cause a less than significant transportation impact in regard to CEQA Guidelines Section 15064.3(b).

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

No Impact. All construction disturbance would be located on private land within the proposed Project site. The Project site does not include modifications to any public roadways or driveways. The gravel access road would be improved to a compacted gravel access road, but the route of the road would not change, remaining compatible with farm equipment. During construction, oversize truck trips would be expected to deliver large pieces of construction equipment and communications tower materials to the site. All oversized trucks would require obtaining permits from Caltrans and local jurisdictions, as needed. The construction contractor would follow all rules and requirements of such permits. There would be no impacts due to increased hazards associated with the Project.

d) Result in inadequate emergency access?

Less Than Significant. During construction, some oversize truck trips are expected to deliver large pieces of construction equipment and materials to the site. These activities may include brief temporary delays on local roads providing access to the site. However, all oversized truck trips would require obtaining permits from Caltrans and local jurisdictions, as needed. The construction contractor would follow all rules and requirements of such permits. These permits include assurances for emergency vehicle movements and access. Additionally, no roadway or lane closures are expected during construction. In the event deliveries require any disruption to public roadways, flagmen would be present to ensure traffic flow, including emergency vehicle flow through the area and access to any nearby residences or areas. Once operational, the proposed Project would have no impact on access or movement to emergency service providers. Impacts would be less than significant.

Mitigation Measures

No mitigation required.

Transportation Impact Conclusions

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

5.18 Tribal Cultural Resources

TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
(i) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(ii) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision © of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Tribal Cultural Resources (TCRs) is a newly defined class of resources under Assembly Bill 52 (AB 52). TCRs include sites, features, places, cultural landscapes, and sacred places or objects that have cultural value or significance to a Tribe. To qualify as a TCR, the resource must either: 1) be listed on, or be eligible for, listing on the CRHR or other local historic register; or 2) constitute a resource that the lead agency, at its discretion and supported by substantial evidence, determines should be treated as a TCR (PRC §21074). AB 52 also states that tribal representatives are considered experts appropriate for providing substantial evidence regarding the locations, types, and significance of TCRs within their traditional and cultural affiliated geographic areas, and therefore, the identification and analysis of TCRs should involve government-to-government tribal consultation between the CEQA lead agency and interested tribal groups and/or tribal persons. (PRC § 21080.3.1(a)).

Approach to Analysis of Tribal Cultural Resources

Information presented in this section was gathered through AB 52 government-to-government consultation between Yolo County and the California Native American Tribes that have cultural affiliations with the proposed Project area and that have requested to consult on the proposed Project. Supplementary information was gathered from the cultural resources literature and records search, cultural resources field survey, and ethnographic summary that was described in detail in Section 5.5 (Cultural Resources).

The proposed Project's effects on TCRs was evaluated using the significance criteria set forth in Appendix G of the CEQA Guidelines and with consideration to Assembly Bill 52 and the Governor's Office of Planning and Research's, "Technical Advisory: AB 52 and Tribal Cultural Resources in CEQA (June 2017)." The conclusions are discussed in more detail below.

There are no known TCRs located within the proposed Project area and no known TCRs within 0.5 mile of the proposed Project area's boundary. Therefore, the analysis concludes that there would be no potential impacts to TCRs. However, there is always the potential for impacts to cause an unexpected impact to

buried TCRs that are at present unknown and unrecorded; therefore, mitigation measures MM CR-1 through MM CR-3 are recommended (see below for more details).

Project Notification

AB 52 requires that within 14 days of the lead agency determining that a project application is complete, a formal notice and invitation to consult about the proposed Project is to be sent to all tribal representatives who have requested, in writing, to be notified of projects that may have a significant effect on TCRs located within the proposed Project area (PCR § 21080.3.1(d)).

On March 1, 2019 Yolo County Department of Community Services sent emails to a total of five tribes that had previously submitted a written request to Yolo County to receive notification of proposed projects. These tribes included the Yocha Dehe Wintun Nation, Wilton Rancheria, Cortina Rancheria Band of Wintun Indians of California, Ione Band of Miwok Indians, and Torres Martinez Desert Cahuilla Indians.

Emails included a brief description of the proposed Project, instructions on how to contact the lead agency Project Manager, and a statement that responses must be received within 30 days of the date of receipt of the email.

One tribe, the Yocha Dehe Wintun Nation, responded with a letter dated March 14, 2019 requesting to consult on the proposed Project.

AB 52 Native American Tribal Consultation

AB 52 states that once California Native American tribes have received the project notification letter, the tribe then has 30 days to submit a written request to consult pursuant to PCR § 21080.3.1(d)). Upon receiving a Tribe's written request to consult, the lead agency then has 30 days to begin government-to-government consultation. Consultation must include discussion of specific topics or concerns identified by tribes. Any information shared between the Tribes and the lead agency representatives is protected under confidentiality laws and subject to public disclosure only with the written approval of the Tribes who shared the information (GC § 6254(r); GC § 6254.10; PCR § 21082.3.(c)(1-2)).

Consultation, as defined in AB 52, consists of the good faith effort to seek, discuss, and carefully consider the views of others. Consultation between the lead agency and a consulting Tribe concludes when either of the following occurs: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists on a TCR; or 2) a consulting party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PCR § 21080.3.2(b)).

One tribe requested to consult on the proposed Project. In-person meetings were held at the Project site on June 18, 2019. The topics of conversation included questions about the depth of excavations and amounts of ground disturbance. No TCRs were identified that may be impacted by the proposed Project. However, potential impacts to unknown cultural resources are possible. In response to potential impacts identified during AB 52 consultation, the mitigation measures MM CR-1 through MM CR-3 in Chapter 5.5, Cultural Resources, were developed to address these impacts. These mitigation measures were circulated for tribal comment on October 15, 2019.

Regulatory Background

Federal

Because the Project requires a permit from the Federal Communications Commission, the Project is an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA). See Section 5.5 (Cultural Resources, Environmental Setting) for more information.

State

California Environmental Quality Act

Public Resources Code, section 21074 defines a TCR as a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe. TCRs also include “non-unique archaeological resources” that may not be scientifically significant, but still hold sacred or cultural value to a consulting tribe.

A resource shall be considered significant if it is: (1) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PCR §5020.1(k); or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PCR §5024.1. In applying these criteria, the lead agency must consider the significance of the resource to a California Native American tribe.

Local

2030 Countywide General Plan for Yolo County

Policies, procedures and professional performance standards related to cultural resources are contained within the Land Use and Community Character Element and the Conservation and Open Space Element.

Impact Analysis

- a) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*

Less Than Significant with Mitigation Incorporated. There are no known TCRs that are listed in, or are known to be eligible for listing in, the CRHR or local register of historical resources within the proposed Project or the 1/2-mile surrounding area. However, portions of the Project area are highly sensitive for buried prehistoric resources. Therefore, it is possible that previously unidentified TCRs that may be eligible for inclusion in the CRHR or local registers could be discovered and damaged, or destroyed, during ground disturbance, which would constitute a significant impact absent mitigation. Implementation of MM CR-1 through MM CR-3 would evaluate and protect unanticipated TCR discoveries; thereby, reducing this impact to less than significant.

- b) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

Less Than Significant with Mitigation Incorporated. There are no known TCRs identified by the consulting tribes during AB 52 Native American consultation or that were determined by the lead agency to qualify as a historical resource within the proposed Project or 1/2-mile surrounding area. However, portions of the Project area are highly sensitive for buried prehistoric resources. Therefore, it is possible that

previously unidentified TCRs could be discovered and damaged, or destroyed, during ground disturbance, which would constitute a significant impact absent mitigation. Implementation of mitigation measures MM CR-1 through MM CR-3 (described above) would evaluate and protect unanticipated TCR discoveries; thereby, reducing this impact to less than significant.

Mitigation Measures

Please see MM CR-1 through MM CR-3.

Tribal Cultural Resources Conclusions

Portions of the Project area are highly sensitive for buried historic-era and prehistoric-era archaeological resources. Monitoring and treatment of any resources inadvertently discovered in these areas would reduce these potential impacts to a less than significant level.

5.19 Utilities and Service Systems

UTILITIES AND SERVICE SYSTEMS

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

According to the County General Plan, the most common method of wastewater treatment in unincorporated Yolo County is by private septic system. The community of Capay, which includes the proposed Project site, does not have a community wastewater treatment system but relies on individual septic systems (Yolo County, 2009).

Similarly, stormwater drainage facilities are limited in the unincorporated County. Many agricultural land uses employ on-site ditches that convey stormwater water to existing roadside ditches (Yolo County, 2009).

Utility service in Yolo County is provided by PG&E. Two major north-south transmission line corridors have been developed in the County, running along Dunnigan Hills and I-505 in the west and along Yolo Bypass in the east. The primary natural gas transmission line is also aligned along the Capay Hills. Two new gas lines (L-406 and L-407) were recently constructed from Capay station to Antelope California (James Winne, personal communication, October 4, 2019).

AT&T is the primary provider of land line telephone service. Cell phone and wireless service is provided by a network across the County, but there are gaps or poor reception in several of the unincorporated communities and remote rural areas.

There are two public facilities for solid waste and recycling in Yolo County, those being the Yolo County Central Landfill and Esparto Convenience Center. The Yolo County Central Landfill is a 722-acre, Class III solid waste landfill that provides solid waste and recycling services. At the current waste disposal rate, the landfill's closure date is estimated as January 1, 2081. The Esparto Convenience Center is an 11-acre facility accepting residential municipal solid waste and recycling. The transfer station does not have an estimated operational life; it will be closed when it is no longer needed (Yolo County, 2009).

Impact Analysis

- a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

No Impact. The temporary construction is scheduled to last approximately 90 days, and most of the labor force (10 workers) would be sourced locally. The proposed Project would create a new freestanding cell tower facility to better serve the existing community of unincorporated Yolo County, near the town of Capay. It would connect to existing power and telecommunications utilities along a preexisting easement. The Project itself would not require or result in the relocation or construction, of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities. No impact would occur.

- b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

Less Than Significant Impact. Water would be used during construction to control fugitive dust. YSAQMD recommends that all construction areas be watered at least twice daily to control fugitive dust. However, the small disturbance footprint, 1.945 acres, would not require excessive amounts of water for dust control. Once construction is completed, water would not be required for the maintenance and operations of the cell tower. There are sufficient water supplies to provided dust management during the construction of the Project.

- c) *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?*

No Impact. There is not a local wastewater treatment provider in this area of unincorporated Yolo County. Additionally, the Project has no need for a wastewater system because operation and maintenance of the facility is performed by employees spending about 15 to 30 minutes during each maintenance check. Hence, it would not require the use of water or produce any wastewater.

- d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

Less Than Significant Impact. It is assumed that soil from the grading will be used in the cut and fill of the slope so that there are no excess soil spoils once the site is graded. Due to the size of the Project, the amount of construction waste will be minimal. Furthermore, California's Green Building Standards Code (CALGreen) requires that at least 50 percent of construction and demolition waste be diverted from the landfill (CalRecycle, 2019). The 722-acre capacity of the Yolo County Central Landfill would not be significantly impacted by the amount of waste materials for disposal generated as a result of construction activities. No solid waste would be generated as a result of operation or maintenance of the Project. Therefore, the Project would not generate solid waste in excess of State or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

- e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

No Impact. The California Integrated Waste Management Act of 1989, which emphasizes resource conservation through the reduction, recycling, and reuse of solid waste, requires that localities conduct a Solid Waste Generation Study and develop a Source Reduction Recycling Element. Yolo County prepared

a County Integrated Waste Management Plan that includes a Source Reduction and Recycling Element, a Household Hazardous Waste Element, and a Non-disposal Facility Element. The proposed Project would operate in accordance with these applicable Solid Waste Management Policy Plans by including recycling where feasible. As identified in Item d) above, the disposal site serving the Project would have sufficient capacity to accommodate the Project's solid waste disposal needs, and the Project would not require the need for new or expanded landfill facilities. Therefore, the proposed Project would comply with federal, State, and local statutes and regulations related to solid waste disposal limits and landfill capacities. No impact would occur.

Mitigation Measures

No mitigation required.

Utilities and Service Systems Impact Conclusions

No potentially significant adverse impacts are identified or anticipated, and no mitigation measures are required.

5.20 Wildfire

WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, **would the project:**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

CAL FIRE has developed a Fire Hazard Severity Scale that uses three criteria to evaluate and designate potential fire hazards in wildland areas. The criteria include fuel loading (vegetation), fire weather (winds, temperatures, humidity levels, and fuel moisture controls), and topography (degree of slope). The Project location would be located in a Moderate Fire Hazard Severity Zone in the State Responsibility Area, meaning that fire suppression is under the control of CAL FIRE (CAL FIRE, 2007). The undeveloped hills south of the Project are classified as Very High Hazard Severity due to the grassy vegetation that dries out during the summer months (Yolo County, 2009).

Fire season in Yolo County runs from May through October. Dry vegetation during this time period provides fuel for fires and can be exacerbated by hot north winds during periods of extremely low humidity. The County and municipalities do fight a large number of vegetation fires primarily along highways and roadways. Local fire stations are responsible for their districts, and CAL FIRE has equipment and staff available in Yolo County during the fire season (Yolo County, 2009).

Impact Analysis

a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

No Impact. The purpose of the telecommunication tower is to improve communication throughout the area, and thus, facilitate improved emergency access. Therefore, the Project would not physically interfere with an adopted emergency response plan or emergency evacuation plan.

b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

Less Than Significant Impact with Mitigation. The proposed Project is located partway up a small hill on the Taber Ranch property. The surrounding area to the north, east, and west is a flat valley in agricultural cultivation, while the area to the south consists of undeveloped grassy hills. Construction equipment and vehicles used for grading, foundation excavation, and tower installation would run on fossil fuels. The new

telecommunications tower would be powered by an underground power line connected to an existing transformer. The underground nature of this utility line would reduce the risk of fire. The operation of the facility would require the use of a 190-gallon, 30kW diesel generator, which would be used on an as-needed basis during power outages to power the cell tower and the air conditioning unit for the walk-in cabinet.

The combined conditions of a gradual slope, high wind potential, and the presence and usage of fuels and power could lead to an increased risk of wildfire and pollutant concentrations. To reduce wildfire risk from construction and operation activities, the proposed Project shall implement MM WF-1 (Prepare a Fire Prevention Plan). With the implementation of MM WF-1, the Project would have a less than significant impact to wildfire risk and increased pollutant concentrations as a result of the slope, prevailing winds, and other factors.

- c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

Less Than Significant Impact. The proposed Project plans include the improvement of the site access road to the Project from a gravel access road to an all-weather gravel access road. This would allow emergency services, including fire, to access the site in the case of a fire or other emergency. Additionally, an underground power line would be installed to bring power from a nearby transformer to the proposed tower location. The construction associated with the road improvement would be minor, and the underground nature of the power line would not increase the risk of fire that may result in temporary or ongoing impacts to the environment. Also, with the implementation of the Fire Prevention Plan required by MM WF-1, any impacts would be less than significant.

- d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

Less Than Significant. As discussed in section 5.7 (Geology and Soils), the proposed Project is located on an area of Moderate Landslide Susceptibility (Yolo County, 2009) and soil that is well-drained, limiting the risk of a landslide. The grading required for the Project would be minimal for the 0.024-acre footprint of the tower's foundation. Additionally, the slope the tower would be built on is moderate. The Project is 1,800 feet away from the nearest residence and is primarily surrounded by grasslands and vineyards. Final engineering would incorporate the results of geotechnical evaluations into the foundation design and location, and adherence to building standards would ensure any impacts related to downstream flooding or landslides would be less than significant.

Mitigation Measures

MM WF-1 Prepare and Implement a Fire Prevention Plan. A Project-specific fire prevention plan for construction of the Project shall be prepared by AT&T Mobility and submitted for review and approval prior to initiation of construction. The draft copy of this Plan is to be provided to the local fire agency at least 90 days before the start of any construction activities. Plan reviewers shall include Yolo County, CAL FIRE, and the local municipal fire agency with jurisdiction over the area where the Project is located. Comments on the Plan shall be provided by AT&T Mobility to all other participants, and AT&T Mobility shall resolve each comment in consultation with Yolo County, CAL FIRE, and the local municipal fire agency, as appropriate. The final Plan shall be approved by these agencies at least 30 days

prior to the initiation of construction activities. AT&T Mobility shall fully implement the Plan during all construction and maintenance activities.

The plan should recognize and prepare for the potential that fast moving, wind driven wildfires could burn adjacent or through the proposed Project as the result of severe fire weather conditions, flash fuels such as provided by perennial grasslands, and abundant ignition sources. Wind driven fires can quickly overcome operational and maintenance crews, placing their health and safety at risk.

The Plan shall cover:

- The purpose and applicability of the plan
- Responsibilities and duties
- Preparedness training and drills
- Procedures for fire reporting, response, and prevention that include:
 - identification of daily site-specific risk conditions
 - the tools and equipment needed on vehicles and to be on-hand at the site
 - reiteration of fire prevention and safety considerations during tailboard meetings
 - daily monitoring of the red-flag warning system with appropriate restrictions on types and levels of permissible activity
- Coordination procedures with CAL FIRE and Yolo County fire officials
- Crew training, including fire safety practices and restrictions
- Method for verification that Plan protocols and requirements are being followed

Wildfire Impact Conclusions

There is a moderate level of wildfire risk within the proposed Project site, and a high level of wildfire risk in the natural lands adjacent to the proposed Project site. With the implementation of MM WF-1, any potentially significant impacts would be reduced to less than significant.

5.21 Mandatory Findings of Significance

MANDATORY FINDINGS OF SIGNIFICANCE		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Does the project have the potential to substantially 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, substantially 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Does the project have the potential to substantially 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, substantially 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?*

Less Than Significant with Mitigation Incorporated. Based on the information provided in this Initial Study and the mitigation measures required, the Project would not degrade the quality of the environment.

As analyzed in this Initial Study, with implementation of the mitigation measures for Biological and Cultural resources, Geology and Soils, Hazards and Hazardous Materials, and Wildfire, the Project would not have the potential to substantially degrade the quality of the environment. Nor would it 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, substantially 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 majority of the impacts are less than significant and where the potential for a significant impact exists, mitigation has been included to reduce the impact to less than significant.

b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Yolo County has a strong focus on protecting its agricultural and open space reserves, commodities, and identity. The County resists urbanization with the goal of maintaining its rural character. The 2030 County-wide General Plan outlines the following strategies for the development vision for growth in the coming years:

1. Modest managed growth within specified existing unincorporated communities, where accompanied by improvements to existing infrastructure and services, as well as by suitable new infrastructure and services;
2. Opportunities for revenue-producing and job-producing agricultural, industrial and commercial growth in limited locations and along key transportation corridors;
3. Thresholds that allow for effective and efficient provision of services, consistent with rural values and expectations;
4. New emphasis on community and neighborhood design requirements that reflect “smart growth” principles and complement the character of existing developed areas.

Less Than Significant. Based on the analysis provided in this Initial Study, the Project would have no significant cumulative impacts. Considering the development plans of the County to limit growth, the size of the Project impact area, and its construction in response to existing need, the Project would not have significant cumulative impacts with other past or future projects. Additionally, the relatively short construction time and minimal additional energy load from the Project would not contribute to significant cumulative impacts. Therefore, the impact would be less than significant.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant. As described in this Initial Study, the Project would not have substantial adverse effects on human beings, directly or indirectly. Most impacts on the environment are less than significant and where the potential for a significant impact exists, mitigation measures have been included to reduce the impact to less than significant. Consequently, preparation of an Environmental Impact Report is not required.

6. Summary of Mitigation Measures

The following mitigation measures were identified to reduce project impacts to less than significant.

Biological Resources

- MM-BIO-1 Prevent Contamination of Sensitive Habitats.** To prevent contamination of fuel into sensitive habitats, the following measures will apply:
- The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the State and U.S.
 - Areas for fuel storage, refueling and servicing of construction equipment must be located in an upland location
 - Wash sites must be located in upland locations to ensure wash water does not flow into the stream channel or adjacent wetlands
 - All construction equipment must be in good working condition, showing no signs of fuel or oil leaks. All questionable motor oil, coolant, transmission fluid, and hydraulic fluid hoses, fittings and seals shall be replaced. The mechanical equipment shall be inspected on a daily basis to ensure no leaks. All leaks shall be repaired in the equipment staging area or other suitable location prior to resumption of construction activity
 - Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation and/or within 100 feet of a waterway. If a spill occurs, no additional work shall occur within 100 feet of the waterway until: (1) the mechanical equipment is inspected by the contractor and the leak has been repaired, (2) the spill has been contained, and (3) CDFW and Yolo County are contacted and have evaluated the impacts of the spill.
- MM BIO-2 Sediment Control.** To avoid debris contamination into drainages and other sensitive wildlife habitats, silt fence or other sediment control devices will be placed around construction sites to contain spoils from construction excavation activities.
- MM BIO-3 Preconstruction Surveys.** Surveys for identified special-status species by qualified biologists shall be conducted at the appropriate times before construction starts to determine occupancy at the site. If no special-status species are found, no further action is required. If individuals are found, including plants or nesting birds, a buffer zone around the species or nest will be required at a sufficient distance to prevent take of individuals or until after the nesting season.
- MM BIO-4 Check Under Equipment and Stored Materials for Special-status Species.** Due to the potential for special-status species to occur, move through, or into the Project area, an on-site biological monitor, shall at a minimum, check the ground beneath all equipment and stored materials each morning prior to work activities and during ground-disturbing activities to prevent take of individuals. All pipes or tubing four inches or greater shall be sealed by the relevant contractor with tape at both ends to prevent animals from entering the pipes at night. All trenches and other excavations shall be backfilled the same day they are opened, or shall have an exit ramp built into the excavation to allow animals to escape.

MM BIO-5 **Bird Nesting Surveys.** If ground-disturbing activities occur during the breeding season of migratory avian and raptor species (February through mid-September), surveys for active nests will be conducted by a qualified biologist no more than 10 days prior to start of activities. Pre-construction nesting surveys shall be conducted for nesting migratory avian and raptor species in the Project site and buffer area. Pre-construction biological surveys shall occur prior to the proposed Project implementation, and during the appropriate survey periods for nesting activities for individual avian species. Surveys will follow required CDFW and USFWS protocols, where applicable. A qualified biologist will survey suitable habitat for the presence of these species. If a migratory avian or raptor species is observed and suspected to be nesting, a buffer area will be established to avoid impacts to the active nest site. Identified nests should be continuously surveyed for the first 24 hours prior to any construction-related activities to establish a behavioral baseline. If no nesting avian species are found, Project activities may proceed, and no further Standard Construction Conditions measures will be required. If active nesting sites are found, the following exclusion buffers will be established, and no Project activities will occur within these buffer zones until young birds have fledged and are no longer reliant upon the nest or parental care for survival.

- Minimum no disturbance of 250 feet around active nest of non-listed bird species and 250-foot no disturbance buffer around migratory birds
- Minimum no disturbance of 500 feet around active nest of non-listed raptor species
- One-half mile no disturbance buffer from listed species and fully protected species until breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.
- Once work commences, all nests should be continuously monitored to detect any behavior changes as a result of Project activities. If behavioral changes are observed, the work causing that change should cease and the appropriate regulatory agencies (i.e., CDFW, USFWS, etc.) shall be consulted for additional avoidance and minimization measures.
- A variance from these no disturbance buffers may be implemented when there is compelling biological or ecological reason to do so, such as when the Project area would be concealed from a nest site by topography. Any variance from these buffers is advised to be supported by a qualified wildlife biologist and is recommended that CDFW and USFWS be notified in advance of implementation of a no disturbance buffer variance.

MM BIO-6 **California Red-legged Frog Construction Monitoring.** The Project proponent shall implement the following Standard Construction Conditions to prevent mortality of individual red-legged frog that may be found migrating across or aestivating on the proposed Project site during proposed Project activities.

- Preconstruction surveys shall be completed within 48 hours prior to commencement of any earth-moving activity, construction, or vegetation removal within Project sites, whichever comes first. The preconstruction survey shall include two nights of nocturnal surveys in areas of suitable habitat.
- If any frogs are encountered during the surveys, all work in the work area shall be placed on hold while the findings are reported to the CDFW and USFWS and it is determined what, if any, further actions must be followed to prevent possible take of this species.

- Where construction will occur in frog habitat where frogs are potentially present, work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat areas. A qualified biologist will assist in determining the boundaries of the area to be fenced in consultation with the Yolo County, USFWS, and CDFW. All workers will be advised that equipment and vehicles must remain within the fenced work areas.
- The USFWS authorized biologist will direct the installation of the fence and will conduct biological surveys to move any individuals of these species from within the fenced area to suitable habitat outside of the fence. Exclusion fencing will be at least 24 inches in height. The type of fencing must be approved by the authorized biologist, the USFWS, and CDFW. This fence should be permanent enough to ensure that it remains in good condition throughout the duration of the construction on the Project site. It should be installed prior to any site grading or other construction-related activities are implemented. The fence should remain in place during all site grading or other construction-related activities. The frog exclusion fence could be “silt fence” that is buried along the bottom edge.
- If any individuals of these species are found within an area that has been fenced to exclude these species, activities will cease until the authorized biologist moves the individuals.
- If any of these species are found in a construction area where fencing was deemed unnecessary, work will cease until the authorized biologist moves the individuals. The authorized biologist in consultation with USFWS and CDFW will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist.
- Any individuals found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities.
- Clearance surveys shall occur on a daily basis in the work area.
- The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed.
- To ensure that diseases are not conveyed between work sites by the authorized biologist, or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force will be followed at all times.
- Project construction activities shall be limited to daylight hours, except during an emergency, to avoid nighttime activities when frogs may be present. Because dusk and dawn are often the times when frogs are most actively foraging and dispersing, all construction activities should cease one half hour before sunset and should not begin prior to one half hour after sunrise.
- Traffic speed should be maintained at 10 miles per hour or less in the work area.

Cultural Resources

MM CR-1 Cultural Resources Monitoring. All utility trenching and other ground-disturbing construction activities within the boundaries of the Taber's Corner Historic District (P-57-000486/ CA-YOL-0205H) and within 100 feet of a drainage shall be monitored by a cultural resources specialist supervised by a Secretary of the Interior qualified archaeologist. At the request of AB 52 consulting tribes, a tribal monitor shall also be present in these locations. Upon completion of construction, a brief letter report presenting the results of the monitoring efforts shall be prepared. After Yolo County reviews and approves the final report, the report shall be submitted to the CHRIS NWIC.

MM CR-2 Inadvertent Discovery of Historical Resources, Unique Archaeological Resources or Tribal Cultural Resources. If previously unidentified cultural resources are identified during construction activities, construction work within 50 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist assesses the significance of the resource. The archaeologist, in consultation with the County, the State Historic Preservation Officer, any interested Tribes, and any other responsible public agency, shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be eligible to the National or California Registers, qualify as a unique archaeological resource under CEQA (PRC §21083.2), or are determined to be tribal cultural resource as defined in PRC §21074.

MM CR-3 Treatment of Human Remains. All human remains discovered are to be treated with respect and dignity. Upon discovery of human remains, all work within 50 feet of the discovery area must cease immediately, nothing is to be disturbed, and the area must be secured. The County Coroner's Office must be called. The Coroner has two working days to examine the remains after notification. The appropriate land manager/owner of the site is to be called and informed of the discovery. It is very important that the suspected remains, and the area around them, are undisturbed and the proper authorities called to the scene as soon as possible, because it could be a crime scene. The Coroner would determine if the remains are archaeological/historic or of modern origin and if there are any criminal or jurisdictional questions.

After the Coroner has determined that the remains are archaeological/historic-era, the Coroner would make recommendations concerning the treatment and disposition of the remains to the person responsible for the excavation, or to his or her authorized representative. If the Coroner believes the remains to be those of a Native American, he/she shall contact the Native American Heritage Commission (NAHC) by telephone within 24 hours.

The NAHC would immediately notify the person it believes to be the most likely descendant (MLD) of the remains. The MLD has 48 hours from the time they are given access to the site to make recommendations to the landowner for treatment or disposition of the human remains. If the descendant does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from further disturbance. If the landowner does not accept the descendant's recommendations, the owner or the descendant may request mediation by NAHC.

According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and willful disturbance of human remains is a felony (Section 7052).

Geology and Soils

- MM PAL-1 Prepare and Implement a Paleontological Resource Mitigation Plan.** Prior to approval of the final construction plans for the proposed Project, the proponent shall retain a qualified professional paleontologist as defined in the paleontological resource mitigation guidelines of the Society of Vertebrate Paleontology (2010). The Qualified Paleontologist shall prepare a paleontological resource mitigation plan. The plan will include the following items:
- A survey of the Project footprint, particularly where it overlies the Tehama Formation, to locate and collect any significant fossils at the surface that could be damaged or destroyed by construction-related activities.
 - Procedures for monitoring the trenching or boring activities in the Tehama Formation.
 - Procedures for testing the sediments removed by trenching or boring for the presence of microvertebrate fossils.
 - Procedures for processing a bulk sample of sediment to recover microvertebrate fossils, should the testing yield positive results. These procedures shall be consistent with the guidelines of the Society for Vertebrate Paleontology (2010).
 - A program for preparing, identifying, and reporting any significant fossils recovered.
 - A curation agreement with a qualified repository for curation of the significant fossils recovered. The Project proponent shall bear the curation costs, should any significant fossils be recovered.

Hazards and Hazardous Materials

- MM HAZ-1 Prepare and Implement Worker Environmental Awareness Program.** A project-specific WEAP shall be prepared and submitted to Yolo County for approval prior to construction. The WEAP shall include, at a minimum, the following provisions related to hazards and hazardous materials:
- A presentation shall be prepared and used to train all site personnel prior to the commencement of work. A record of all trained personnel shall be kept.
 - Instruction on compliance with proposed Project mitigation measures.
 - A list of phone numbers of the Yolo County personnel associated with the proposed Project (archaeologist, biologist, environmental coordinator, and regional spill response coordinator).
 - Instruction on the individual responsibilities under the Clean Water Act, the Project SWPPP, site-specific BMPs, and the location of Material Safety Data Sheets for the Project.
 - Worker Training on Emergency Release Response Procedures to include hazardous materials handling procedures for reducing the potential for a spill during construction, and hazardous material clean up procedures and training to ensure quick and safe cleanup of accidental spills.
 - Instructions to notify the foreman and regional spill response coordinator in case of a hazardous materials spill or leak from equipment, or upon the discovery of soil, ground-

water, or surface water contamination. The foreman or regional spill response coordinator shall have authority to stop work at that location and to contact the Certified Unified Program Agency (CUPA) immediately if unanticipated visual evidence of potential contamination or chemical odors are detected. Work would be resumed at this location after any necessary consultation and approval by the CUPA or other entities, as specified by the CUPA.

- Instruction that noncompliance with any laws, rules, regulations, or mitigation measures could result in being barred from participating in any remaining construction activities associated with the proposed Project.

MM HAZ-2

Prepare and Implement a Hazardous Materials and Waste Management Plan. Prior to approval of the final construction plans for the proposed Project, an existing AT&T Mobility hazardous materials management plan, or if no such plan is in place, a Project-specific Hazardous Materials and Waste Management Plan for the construction phase of the proposed Project shall be prepared and submitted to Yolo County for review and approval prior to construction. The Plan will be prepared to ensure compliance with all applicable federal, State, and local regulations. The Hazardous Materials and Waste Management Plan will reduce or avoid the use of potentially hazardous materials for the purposes of worker safety, protection from soil, groundwater, and surface water contamination, and proper disposal of hazardous materials. The plan will include the following information related to hazardous materials and waste, as applicable:

- A list of the hazardous materials that will be present on-site and in the local construction yard during construction, including information regarding their storage, use, and transportation
- Any secondary containment and countermeasures that will be required for on-site and construction yard hazardous materials, as well as the required responses for different quantities of potential spills
- A list of spill response materials and the locations of such materials at the proposed Project site and in the local construction yard during construction. Additionally, the Plan shall designate that spill response materials be kept onsite for all activities performed near a stream or pond
- Written procedures for fueling and maintenance of construction vehicles and equipment would be prepared prior to construction. The Plan shall include the following procedures:
 - Construction vehicles shall be fueled and maintained offsite at the construction yard or at local fuel stations. Construction vehicles operated near to, or adjacent to, the stream channel or pond shall be inspected and maintained daily to prevent leaks.
 - Construction equipment such as drill rigs and excavators shall be fueled offsite when feasible. When refueling offsite is not feasible, onsite refueling of the equipment by refueling vehicles or fuel trucks shall follow specified procedures to prevent leaks or spills. Procedures will require refueling be located a minimum of 150 feet from a stream channel or pond and the use of spill mats, drop cloths made of plastic, drip pans, or trays to be placed under refueling areas to ensure that fuels do not come into contact with the ground. Spill cleanup materials shall be kept readily available on the refueling vehicles.

- Drip pans or other collection devices would be placed under equipment, such as motors, pumps, generators, and welders, during operation and at night to capture drips or spills. Equipment would be inspected and maintained daily for potential leakage or failures.
- A list of the adequate safety and fire suppression devices for construction activities involving toxic, flammable, or exposure materials
- A description of the waste-specific management and disposal procedures that will be conducted for any hazardous materials that will be used or are discovered during construction of the proposed Project
- A description of the waste minimization procedures to be implemented during construction of the proposed Project

Wildfire

MM WF-1

Prepare and Implement a Fire Prevention Plan. A Project-specific fire prevention plan for construction of the Project shall be prepared by AT&T Mobility and submitted for review and approval prior to initiation of construction. The draft copy of this Plan is to be provided to the local fire agency at least 90 days before the start of any construction activities. Plan reviewers shall include Yolo County, CAL FIRE, and the local municipal fire agency with jurisdiction over the area where the Project is located. Comments on the Plan shall be provided by AT&T Mobility to all other participants, and AT&T Mobility shall resolve each comment in consultation with Yolo County, CAL FIRE, and the local municipal fire agency, as appropriate. The final Plan shall be approved by these agencies at least 30 days prior to the initiation of construction activities. AT&T Mobility shall fully implement the Plan during all construction and maintenance activities.

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 - daily monitoring of the red-flag warning system with appropriate restrictions on types and levels of permissible activity
- Coordination procedures with CAL FIRE and Yolo County fire officials
- Crew training, including fire safety practices and restrictions
- Method for verification that Plan protocols and requirements are being followed

7. List of Preparers

A consultant team headed by Aspen Environmental Group prepared this document under the direction of Yolo County Department of Community Services. The preparers and technical reviewers of this document are presented below.

Lead Agency

Yolo County Department of Community Services, Planning Division

JD Trebec, Project Manager Lead Agency Contact

Project Management and Document Production

Aspen Environmental Group

John Carrier, Senior Project Manager.....	Project Manager
Tom Murphy, Principal-in-charge.....	Project Oversight
Scott Debauche, Environmental Planner.....	Aesthetics
Amanda Wild, Environmental Scientist.....	Agriculture and Forestry; Geology and Soils; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Noise; Population and Housing; Public Services, Utilities, and Service Systems; Recreation; Transportation & Traffic; Wildfire
Brewster Birdsall, Senior Associate.....	Air Quality, Greenhouse Gas
Jody Fessler, Environmental Compliance Specialist.....	Biological Resources
Beth Bagwell, Senior Cultural Resources Specialist.....	Cultural Resources, Tribal Cultural Resources
Mark Tangard, Documents Manager.....	Document Production
Kati Simpson.....	Graphics
Tracy Popiel, GIS Specialist.....	GIS/Graphics

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Appendix A

Visual Simulations

Aerial photograph showing the viewpoints for the photosimulations.

Taber Ranch

16628 County Road 81
Capay, CA 95607
CVL03477



1



Photosimulation of the view looking west along Hwy 16 near Rd 82.

Taber Ranch

16628 County Road 81
Capay, CA 95607
CVL03477



2



Existing

Photosimulation of the view looking south from Hwy 16 near Road 79.

Taber Ranch
16628 County Road 81
Capay, CA 95607
CVL03477



Proposed

3



Existing

Photosimulation of the view looking southeast from the nearest point along Road 79A.

Taber Ranch

16628 County Road 81

Capay, CA 95607

CVL03477



Proposed faux water tank

Proposed

4

Existing

Photosimulation of the view looking northwest from the visitor center.

Taber Ranch
16628 County Road 81
Capay, CA 95607
CVL03477



Proposed

Proposed faux water tank



Appendix B

Biological Resources Assessment



September 19, 2019 (Revised Figures)

Complete Wireless Consulting
(On behalf of AT&T Mobility, LLC)

**RE: Revised Biological Resource Assessment
Modified Location AT&T New Site Build- New Tower & Ground Improvements
AT&T Site Number: CVL03477
AT&T Site Name: Taber Ranch
AT&T FA: 11569650
16628 County Road 81 Capay, Yolo County, CA
GE²G Project # 311184**

Geist Engineering and Environmental Group, Inc. (GE²G), appreciates the opportunity have assisted Complete Wireless Consulting by having a Revised Biological Resource Assessment completed for the above listed modified location for the AT&T Mobility, LLC undertaking. Based on surrounding wetland resources the proposed tower ground lease area was moved to the northeast per the current design plans dated August 19, 2019.

Executive Summary:

No Federal critical habitat was identified within the proposed project site and buffer area. Botanical and biological surveys of the project site vicinity were completed on March 19 (previous tower location) and July 10, 2019 (current tower location). Four (4) vegetation communities were observed within the study area and include the following: 1) non-native annual grassland, 2) agricultural lands, 3) freshwater emergent wetland, and 4) ruderal vegetation.

Freshwater emergent wetlands were observed in the buffer area of the proposed project. An agricultural pond is ~246-feet west of the proposed telecommunications tower, and a wetland swale is ~198-feet north of the proposed telecommunications tower. These wetland areas are located outside of the areas proposed for ground disturbance during proposed construction activities, and therefore, will not be impacted during project implementation.

Review of the USFWS, the CNPS, and the CNDDB lists revealed that one (1) listed plant species/species of concern has potential to occur in the general project area. No potential habitat is present for this single plant species within the proposed project site and buffer area. The July 2019 survey was conducted within the blooming period of this special status plant species. Because no special status plant species were identified as potentially occurring within the proposed project site or buffer area, none of these species are expected to be present, and no impacts are anticipated.

Because common wildlife species found in the project area are locally and regionally common, potential impacts to these resources are considered less than significant. Therefore, no avoidance or minimization measures are proposed at this time.

Per the completed Biological Resources Assessment Report it is our finding that potential impacts to wildlife or plants can be avoided with the below Best Construction Practices as well Standard Construction Conditions.

GEIST ENGINEERING AND ENVIRONMENTAL GROUP, INC.

4200 Park Boulevard #149, Oakland, California 94602

510.238.8851 (p) / 510.238.8644 (f)

Field Offices: Arizona, California, Colorado, Oregon, and Washington

**Recommendations:**

None of the species mentioned in the Biological Resource Assessment, or evidence of the species, were observed during biological surveys. No avoidance or minimization measures are proposed at this time.

Best Management Practices & Standard Construction Conditions are briefly summarized below:

1. If construction will start during the breeding or nesting season for Migratory Bird Treaty Act (MBTA) birds than a preconstruction avian survey for nesting birds should be implemented. *(Breeding season starts February 1, nesting season starts March 1st and both continue through until mid-September with special circumstances for individual species).*
2. Surveys for identified special-status species by qualified biologists shall be conducted at the appropriate times before construction starts to determine occupancy at the site.
3. Construction Best Management Practices as well as Standard Construction Conditions will need to be completed to prevent take of individuals discussed are listed in the attached report (Staging and fueling, silt fencing, pre-construction surveys, biological monitor, Environmental Awareness Training for construction workers, and site boundaries shall be clearly delineated by stakes.

If you have any inquiries or would like any additional information, please contact me at (510) 238-8851, or sgeist@geistenvironmental.com.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Stephen Geist', is written over a light green rectangular background.

Stephen Geist, President,
Geist Engineering and Environmental Group, Inc.

Attached: Revised Biological Resource Assessment as completed by Senior Consulting Wildlife Biologist Cord Hute, dated March 2019 (Revised September 2019 for the modified northeast tower location)
(September 19, 2019 -revised Figures 2, 3, & 4 updated and replaced)

GEIST ENGINEERING AND ENVIRONMENTAL GROUP, INC.

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Field Offices: Arizona, California, Colorado, Oregon, and Washington

Biological Resources Assessment

**CCL03477 Taber Ranch Communications Tower
Telecommunications Project
Yolo County, California**

**March 2019
(Revised September 2019 for the Modified Location)**

Prepared for:

**Geist Engineering & Environmental Group, Inc (GE²G)
&
AT&T Mobility, LLC
2600 Camino Ramon San Ramon, CA 94583**

Prepared by:

**Synthesis Planning
442 San Marin Drive
Novato, CA 94945
Contact: Cord Hute
Phone: (415) 328-7923**

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Summary

The proposed project is situated 4.89 miles west of the City of Esparto and 13.86 miles northwest of the City of Winters in unincorporated Yolo County, California. The project is located 0.37 miles southwest of State Highway 16. This project is being undertaken to provide improved telecommunications services to the local area through the installation of a new communication tower and associated equipment. Synthesis Planning was contracted by AT&T to perform this Biological Resources Assessment for the proposed project.

Four (4) vegetation communities were observed within the study area and include the following: 1) non-native annual grassland, 2) agricultural lands, 3) freshwater emergent wetland, and 4) ruderal vegetation. As part of this Biological Resources Assessment, the potential for occurrence of special-status plant species and special-status wildlife species was also evaluated.

Best Construction Practices and Avoidance and Minimization Measures as well as Standard Construction Conditions to prevent take of individuals discussed above are included in this report.

List of Acronyms and Abbreviations

BRA	Biological Resources Assessment
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CSC	California Species of Concern
FESA	Federal Endangered Species Act
FGC	Fish and Game Code
MBTA	Migratory Bird Treaty Act
NMFS	National Marine Fisheries Service
RWQCB	Regional Water Quality Control Board
SWPPP	Stormwater Pollution Prevention Plan
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
USACE	US Army Corps of Engineers
UTM	Universal Trans Mercator
WHR	Wildlife Habitat Relationships

1.0 Introduction

The purpose of this Biological Resources Assessment is to provide technical information and to review the proposed project study area, 4.89 miles west of the City of Esparto and 13.86 miles northwest of the City of Winters in unincorporated Yolo County, California (see Appendix A, Figures 1 and 2). This project is being undertaken to provide improved telecommunications services to the local area through the installation of a new communication tower and associated equipment. Synthesis Planning prepared this Biological Resources Assessment (BRA) to provide sufficient detail to determine the potential effects of the proposed project on federally- and state-listed wildlife and plant species. This BRA was conducted to determine the potential for special-status vegetation communities, plant and animal species to occur within the project study area, and to identify the limitations to potential development of the project. The BRA is prepared in accordance with legal requirements found in Section 7 (a)(2) of the Endangered Species Act (16 U.S.C. 1536(c)) and also provides information required for an Initial Study/Mitigated Negative Declaration as part of the California Environmental Quality Act (CEQA) review for the project. The document presents technical information upon which later decisions regarding project effects are developed.

The project is located 0.38 miles southwest of State Highway 16 (see Appendix A, Figure 2). The project area is located in Sections 19 and 20 of the Esparato 7.5- minute topographic quadrangle. The project site is located within Township 10N and Range 2W. Surrounding land uses consist of agricultural and rural residences.

1.1 Project Description

A review of zoning drawings indicated that the proposed action would include:

- Construction of a 30 feet by 35 feet (1,050 square feet, or 0.024 acres permanent disturbance) level pad area. The pad area would be covered with gravel on portions not used for equipment installation. Work area is located within non-native annual grassland habitat;
- Construction of 150 feet (0.028 miles) of access road from existing access road to proposed communications tower site. Proposed road would be 20 feet wide. Permanent disturbance of 3,000 square feet, or 0.069 acres. The work area is within non-native annual grassland habitat;
- Installation of 120-foot tall faux water tower communications tower;
- Installation of telecommunications equipment and other related equipment within various areas of the gravel pad;
- Installation 6 foot tall chain link fence around telecommunications site;

- Installation of 2,644 feet (0.501 miles) of underground power line between tower site and existing power pole/line to the northeast of tower site. Right-of way would be 10 feet wide. Temporary disturbance of 26,440 square feet, or 0.607 acres. ROW is within existing disturbed ruderal and non-native annual grassland habitat; and
- Installation of 2,810 feet (0.532 miles) of underground fiber-optic cable line between tower site and existing aerial fiber-optic cable connection point to southeast of tower site (28,100 square feet, or 0.645 acres of temporary disturbance). ROW is within existing disturbed ruderal and non-native annual grassland habitat. This disturbance will occur at the same time and area as installation of the underground power line.

The proposed construction of the wireless facilities, construction of the new access road, and access road improvements would permanently displace approximately 4,030 square feet, or 0.093 acres of undisturbed habitat areas (non-native annual grassland), and temporarily displace approximately 54,540 square feet, or 1.252 acres of ruderal and non-native annual grassland habitat.

Staging Areas and Fueling

Storage areas for contractor equipment and materials will be determined prior to project construction activities. AT&T, with the assistance of a biologist, will review the local project area and locate staging areas that are in previously disturbed areas that will not have potential to affect wildlife habitat or species. All staging areas must be approved by Yolo County prior to use. In addition, to prevent contamination of fuel into sensitive habitats, the following measures will apply:

- The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the State and U.S.,
- Areas for fuel storage, refueling and servicing of construction equipment must be located in an upland location,
- Wash sites must be located in upland locations to ensure wash water does not flow into the stream channel or adjacent wetlands.
- All construction equipment must be in good working condition, showing no signs of fuel or oil leaks. All questionable motor oil, coolant, transmission fluid, and hydraulic fluid hoses, fittings and seals shall be replaced. The mechanical equipment shall be inspected on a daily basis to ensure no leaks. All leaks shall be repaired in the equipment staging area or other suitable location prior to resumption of construction activity.
- Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation within 100 feet of a waterway. If a spill occurs, no additional

work shall occur in-channel until, 1) the mechanical equipment is inspected by the contractor and the leak has been repaired, 2) the spill has been contained, and 3) CDFW and Sonoma County are contacted and have evaluated the impacts of the spill.

Construction Scheduling

The estimated time period for construction is 90 working days for the entire project. Work will begin as soon as all regulatory clearances and permits are obtained.

Operations and Maintenance

The facilities would be constructed to current construction-industry standards and codes.

Construction Best Management Practices

Construction BMPs will be incorporated in the construction of the project and include, but are not limited to, the following:

- To avoid debris contamination into drainages and other sensitive wildlife habitats, silt fence or other sediment control devices will be placed around construction sites to contain spoils from construction excavation activities.
- Surveys for identified special-status species by qualified biologists shall be conducted at the appropriate times before construction starts to determine occupancy at the site. If no special-status species are found, no further action other than the Best Management Practices identified above are required. If individuals are found, including plants or nesting birds, a buffer zone around the species or nest will be required at a sufficient distance to prevent take of individual species.
- Due to the potential for special-status species to occur, move through, or into the project area, an on-site biological monitor, shall at a minimum, check the ground beneath all equipment and stored materials each morning prior to work activities during disturbing activities to prevent take of individuals. All pipes or tubing four (4) inches or greater shall be sealed by the relevant contractor with tape at both ends to prevent animals from entering the pipes at night. All trenches and other excavations shall be backfilled the same day they are opened, or shall have an exit ramp built into the excavation to allow animals to escape.
- Environmental Awareness Training shall be presented to all personnel working in the field on the proposed project site. Training shall consist of a brief presentation in which biologists knowledgeable of endangered species biology and legislative protection shall explain endangered species concerns. Training shall include a discussion of special-status plants and sensitive wildlife species. Species biology, habitat needs, status under the Endangered

Species Act, and measures being incorporated for the protection of these species and their habitats shall also be discussed.

- Project site boundaries shall be clearly delineated by stakes and /or flagging to minimize inadvertent degradation or loss of adjacent habitat during project operations. Staff and/or its contractors shall post signs and/or place fence around the project site to restrict access of vehicles and equipment unrelated to project operations.

2.0 Study Methodology

This Biological Resources Assessment used the best available scientific and commercial data to evaluate the potential effects to biological resources from the proposed project. Literature review, aerial imagery and field surveys informed the descriptions of the vegetation communities, identification of present and past occurrences of special-status species in the vicinity of the proposed project, and the assessment of habitats for special-status animal species.

2.1 Literature Search

Information on special-status plant species was compiled through a review of the literature and database searches. Database searches for known occurrences of special-status species focused on the Esparato U.S. Geologic Service 7.5-minute topographic quadrangle. The following sources were reviewed to determine which special-status plant and wildlife species have been documented in the vicinity of the project site:

- U.S. Fish and Wildlife Service (USFWS) quadrangle species lists (USFWS 2019)
- USFWS list of special-status animals for Sonoma County (USFWS 2019)
- California Natural Diversity Database records (CNDDDB) (CNDDDB 2019)
- California Department of Fish and Wildlife's (CDFW) Special Animals List (CDFW 2019)
- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2019)
- California Native Plant Society (CNPS) Electronic Inventory records (CNPS 2019)
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner et al. 1990)

The USFWS electronic list of Endangered and Threatened Species was queried electronically (www.fws.gov/sacramento/es_spp_lists-overview.htm). The CalFish IMAPS Viewer (www.calfish.org/DataandMaps/CalFishGeographicData), developed by CDFW Biogeographic Branch for analysis of fisheries, was also reviewed.

The CDFW BIOS website and the *California Essential Habitat Connectivity Project: A strategy for conserving a connected California* (Spencer et al. 2010) were reviewed for wildlife movement information. The CDFW BIOS website and the CNDDDB were review for documented nursery sites. Other sources of information regarding reported occurrences include locations previously reported to the U.C Berkeley Museum of Vertebrate Zoology and the California Academy of Sciences.

2.2 Personnel and Survey Dates

Cord Hute, Senior Biologist for Synthesis Planning, conducted botanical and biological surveys of the project site on March 19 and July 10, 2019. Mr. Hute analyzed on-site and buffer area habitats for suitability for special-status plant and animal species during these surveys.

2.3 Impact Assessment Methodology

The on-site vegetation communities, present and past occurrence locations of federally and state listed species and federal and state species of concern within close proximity of the proposed project area, and habitats for special-status plant and animal species were examined. Based on the current site conditions, the potential for occurrence on the site for special-status biological resources was evaluated and the project description was used to determine any potential direct or indirect effects.

The determination of whether the proposed project may result in adverse impacts to federally-listed special-status species was based on guidelines established by the USFW under Section 7(a) of the Federal Endangered Species Act (FESA), under which a project that may have an adverse effect impact on listed biological resources must be assessed. FESA states that, “each federal agency shall...insure that any *action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an “agency action”) is not likely to jeopardize the continued existence of any endangered or threatened or result in the destruction or adverse modification of habitat of such species.” Thus, components of the proposed project were deemed to have an adverse impact on special-status biological resources if they could result in effects as described in the above statement to any listed species or its habitat.

The determination of whether the proposed project may result in adverse impacts to State special-status species was based on CEQA, the CDFW and the CNPS guidelines for special status plants and animals.

Potential impacts from the project to habitats not occupied by species but for which habitats occurred was also evaluated.

3.0 Environmental Baseline

Yolo County encompasses a portion of the Sacramento Valley and the eastern edge of the Inner North Coast Ranges. These subregions vary in topography, climate, and plant communities. The eastern and southern portions of the County are located on the relatively level valley floor. The north-central County encompasses the Dunnigan Hills, and the western portion rises into the Blue Ridge and Rocky Ridge of the inner north Coast Ranges. The Capay Valley lies between Blue Ridge and the Capay Hills. Little Blue Ridge, which has some of the highest elevations in the County, is in the northwestern corner of the County.

Yolo County has a Mediterranean climate characterized by hot, dry summers and temperate, wet winters. However, the County comprises two distinct climate zones. The northern and central areas of Yolo County experience hot summers and moderately cold winters, while the southeastern County receives marine air influence from the San Joaquin-Sacramento Delta regions to the south that reduces the temperature extremes of the valley. During the summer, temperatures generally average a high of 95° F and a low in the mid-50s. Winter temperatures average a high in the 50s, and low of 38 to 40° F. Average annual precipitation ranges from 17 inches in the northeast to 34 inches along the western part of the County. In spite of these distinctions, the biological communities in Yolo County are distributed primarily based on the location of water resources and agricultural development (NCRCD 2004).

3.1 Wetlands and Waters of the U.S. and State

Wetlands are generally considered to be areas that are periodically or permanently inundated by surface or ground water, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration, and purification functions. Technical standards have been developed as a method of defining wetlands through consideration of three criteria: hydrology, soils, and vegetation (USACE 1987).

The U.S. Army Corps of Engineers (USACE), CDFW, and Regional Water Quality Control Board (RWQCB) have jurisdiction over modifications to stream channels, river banks, lakes, and other wetland features. Jurisdiction of the Corps is established through the provisions of Section 404 of the Clean Water Act, which prohibits the discharge of dredged or fill material into “waters” of the United States without a permit, including certain wetlands and unvegetated “other waters of the U.S.” The Corps also has jurisdiction over navigable waters, including tidally influenced ones below Mean High Water, under Section 10 of the Rivers and Harbors Act. Jurisdictional authority of the CDFG is established under Section 1602 of the Fish and Game Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed, or bank of any lake, river, or stream. The Fish and Game Code states that it is “unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake” without notifying the Department, incorporating necessary mitigation, and obtaining a Streambed Alteration agreement. The Wetlands Resources Policy of the CDFW states that the

Fish and Game Commission will “strongly discourage development in or conversion of wetlands... unless, at a minimum, project mitigation assures there will be no net loss of either wetland habitat values or acreage.” Jurisdictional authority of the RWQCB is established pursuant to Section 401 of the Clean Water Act, which typically requires a water quality certification when an individual or nationwide permit is issued by the Corps. The RWQCB also has jurisdiction over “waters of the State” under the Porter-Cologne Water Quality Control Act.

A delineation of wetlands and watercourses within the project study area was conducted by a Synthesis Planning biologist during the March 19 and July 10, 2019 site visits. Synthesis Planning identified areas of freshwater emergent wetland in 2 areas of the project buffer where manmade agricultural ponds/swales were present. These wetland areas are located outside of the areas proposed for ground disturbance during proposed construction activities, and therefore, will not be impacted during project implementation. The telecommunications tower will be located approximately ~246 feet east of an agricultural pond, and ~198 feet south of a wetland swale. A map showing the location of the wetland areas is appended in Attachment A.

3.2 Vegetation Communities and Wildlife Habitat

Wildlife habitat classifications for this report is based on the California Department of Fish and Game's Wildlife Habitat Relationships (WHR) System (CDFG 1988) which places an emphasis on dominant vegetation, vegetation diversity and physiographic character of the habitat. The value of a site to wildlife is influenced by a combination of the physical and biological components of the immediate environment, and includes such features as type, size, and diversity of vegetation communities present and their degree of disturbance. As a plant community is degraded by loss of understory species, creation of openings, and a reduction in canopy area, a loss of structural diversity generally results. Degradation of the structural diversity of a community typically diminishes wildlife habitat quality, often resulting in a reduction of wildlife species diversity.

Vegetation communities are often classified based on the dominant plant species within the community. Wildlife habitats are typically distinguished by vegetation type, with varying combinations of plant species providing different resources for use by wildlife. As a result, wildlife habitats are often classified on a more inclusive manner of the structure of the habitat rather than the specifics of the plant species, resulting in several vegetation communities occurring under one type of wildlife habitat.

The following is a discussion of existing wildlife habitats found within the proposed project sites and buffer areas, and the wildlife species they support. Four (4) vegetation community types were observed within the study area. Where appropriate vegetation community types are described using The Manual of California Vegetation (Sawyer, et. al. 2009). Vegetation types observed were: 1) non-native annual grassland, 2) agricultural lands, 3) freshwater emergent wetland, and 4) ruderal vegetation.

1. Non-native annual grassland was observed within both the proposed tower project site, the buffer area of the tower site, and within portions of the buffer area of the existing access road to

the tower site. This plant community is generally composed of introduced grasses and broadleaf weedy species, which quickly re-colonize disturbed areas. Common dominant and subdominant plant species that were observed within this vegetative community during biological surveys included: yarrow (*Achillea millefolium*), fiddleneck (*Amsinckia menziesii* var. *intermedia*), slender wild oat (*Avena barbata*), purple false brome (*Brachypodium distachyon*), black mustard (*Brassica nigra*), rattlesnake grass (*Briza maxima*), ripgut grass (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), morning-glory (*Calystegia purpurata* var. *purpurata*), owl's-clover (*Castilleja densiflora* ssp. *densiflora*), yellow-star thistle (*Centaurea solstitialis*), Monterey centaury (*Centaurium muehlenbergii*), bindweed (*Convolvulus arvensis*), northern willow herb (*Epilobium ciliatum* ssp. *ciliatum*), broad-leaf filaree (*Erodium botrys*), red-stem filaree (*Erodium cicutarium*), California poppy (*Eschscholzia californica*), fennel (*Foeniculum vulgare*), coastal tarweed (*Deinandra corymbosa* ssp. *corymbosa*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), hare barley (*Hordeum murinum* ssp. *leporinum*), Italian ryegrass (*Lolium multiflorum*), bur clover (*Medicago polymorpha*), bristly ox tongue (*Picris echioides*), common plantain (*Plantago major*), radish (*Raphanus sativus*), dandelion (*Taraxacum officinale*), subterranean clover (*Trifolium subterraneum*), and six-weeks fescue (*Vulpia bromoides*). Annual grasslands within and adjacent to the project site provides moderate habitat value for wildlife. This habitat type has the potential to support a variety of small mammals and provides important foraging habitat for raptors and other bird species. Birds commonly found in annual grasslands include Cooper's hawk (*Accipiter cooperii*), red-tailed hawks (*Buteo jamaicensis*), red-winged blackbird (*Agelaius phoeniceus*), coyote (*Canis latrans*), house finch (*Carpodacus mexicanus*), turkey vulture (*Cathartes aura*), killdeer (*Charadrius vociferus*), common raven (*Corvus corax*), Brewer's blackbirds (*Euphagus cyanocephalus*), American kestrels (*Falco sparverius*), black-tailed jackrabbit (*Lepus californicus*), wild turkey (*Meleagris gallopavo*), northern mockingbird (*Mimus polyglottos*), western fence lizard (*Sceloporus occidentalis*), western bluebird (*Sialia mexicana*), western meadowlark (*Sturnella neglecta*), California ground squirrels (*Spermophilus beecheyi*), and Botta's pocket gophers (*Thomomys bottae*).

2. Almond (*Prunus dulcis*) orchard and grape (*Vitis vinifera*) vineyard agricultural fields were observed in the buffer area of the existing access roads and on either side of the proposed underground power line installation route. Vegetative species identified during the field visit included wild oat (*Avena fatua*), black mustard (*Brassica nigra* L. Koch), ripgut brome (*Bromus diandrus*), lambsquarter (*Chenopodium berlandieri*), common willow herb (*Epilobium ciliatum* ssp. *ciliatum*), California mustard (*Guillenia lasiophylla*), common mallow (*Malva neglecta* Wallr.), and cheeseweed (*Malva parviflora*).

3. Freshwater emergent wetland was observed in the buffer area of the proposed project – an agricultural pond ~246-feet west of, and a wetland swale ~198- feet north of the proposed telecommunications tower, respectively. These wetland areas are located outside of the areas proposed for ground disturbance during proposed construction activities, and therefore, will not be impacted during project implementation. Freshwater emergent wetlands are characterized by erect, rooted herbaceous hydrophytes. Dominant vegetation generally consists of perennial monocots up to 6.6 feet tall. All emergent wetlands are flooded frequently, enough so that the roots of the vegetation prosper in an anaerobic environment. The acreage of fresh emergent

wetlands in California has decreased dramatically since the turn of the century due to drainage and conversion to other uses, primarily agriculture. Fresh emergent wetlands are among the most productive wildlife habitats in California. Vegetative species identified during the field visit included umbrella sedge (*Cyperus eragrostis*), Baltic rush (*Juncus balticus*), common rush (*Juncus effusus*), water smartweed (*Polygonum amphibium*), curly dock (*Rumex crispus*), narrow-leaved cattail (*Typha angustifolia*), and broad-leaved cattail (*Typha latifolia*). They provide food, cover, and water for more than 160 species of birds and numerous mammals, reptiles, and amphibians. Many species rely on fresh emergent wetlands for their entire life cycle. Wildlife species commonly found in this community include song sparrows (*Melospiza melodia*), red-winged blackbirds (*Agelaius phoeniceus*), raccoons (*Procyon lotor*), California voles (*Microtus californicus*), California ground squirrel (*Spermophilus beecheyi*), black-tailed jackrabbit (*Lepus californicus*), black-tailed deer (*Odocoileus hemionus columbianus*), and skunks (*Mephitis sp.*). This community is a sensitive community because of historic and continuing loss of wetland habitats from agricultural conversion, urbanization, and flood control development.

4. Ruderal vegetation was observed within the existing access road to the proposed communications tower site and within the agricultural lands through which the underground power line will be installed. This vegetation type is comprised mostly of non-native weedy herbaceous forb plants.

4.0 Special-Status Species and Their Habitats

4.1 Regulatory Requirements

4.1.1 Federal Endangered Species Act (FESA)

To determine whether the proposed project may result in adverse effects to federally listed species, the criteria used was based on guidelines established by the USFWS under Section 7(a) of the FESA, in which a project that may have an adverse effect on listed biological resources must be assessed. FESA (16 U.S. Code [USC 1531–1544]) provides for the conservation of species that are Endangered or Threatened throughout all or a significant portion of their range, as well as the protection of habitats on which they depend.

Section 7 requires federal agencies to consult with USFWS or NMFS, or both, before performing any action (including actions such as funding a program or issuing a permit) that may affect listed species or designated Critical Habitat. The section 7 consultations are designed to assist Federal agencies in fulfilling their duty to ensure federal actions "do not jeopardize" the continued existence of a species or destroy or adversely modify Critical Habitat.

The USFWS defines temporary and permanent effects as areas denuded, manipulated, or otherwise modified from their pre-project conditions, thereby removing one or more essential components of a listed species' habitat as a result of project activities that include, but are not limited to, construction, staging, storage, lay down, vehicle access, parking, etc. According to the USFWS, temporary effects are limited to one construction season and, at a minimum, are fully restored to baseline habitat values or better within one year following initial disturbance. Permanent effects are not temporally limited and include all effects not fulfilling the criteria for temporary effects.

4.1.2 Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (Title 16, United States Code [USC], Part 703) enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703, 50 Code of Federal Regulations [CFR] 21, 50 CFR 10). Most actions that result in taking of, or the permanent or temporary possession of, a protected species constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. The Migratory Bird Permit Memorandum (MBPM-2) dated April 15, 2003, clarifies that destruction of most unoccupied bird nests (without eggs or nestlings) is permissible under the MBTA; exceptions include nests of federally threatened or endangered migratory birds, bald eagles (*Haliaeetus leucocephalus*), and golden eagles (*Aquila chrysaetos*). USFWS is responsible for overseeing compliance with the MBTA.

4.1.3 California Endangered Species Act (CESA)

The California Endangered Species Act (CESA (FGC §§ 2050–2116) is administered by CDFW. The CESA prohibits the “taking” of listed species except as otherwise provided in state law. The CESA includes FGC Sections 2050–2116, and policy of the state to conserve, protect, restore, and enhance any endangered species or any threatened species and its habitat. The CESA requires mitigation measures or alternatives to a proposed project to address impacts to any State listed endangered, threatened or candidate species, or if a project would jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy. Section 86 of the FGC defines take as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Unlike the ESA, CESA applies the take prohibitions to species under petition for listing (state candidates) in addition to listed species. Section 2081 of the FGC expressly allows CDFW to authorize the incidental take of endangered, threatened, and candidate species if all of the following conditions are met:

- The take is incidental to an otherwise lawful activity.
- The impacts of the authorized take are minimized and fully mitigated.
- Issuance of the permit will not jeopardize the continued existence of the species.
- The permit is consistent with any regulations adopted in accordance with §§ 2112 and 2114 (legislature-funded recovery strategy pilot programs in the affected area).
- The applicant ensures that adequate funding is provided for implementing mitigation measures and monitoring compliance with these measures and their effectiveness.

The CESA provides that if a person obtains an incidental take permit under specified provisions of the ESA for species also listed under the CESA, no further authorization is necessary under CESA if the federal permit satisfies all the requirements of CESA and the person follows specified steps (FGC § 2080.1).

4.1.4 California Fish and Game Code

The California Constitution establishes the California Fish and Game Commission (Commission) (CA Constitution Article 4, § 20). The California Fish and Game Code (FGC) delegates the power to the Commission to regulate the taking or possession of birds, mammals, fish, amphibian and reptiles (FGC § 200). The Commission has adopted regulations setting forth the manner and method of the take of certain fish and wildlife in the California Code of Regulations, Title 14.

4.1.5 California Fish and Game Code- Species Protection

The FGC establishes CDFW (FGC § 700) and states that the fish and wildlife resources of the state are held in trust for the people of the state by and through CDFW (FGC § 711.7(a)). All licenses, permits, tag reservations and other entitlements for the take of fish and game authorized by FGC are prepared and issued by CDFW (FGC § 1050 (a)).

Provisions of the FGC provide special protection to certain enumerated species such as:

- § 3503 protects eggs and nests of all birds.
- § 3503.5 protects birds of prey and their nests.
- § 3511 lists fully protected birds.
- § 3513 protects all birds covered under the federal Migratory Bird Treaty Act.
- § 3800 defines nongame birds.
- § 4150 defines nongame mammals.
- § 4700 lists fully protected mammals.
- § 5050 lists fully protected amphibians and reptiles.
- § 5515 lists fully protected fish species.

4.2 Special-Status Species Reviewed

For the purposes of this Biological Resources Assessment, special-status species include those that are federally listed as Endangered, Threatened or Proposed for federal listing (candidate) under the USFWS. Other species also evaluated in this Biological Assessment include non-listed federal and California Special Species of Concern (CSC) and those species that fall under the jurisdiction of the USFWS such as the Migratory Bird Treaty Act (MBTA) and the CDFW, such as CEQA Section 15380(d).

Impacts to special-status species were assessed if: (1) those species occurred in habitats similar to those of the project sites and buffer areas, and (2) were known to occur within the general vicinity of the proposed project sites.

Federally and State-Listed Plant Species. Review of the USFWS (USFWS 2019), the CNPS (CNPS 2019), and the CNDDB (CNDDB 2019) revealed that one (1) listed plant species/species of concern has potential to occur in the general project area. Please refer to Table 1 for a list of these species and their habitat requirements. No potential habitat is present for this single plant species within the proposed project site and buffer area. Botanical surveys were conducted on March 19 and July 10, 2019. These surveys were conducted within the blooming period of this special-status plant species.

Because no special-status plant species were identified as potentially occurring within the proposed project site or buffer area, none of these species are expected to be present, and no impacts are anticipated.

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
Birds					
Prairie falcon	<i>Falco mexicanus</i>	-	CSC	Inhabits dry open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield.	Potentially Present. The taxon has potential to occur within the proposed project sites or buffer areas due to the presence of appropriate foraging habitat throughout the general project area. No appropriate nesting habitat is present within the project area. No sign of this species was observed during biological surveys. This species has been documented within the general vicinity to the east of the proposed project site (CDFW 2019) (see Figure 3).
Bank swallow	<i>Riparia riparia</i>	-	CT	Colonial nester. Nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, and oceans to dig nesting holes.	None. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Amphibians and Reptiles					
Giant Garter Snake	<i>Thamnophis gigas</i>	FT	ST	Prefers fresh water marsh and low gradient streams. Has adapted to drainage ditches and irrigation canals.	None. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
California red-legged frog	<i>Rana draytonii</i>	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 water for larval development. Must have access to aestivation habitat, consisting of small mammal burrows and moist leaf litter.	Potentially Present. Potential aquatic foraging and breeding habitat suitable for this species was observed in a pond 115 feet southwest and a pond 985 feet south of the proposed tower pad location. Potential aestivation habitat was observed in the proposed tower pad site and buffer area of the pad site and existing access road to the pad site. No sign of this species was observed during biological surveys. This species has not been documented within the general vicinity of

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
					the proposed project site or buffer area (CDFW 2019) (see Figure 3).
Foothill yellow-legged frog	<i>Rana boylei</i>	-	CSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Require at least 15 weeks to attain metamorphosis.	None. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Fish					
Delta Smelt	<i>Hypomesus transpacificus</i>	FT	CT	Found only from the Suisun Bay upstream within the Delta in Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties. Shortly before spawning, adults migrate upstream from the brackish-water habitat associated with mixing zone and disperse widely into river channels and tidally influenced backwater sloughs. Spawn in shallow, fresh or slightly brackish water upstream of the mixing zone. Most spawning happens in tidally influenced backwater sloughs and channel edgewater.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Plants					
Heller's bush-mallow	<i>Malacothamnus helleri</i>			Chaparral and riparian woodland. Elevation range: 305 to 635 meters. Blooms May to July.	No Potential. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Sensitive Vegetative Communities					
None					

Status Codes:

Federal

FE = Federally listed as Endangered
FT = Federally listed as Threatened
FC = Federal Candidate species

State

CE = California listed as Endangered
CT = California listed as Threatened
CR = California listed as Rare
CFP = California Fully Protected

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
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CSC = Species of Special Concern
WL = CDFW Watch List

California Rare Plant Rank (formerly known as CNPS Lists)

California Rare Plant Rank 1A = Plants presumed extinct in California

California Rare Plant Rank 1B = Plants rare, threatened, or endangered in California and elsewhere

California Rare Plant Rank 2A = Plants presumed extirpated from California, but more common elsewhere

California Rare Plant Rank 2B = Plants rare or endangered in California, but more common elsewhere

California Rare Plant Rank 3 = Plants about which we need more information; a review list

California Rare Plant Rank 4 = Plants of limited distribution; a watch list.

California Rare Plant Rank Rarity Status of .1 = Seriously endangered in California

California Rare Plant Rank Rarity Status of .2 = Fairly endangered in California

Status, distribution, and habitat information from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database RareFind 5 (CDFW 2019); California Native Plant Society, California Rare Plant Electronic Inventory (CNPS 2019); and USFWS Online Endangered Species Database (USFWS 2019).

4.3 SPECIAL-STATUS WILDLIFE SPECIES

The following is a discussion of species having potential to occur on site and/or are species that are prominent in today's regulatory environment. This document does not address impacts to species that may occur in the region but for which no habitat occurs on site. Species-specific information described below is primarily from USFWS 2019 and CDFW 2019, unless otherwise noted.

Prairie Falcon - Prairie falcon occurs as an uncommon nesting species throughout the Sierra Nevada foothills, Coast Ranges, Modoc Plateau and adjacent mountains, Great Basin mountains, and southern California desert and mountains. Nests are typically located in a scrape on a sheltered ledge of a cliff overlooking a large, open area (generally supporting grassland, rangeland, savannah, or desert scrub). However, the species sometimes utilizes old nests of other cliff-nesting species (e.g., great-horned owl, common raven, golden eagle, etc.). Although southeast-facing nest sites are preferred, orientation is secondary to the nature of the ledge. Nesting occurs from mid-February through mid-September with a peak during April to early August (Zeiner et al. 1990). Home range and nest territory size varies with availability of suitable nesting habitat and adjacent foraging habitat (Craighead and Craighead 1956).

No suitable nest sites or nesting habitat for this species were observed within the proposed project site or buffer area, or within the general project area. However, given that the species is wide-ranging in its foraging habits, and the project site and buffer area provide an open habitat type that facilitates landings, foraging, and take-offs, it has some potential, albeit low, to occur on the sites. No impacts are expected to nesting activities of this species.

No individuals of this species were observed during surveys. This species has not been documented within the boundaries of the proposed project site (CDFW 2019) (see Figure 3). This species has been documented in the general vicinity of the proposed project site to the east. Therefore, this species is highly unlikely this species will be impacted by proposed project activities.

California red-legged frog breeding habitat for this frog is primarily in ponds, but they will also breed in slow moving streams, or deep pools in intermittent streams. Inhabited ponds are typically permanent and contain emergent and shoreline vegetation. Sufficient pond depth and shoreline cover are both critical, because they provide means of escape from predators for the frogs (Stebbins 1985, CDFW 1988). Additionally, emergent vegetation is necessary for the deposition of eggs. The breeding period begins during heavy rains, from early to late winter, usually November through early May. The larvae mature in 11 to 20 weeks.

Non-breeding CRF have been found in both aquatic and upland habitats. The majority of individuals prefer dense, shrubby or emergent vegetation, closely associated with deep (>0.7 meters) still, or slow moving water. However, some individuals use habitats that are removed from aquatic habitats, seeking cover in ground squirrel burrows, under boulders and logs and in non-native grasslands. Upland refugia habitat includes areas up to 90 meters from a stream

corridor and includes natural features, such as boulders, rocks, trees, shrubs, and logs. Incised stream channels with portions narrower than 18 inches and depths greater than 18 inches may also provide habitat. In general, densely vegetated terrestrial areas within the riparian corridor provide important sheltering habitat during the winter flooding of the streams. Along the coast, upland habitat is used throughout the year with animals making straight-line movements between water bodies regardless of the terrain (Bulger et al. 2003).

During dry periods, California red-legged frogs are seldom found far from water. However, during wet weather, individuals may make overland excursions through upland habitats over distances up to 2 miles. These dispersal movements are generally straight-line, point-to-point migrations rather than following specific habitat corridors. Dispersal distances are believed to depend on the availability of suitable habitat and prevailing environmental conditions. Very little is known about how California red-legged frogs use upland habitats during these periods.

During summer, California red-legged frogs often disperse from their breeding habitat to forage and seek summer habitat if water is not available (USFWS 2019). This habitat may include shelter under boulders, rocks, logs, industrial debris, agricultural drains, watering troughs, abandoned sheds, or hay-ricks. They will also use small mammal burrows, incised stream channels, or areas with moist leaf litter (Jennings and Hayes 1994). This summer movement behavior, however, has not been observed in all California red-legged frog populations studied.

The historical range of the California red-legged frog extended along the coast from the vicinity of Point Reyes National Seashore, Marin County, California and inland from Redding, Shasta County southward to northwestern Baja California, Mexico (Jennings and Hayes 1985). The current distribution of this species includes only isolated localities in the Sierra Nevada, northern Coast and Northern Transverse Ranges. It is still common in the San Francisco Bay area and along the central coast. It is now believed to be extirpated from the southern Transverse and Peninsular Ranges (USFWS 2019).

Potential aquatic foraging and breeding habitat suitable for this species was observed in a pond 198 feet north, and a pond 246 feet west, respectively, of the proposed tower site. Additionally, the northern portion of the power line trench lies approximately 110 feet north of an area of ponded water that is potential aquatic breeding habitat for this species. Potential upland aestivation habitat was observed in the proposed tower site and in the buffer areas of the proposed tower site and the existing access route. No sign of this species was observed during biological surveys in the ponds adjacent to the project site. Additionally, American bullfrogs (*Lithobates catesbeianus*) were observed in the ponded water areas. Bullfrogs are a predator of California red-legged frogs, and their presence lowers the potential that California red-legged frogs are present in the potential aquatic habitat. This species has the potential to use upland areas found in the project site and buffer area for upland refugia. The proposed project site has appropriate vegetative cover to serve as upland refugia habitat. Appropriate cover was observed during biological surveys in the project site and buffer area. No potential aestivation burrow sites were observed within the project site or buffer area during biological surveys. This species has not been documented within the vicinity of the proposed project site.

or the quad the project site occurs within, as well as in adjacent quads(CDFW 2019) (see Figure 3). The USFWS database lists this species as potentially occurring within this quad, but provides no actual sighting data. This species could potentially use the habitat during movement and aestivation activities. The proposed project site is not located within mapped critical habitat for this species as designated by USFWS.

4.4 CRITICAL HABITAT

No Federal critical habitat was identified within the proposed project site and buffer area (USFWS 2019).

4.5 SPECIAL-STATUS NATURAL COMMUNITIES

Coastal and Valley Freshwater Marsh was observed within the proposed project site and buffer area as designated by the CNDDDB.

5.0 Impacts Analysis and Standard Construction Conditions

This section summarizes the potential biological impacts from implementation of the proposed project. The analysis of these effects is based on a reconnaissance-level biological survey of the project site and buffer area, a review of existing databases and literature, and personal professional experience with biological resources of the region. Potential effects to federally- and state-listed special-status animal species may occur from the proposed project. Standard Construction Conditions for these biological impacts are provided below. A synopsis of the species potentially affected is presented in Table 2, and is followed by Standard Construction Conditions to avoid “take” of individuals.

Table 2: Special Status Animal Species Potentially Affected by the Proposed Project

Species	Status (Federal/State)	Habitat Present/ Absent	Condition Measure Yes/No
California red-legged frog	FT/CSC	Present	Yes

Potential Impacts to Common Wildlife and Plant Populations from Project Activities

Direct mortality or injury to common wildlife and plant populations could occur during ground disturbance activities associated with implementation of the project. Small vertebrate, invertebrate, and plant species are particularly prone to impact during project implementation because they are much less to non-mobile, and cannot easily move out of the path of project activities. Other more mobile wildlife species, such as most birds and larger mammals, can avoid project-related activities by moving to other adjacent areas temporarily. Increased human activity and vehicle traffic in the vicinity may disturb some wildlife species. Because common wildlife species found in the project area are locally and regionally common, potential impacts to these resources are considered less than significant. Therefore, no avoidance or minimization measures are proposed at this time.

Potential Impacts to Nesting Special-Status Avian Species from Project Activities

Implementation of the proposed project could potentially impact individual, foraging, and nesting migratory birds and raptor species should they become established within the proposed project site or buffer area prior to project implementation. Impacts to these species could occur through crushing by construction equipment during implementation of project activities. Actively nesting birds could also be affected due to noise and vibration from project activities, if nests are located close enough to project activities. Project related noise and vibration could cause the abandonment of active nest sites. Impacts to these species would be considered significant. In the event that nesting birds become established in the proposed project site or buffer area, the following Standard Construction Conditions measures will be implemented.

If ground disturbing activities occur during the breeding season of migratory avian and raptor species (February through mid-September), surveys for active nests will be conducted by a qualified biologist no more than 10 days prior to start of activities. Pre-construction nesting surveys shall be conducted for nesting migratory avian and raptor species in the project site and buffer area. Pre-construction biological surveys shall occur prior to the proposed project implementation, and during the appropriate survey periods for nesting activities for individual avian species. Surveys will follow required CDFW and USFWS protocols, where applicable. A qualified biologist will survey suitable habitat for the presence of these species. If a migratory avian or raptor species is observed and suspected to be nesting, a buffer area will be established to avoid impacts to the active nest site. Identified nests should be continuously surveyed for the first 24 hours prior to any construction-related activities to establish a behavioral baseline. If no nesting avian species are found, project activities may proceed and no further Standard Construction Conditions measures will be required. If active nesting sites are found, the following exclusion buffers will be established, and no project activities will occur within these buffer zones until young birds have fledged and are no longer reliant upon the nest or parental care for survival.

- Minimum no disturbance of 250 feet around active nest of non-listed bird species and 250 foot no disturbance buffer around migratory birds;
- Minimum no disturbance of 500 feet around active nest of non-listed raptor species;
- and 0.5-mile no disturbance buffer from listed species and fully protected species until breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.
- Once work commences, all nests should be continuously monitored to detect any behavioral changes as a result of project activities. If behavioral changes are observed, the work causing that change should cease and the appropriate regulatory agencies (i.e. CDFW, USFWS, etc.) shall be consulted for additional avoidance and minimization measures.
- A variance from these no disturbance buffers may be implemented when there is compelling biological or ecological reason to do so, such as when the project area would be concealed from a nest site by topography. Any variance from these buffers is advised to be supported by a qualified wildlife biologist and is recommended that CDFW and USFWS be notified in advance of implementation of a no disturbance buffer variance.

Potential Impacts to California Red-Legged Frogs from Project Activities

Implementation of the proposed project has the potential to result in direct impacts to California red-legged frog should they be present in the proposed project site during project activities. No individuals of this species were observed during biological surveys in upland refuge habitat (found in project site and buffer area) or in breeding habitat found in the project buffer area, and

none have been observed within the proposed project site or immediate buffer area as indicated by the search of the CNDDDB database.

Direct impacts to individuals of these species could result from ground disturbance activities during project implementation within upland refuge habitat when movement across these areas is occurring. Impacts could also occur in refuge habitat if individuals of this species are aestivating in underground refugia (**no underground refugia were observed in the project site during biological surveys**). These species could be directly impacted by crushing by project equipment or vehicles. These impacts could result in direct mortality of individuals or small populations of these species. No direct impacts are proposed to the aquatic breeding and foraging habitat of this species, so no direct impacts are anticipated.

In order to reduce potential impacts to these species to a less than significant level, the following measures will be implemented:

The project proponent shall implement the following Standard Construction Conditions to prevent mortality of individual red-legged frog that may be found migrating across or aestivating on the proposed project site during proposed project activities.

- Preconstruction surveys shall be completed within 48 hours prior to commencement of any earth-moving activity, construction, or vegetation removal within project sites, whichever comes first. The preconstruction survey shall include two nights of nocturnal surveys in areas of suitable habitat.
- If any frogs are encountered during the surveys, all work in the work area shall be placed on hold while the findings are reported to the CDFW and USFWS and it is determined what, if any, further actions must be followed to prevent possible take of this species.
- Where construction will occur in frog habitat where frogs are potentially present, work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat areas. A qualified biologist will assist in determining the boundaries of the area to be fenced in consultation with the Sonoma County, USFWS, and CDFW. All workers will be advised that equipment and vehicles must remain within the fenced work areas.
- The USFWS authorized biologist will direct the installation of the fence and will conduct biological surveys to move any individuals of these species from within the fenced area to suitable habitat outside of the fence. Exclusion fencing will be at least 24 inches in height. The type of fencing must be approved by the authorized biologist, the USFWS, and CDFW. This fence should be permanent enough to ensure that it remains in good condition throughout the duration of the construction project on the project site. It should be installed prior to any site grading or other construction-related activities are implemented. The fence

should remain in place during all site grading or other construction-related activities. The frog exclusion fence could be “silt fence” that is buried along the bottom edge.

- If at any individuals of these species are found within an area that has been fenced to exclude these species, activities will cease until the authorized biologist moves the individuals.
- If any of these species are found in a construction area where fencing was deemed unnecessary, work will cease until the authorized biologist moves the individuals. The authorized biologist in consultation with USFWS and CDFW will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist.
- Any individuals found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities.
- Clearance surveys shall occur on a daily basis in the work area.
- The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed.
- To ensure that diseases are not conveyed between work sites by the authorized biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force will be followed at all times.
- Project activities shall be limited to daylight hours, except during an emergency, in order to avoid nighttime activities when frogs may be present. Because dusk and dawn are often the times when frogs are most actively foraging and dispersing, all construction activities should cease one half hour before sunset and should not begin prior to one half hour before sunrise.
- Traffic speed should be maintained at 10 miles per hour or less in the work area.

6.0 Conclusions and Determinations

6.1 Conclusions

This project will incorporate reasonable and prudent Best Construction Practices and Avoidance and Minimization Measures as well as Standard Construction Conditions, described in Section 1. As a result, the project is not anticipated to result in take of any of the listed species described in this biological assessment.

Provided the precautions outlined above are followed, it has been concluded by Synthesis that the proposed project would:

- Have less than significant impacts upon federal and California endangered, threatened, proposed or candidate species;
- Not result in destruction or adverse modification of a critical habitat area of a federal or California endangered or threatened species; and
- Not result in “take” of migratory birds protected under the Migratory Bird Treaty Act and other state, local or federal laws.

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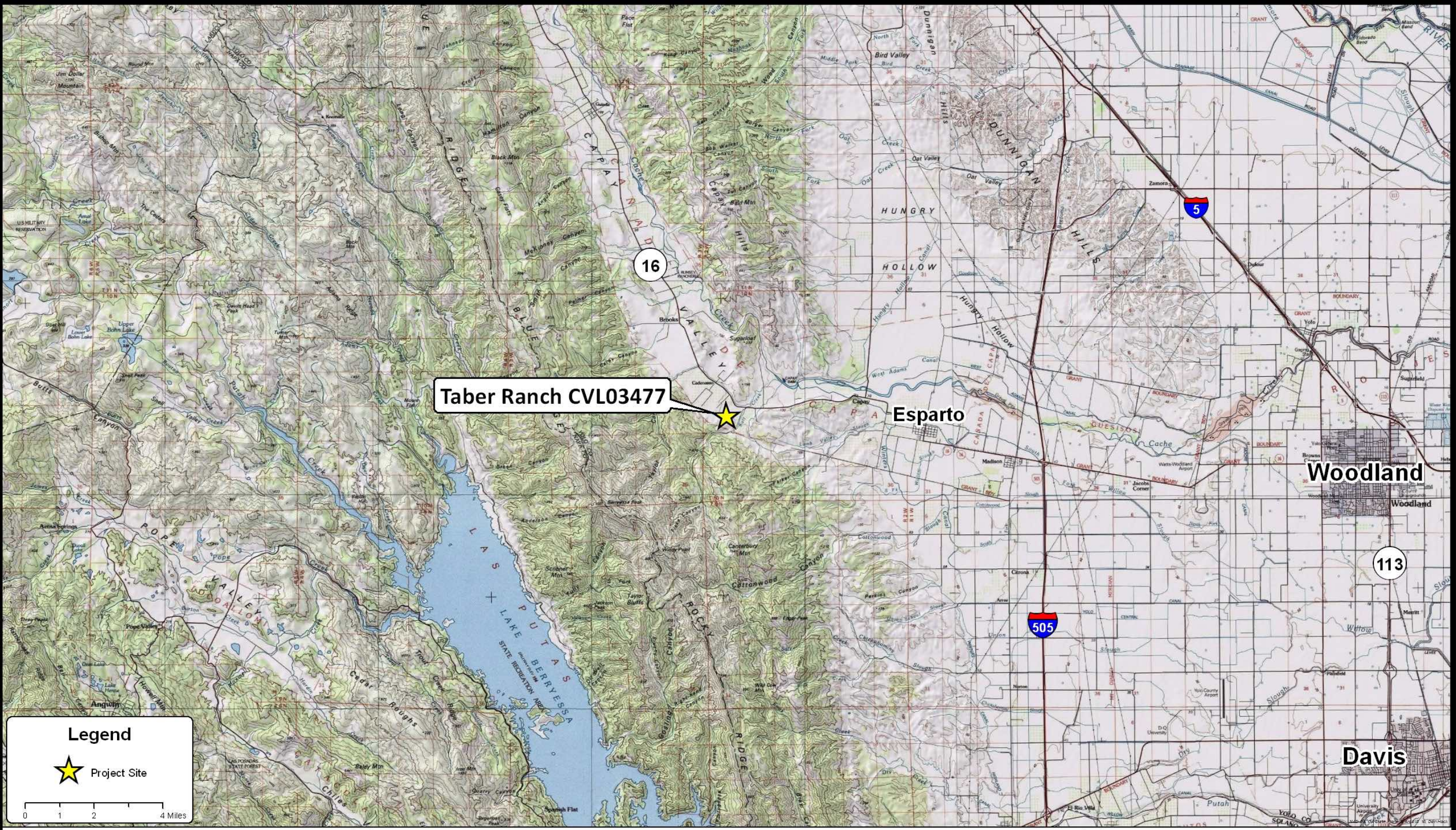
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Appendix A: Project Figures



Legend

★ Project Site

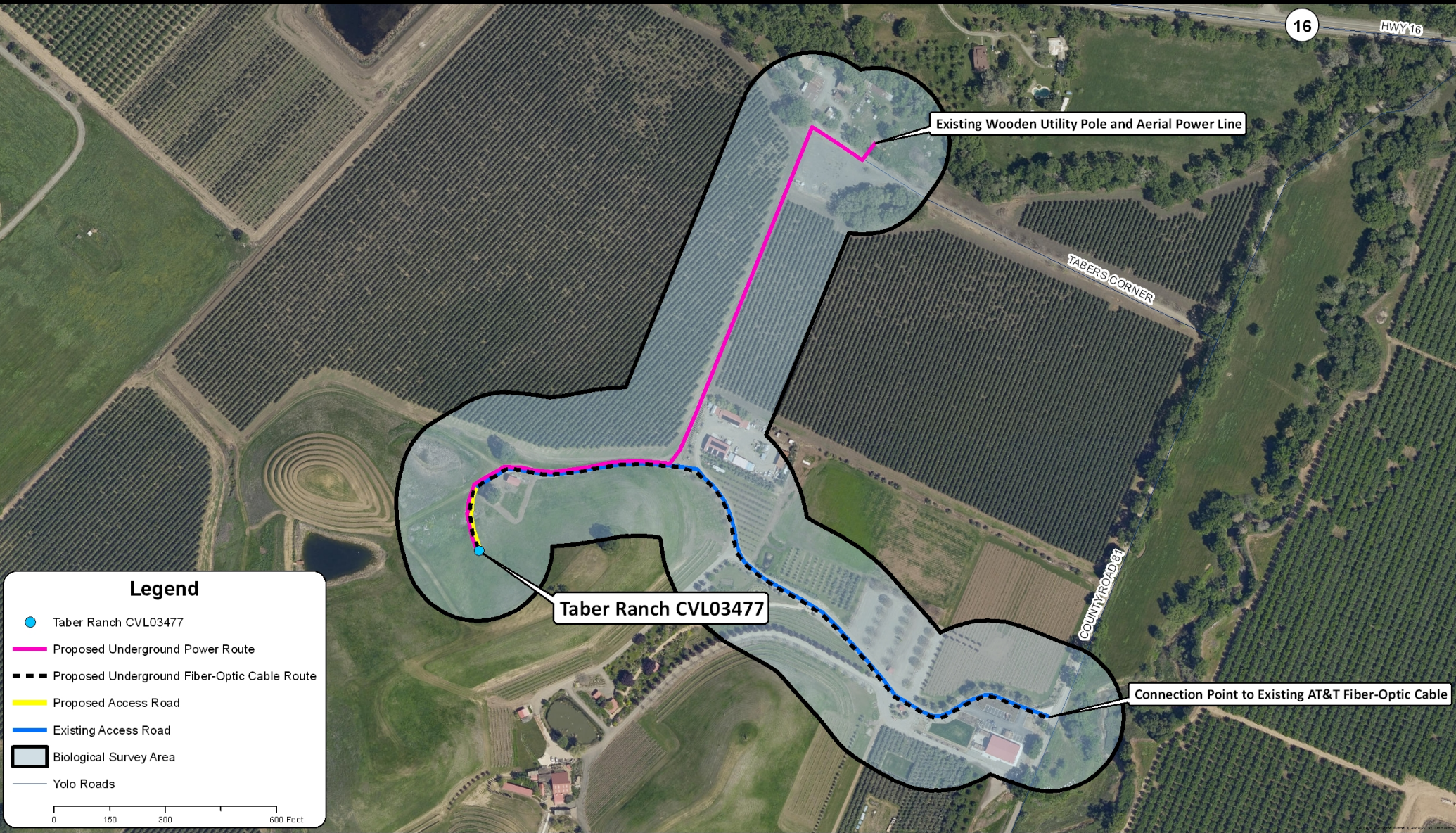
0 1 2 4 Miles

Synthesis Planning
442 San Marin Drive
Novato, California 94945
Telephone (415) 328-7923

FIGURE 1
Project Location Map

AT&T
5001 Executive Parkway
San Ramon, CA 94583





Synthesis Planning
442 San Marin Drive
Novato, California 94945
Telephone (415) 328-7923

FIGURE 2
Project Location Map

AT&T
5001 Executive Parkway
San Ramon, CA 94583



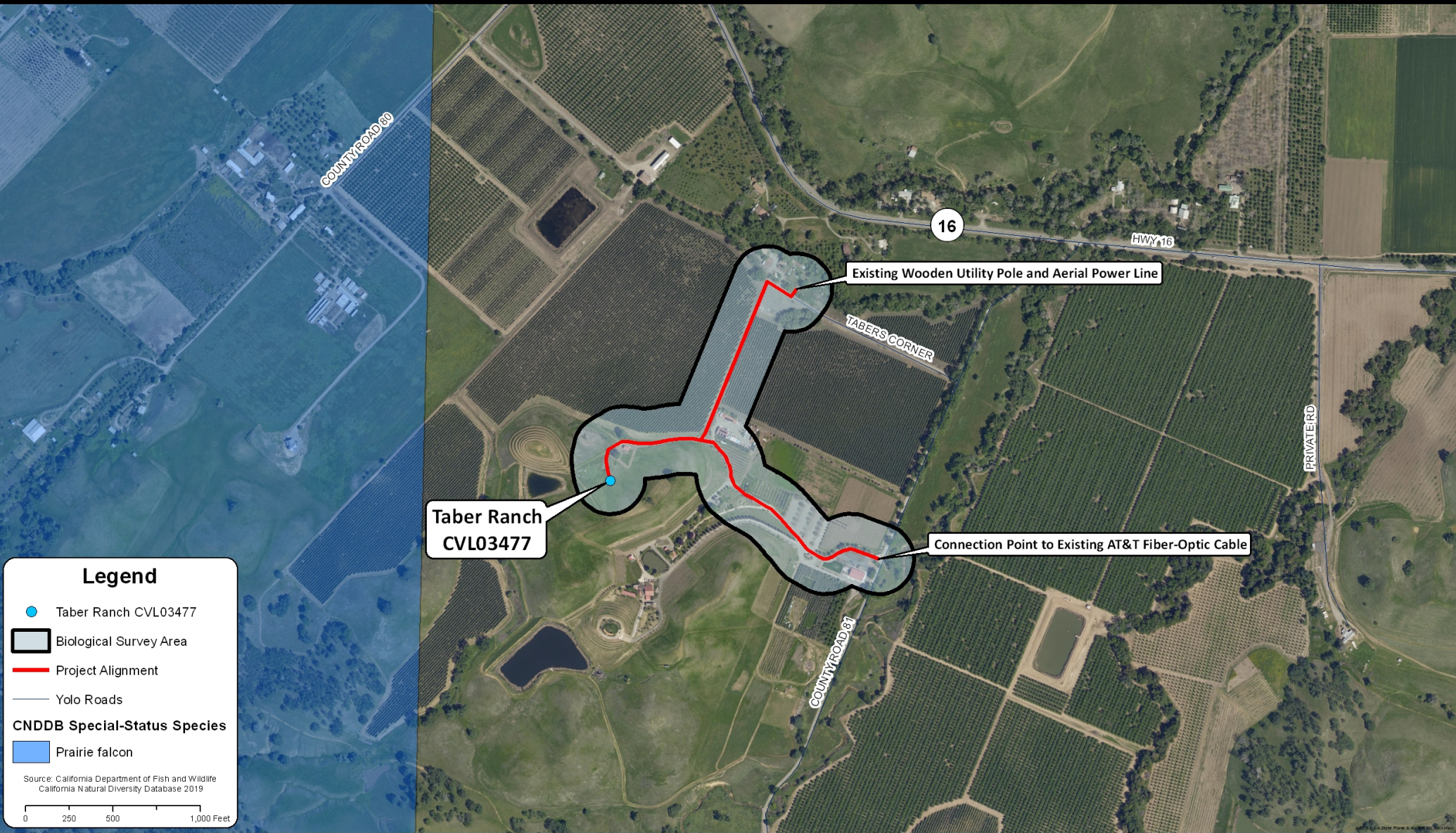


FIGURE 3
CNDDB Species Occurrences in the Vicinity of Project Area

Synthesis Planning
442 San Marin Drive
Novato, California 94945
Telephone (415) 328-7923

AT&T
5001 Executive Parkway
San Ramon, CA 94583



Figure 4. Wetland Map



Appendix B

Site Photos



Proposed tower project site. View looking north from the south side of the proposed tower location.



Existing access road to proposed tower project site. View looking northeast from proposed tower location.



Agricultural pond with freshwater emergent wetland west of the proposed tower project site. View looking west.



Proposed underground power line right of way. View looking south.



Proposed tie-in point to existing power line. View looking north.



Existing paved access road to proposed tower project site. View looking west.



Existing paved access road to proposed tower project site and tie-in point to existing underground fiber-optic communications line. View looking east.

Appendix C

Engineering Drawings



SITE NUMBER: CVL03477
SITE NAME: TABER RANCH

**SITE TYPE: PREMANUFACTURED SHELTER /
FAUX WATER TANK**



COMPLETE
Wireless Consulting

AT&T SITE NO:	CVL03477
PROJECT NO:	162-2393
DRAWN BY:	KBN
CHECKED BY:	SV

REV	DATE	DESCRIPTION
	08/19/19	100% ZD REV3
	01/31/19	100% ZD REV2
	12/18/18	100% ZD REV1
	12/10/18	100% ZD
	11/28/18	90% ZD

License:

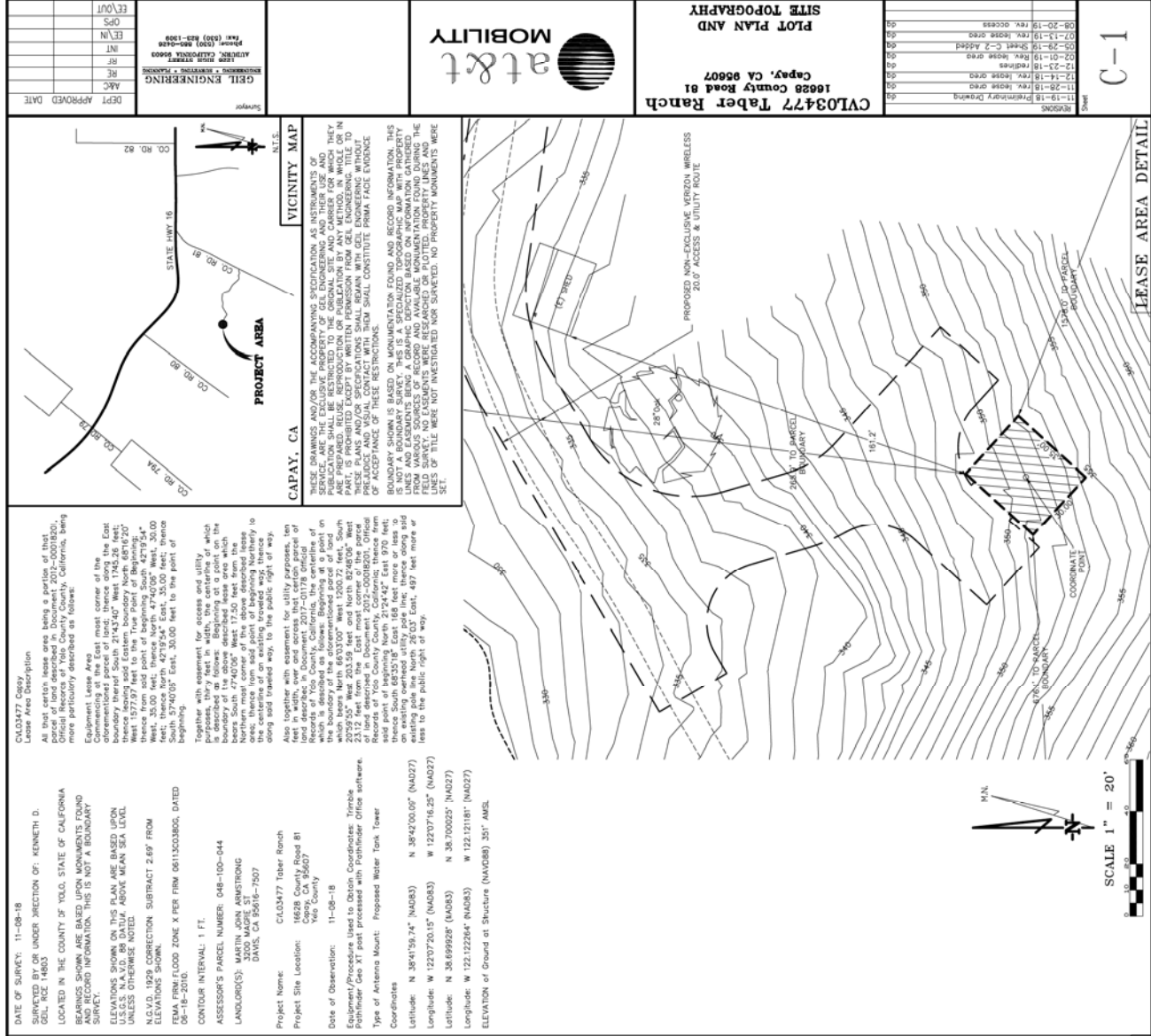
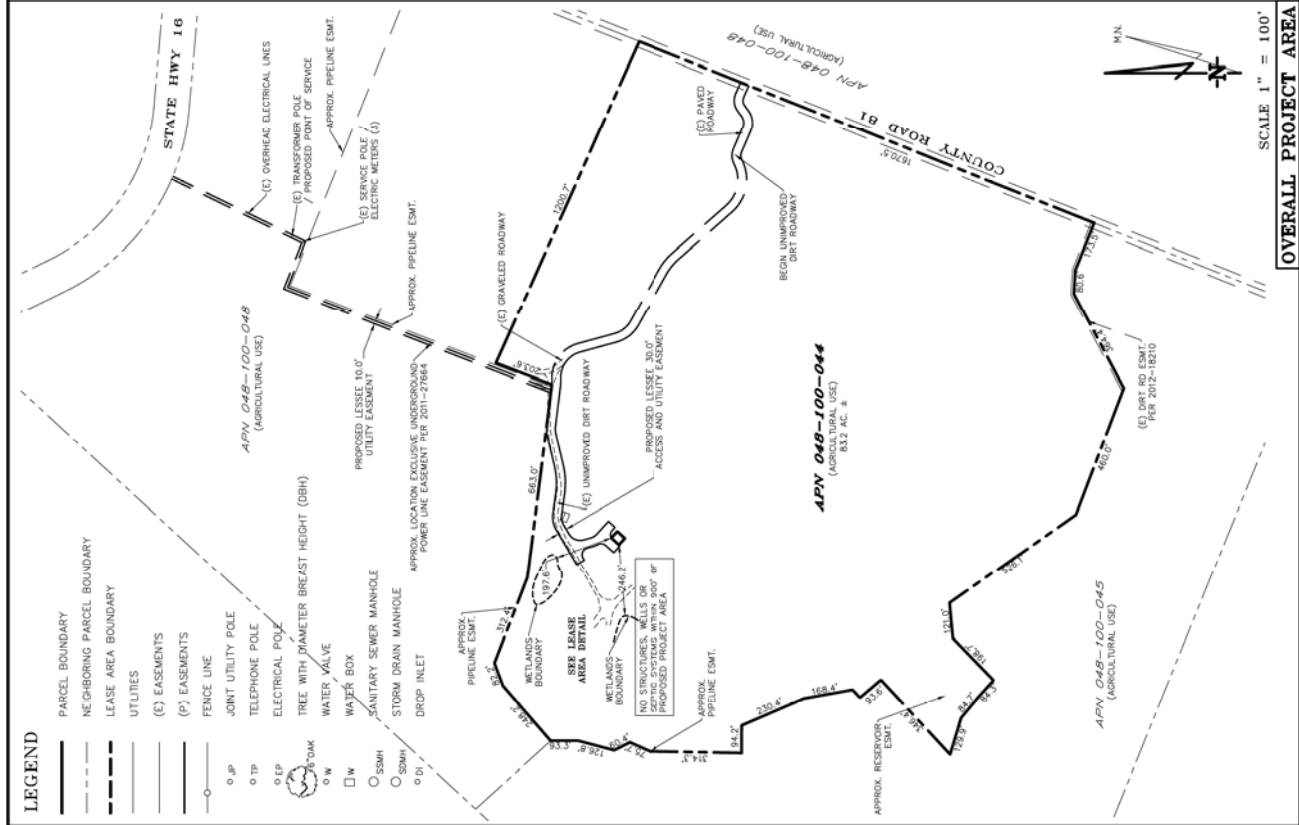
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Architect:
**MST ARCHITECTS**
1520 River Park Drive
Sacramento, California 95815

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
T-1.1

[illegible]



Issued For:
CVL03477
TABER
RANCH
16628 COUNTY ROAD 81
CAPAY, CA 95607

PREPARED FOR

 **at&t**

2400 Camino Ramon
San Ramon, California 94583

Vendor:  **COMPLETE**
Wireless Consulting, Inc.

T&T SITE NO:	CVL03477
PROJECT NO:	162.2393
DRAWN BY:	KBN
CHECKED BY:	SV

REV	DATE	DESCRIPTION
	08/19/19	100% ZD REV3
	01/31/19	100% ZD REV2
	12/18/18	100% ZD REV1
	12/10/18	100% ZD
	11/28/18	90% ZD

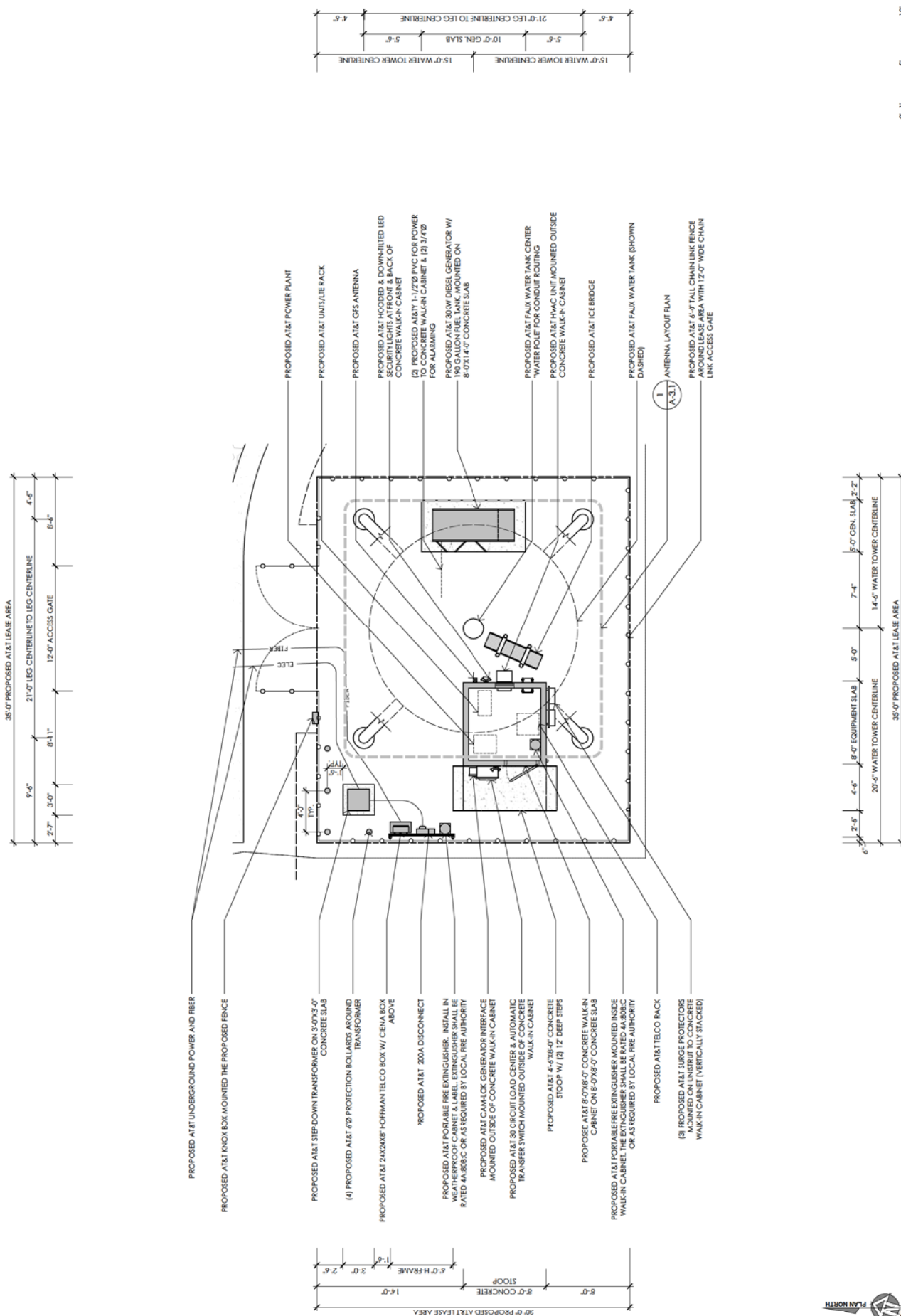
Licensee:

IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS

Architect:
**MST ARCHITECTS**
1520 River Park Drive
Sacramento California 95815

SHEET TITLE:
**EQUIPMENT
LAYOUT PLAN**

SHEET NUMBER:
A-2.1



Board For:
CVL03477
TABER
RANCH
16428 COUNTY ROAD 81
CAPAY, CA 95607



AT&T SITE NO: CVL03477
PROJECT NO: 1642393
DRAWN BY: KBN
CHECKED BY: SV

REV	DATE	DESCRIPTION
06/19/17	100% TD REV3	
01/31/17	100% TD REV2	
12/18/16	100% TD REV1	
12/10/16	100% TD	
11/29/16	90% TD	

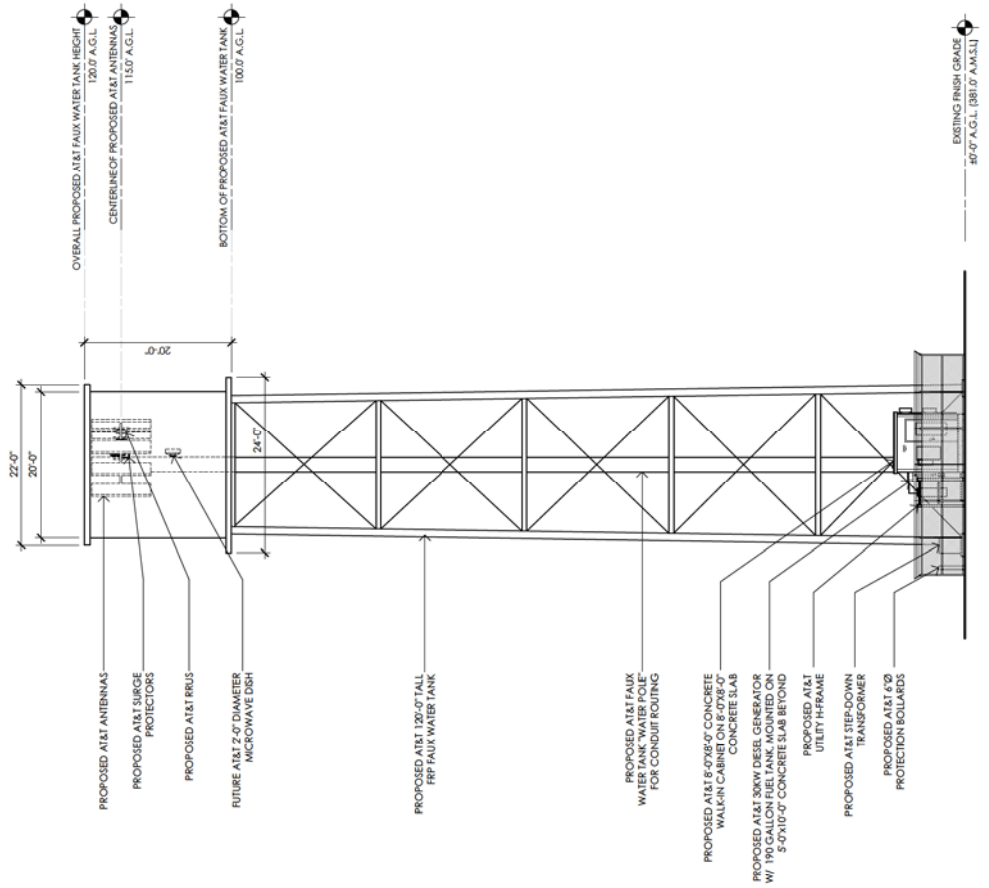
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PROFESSIONAL ENGINEER OR ARCHITECT
DOCUMENT

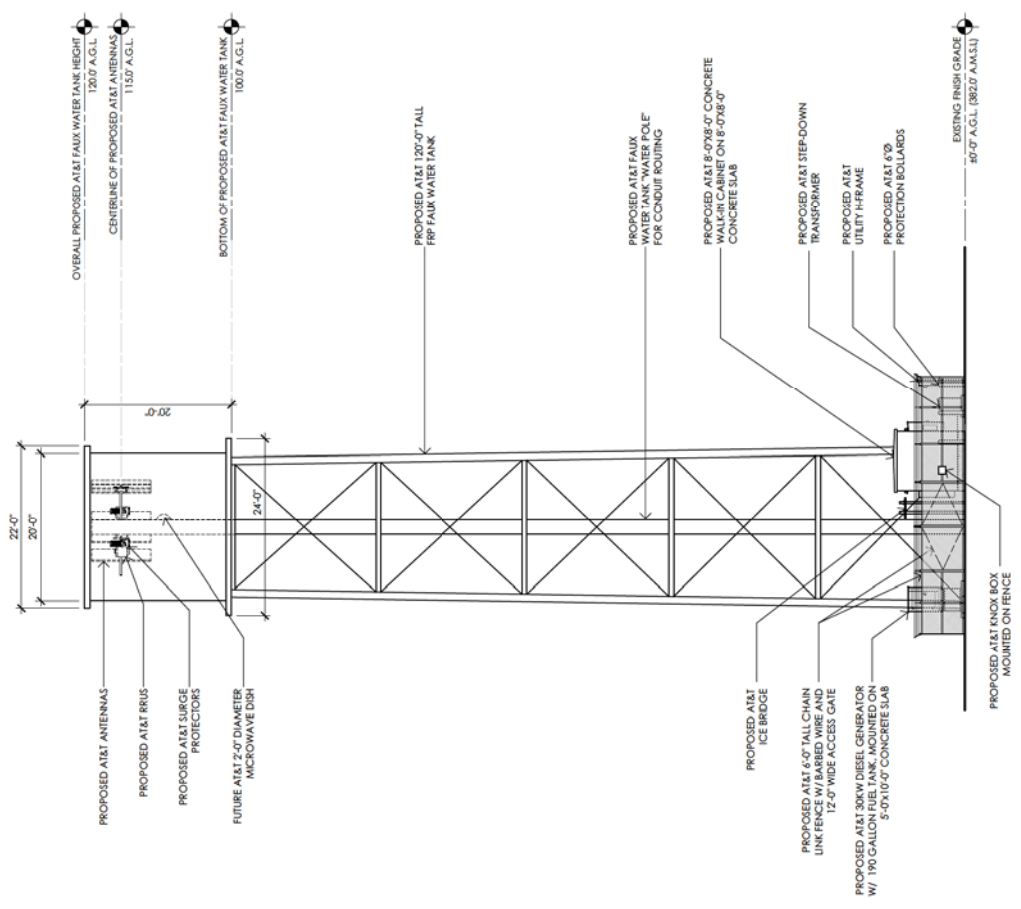


SHEET TITLE
**PROPOSED
ELEVATIONS**

SHEET NUMBER:
A-4.1



1 SOUTHWEST ELEVATION
1/8" = 1'-0"



2 NORTHWEST ELEVATION
1/8" = 1'-0"

Appendix C

Cultural Resources Investigation

CONFIDENTIAL

The content of the cultural resources investigation is confidential under statute. It has been provided to Yolo County.

Appendix D

Environmental Noise Assessment

Environmental Noise Assessment

Taber Ranch AT&T Cellular Facility

Capay (Yolo County), California

BAC Job # 2019-004

Prepared For:

Complete Wireless Consulting

Attn: Lindsey Ekins
2009 V Street
Sacramento, CA 95818

Prepared By:

Bollard Acoustical Consultants, Inc.



Dario Gotchet, Consultant

February 6, 2019



Introduction

The Taber Ranch AT&T Wireless Unmanned Telecommunications Facility Project (project) proposes the installation of cellular equipment within a lease area located at 16628 County Road 81 in Capay (Yolo County), California. The externally mounted HVAC unit of a pre-manufactured walk-in cabinet and an emergency diesel standby generator have been identified as the primary noise sources associated with the project. Please see Figure 1 for the general project site location. The studied site design is dated January 31, 2019.

Bollard Acoustical Consultants, Inc. has been contracted by Complete Wireless Consulting, Inc. to complete an environmental noise assessment regarding the proposed project cellular equipment operations. Specifically, the following assessment addresses daily noise production and exposure associated with operation of the project emergency generator and HVAC equipment.

Please refer to Appendix A for definitions of acoustical terminology used in this report. Appendix B illustrates common noise levels associated with various sources.

Criteria for Acceptable Noise Exposure

County of Yolo 2030 Countywide General Plan

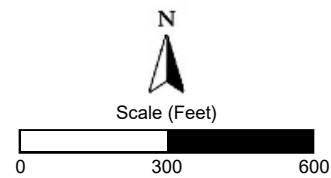
The Health and Safety Element of the County of Yolo 2030 Countywide General Plan establishes noise compatibility guidelines for a various land uses. Specifically, Figure HS-7 of this chapter identifies community noise exposure criteria for single-family residential uses, such as the nearest residences that could be affected by this project. The noise level criteria for single-family residential uses identified in General Plan Figure HS-7 has been reproduced and is provided below in Table 1.

Table 1 Noise Compatibility Guidelines for Residential Uses (Single-Family) County of Yolo 2030 Countywide General Plan	
Category	Community Noise Exposure, L_{dn} or CNEL (dB)
Normally Acceptable	<60
Conditionally Acceptable	55-70
Normally Unacceptable	70-75
Clearly Unacceptable	>75
Source: County of Yolo 2030 Countywide General Plan, Health & Safety Element (Noise), Figure HS-7	



Legend

- Proposed Cellular Facility Equipment Lease Area
- Parcel Boundaries
- △ # Nearest Residential Receiver



Taber Ranch AT&T Cellular Facility
Capay (Yolo County), California

Proposed Cellular Facility Equipment
Lease Area & Nearest Residential Use

Figure 1



Project Noise Generation

As discussed previously, there are two project noise sources which are considered in this evaluation; the externally mounted HVAC unit of the walk-in cabinet and the emergency diesel generator. The evaluation of potential noise impacts associated with the operation of each noise source is evaluated separately as follows:

HVAC Equipment Noise Source and Reference Noise Level

The project proposes the installation of pre-manufactured walk-in cabinet equipped with one (1) externally mounted HVAC unit within the lease area illustrated on Figure 1. Based on the project site plans, the HVAC unit assumed for the project is a 4-ton Marvair ComPac I Model AVPA42ACA. Based on reference noise level data obtained from the manufacturer, this specific HVAC unit model has a reference noise level of 60 dB at a distance of 30 feet. The manufacturer's noise level data specification sheet for the proposed unit is provided as Appendix C.

Generator Noise Source and Reference Noise Level

A Generac Industrial Power Systems Model SD030 is proposed for use at this facility to maintain cellular service during emergency power outages. Based on the project site plans, it is assumed that the proposed generator will be equipped with the Level 2 Acoustic Enclosure resulting in a reference noise level of 68 dB at a distance of 23 feet. The manufacturer's noise level data specification sheet for the proposed generator is provided as Appendix D.

The generator which is proposed at this site would only operate during emergencies (power outages) and brief daytime periods for periodic maintenance/lubrication. According to the project applicant, testing of the generator would occur twice per month, during daytime hours, for a duration of approximately 15 minutes. The emergency generator would not operate at night, except during power outages.

Predicted Facility Noise Levels at Nearest Residential Use

As indicated in Figure 1, the proposed cellular facility equipment lease area maintains a separation of approximately 1,600 feet from the nearest residential use, identified as receiver 1 (single-family residence). Assuming standard spherical spreading loss (-6 dB per doubling of distance), project-equipment noise exposure at the nearest residential use was calculated and the results of those calculations are presented in Table 2.

In order to calculate project-related noise generation relative to the County of Yolo General Plan L_{dn} noise level descriptor, the number of hours the equipment is in operation must be known. For the purpose of this analysis, the HVAC unit of the pre-manufactured walk-in cabinet was conservatively assumed to be operating continuously for 24 hours. As mentioned previously, the project applicant has indicated that routine testing and maintenance of the emergency generator is limited to daytime hours, twice per month, for a duration of less than 15 minutes. However, because generator noise is not exempt during nighttime emergency operation, it was conservatively assumed that the generator would operate for the duration of an hour during nighttime hours.

Table 2 Project-Related Noise Exposure at Nearest Residential Use Taber Ranch AT&T Wireless Telecommunications Facility Project				
Receiver ¹	Distance from Cellular Equipment Lease Area, feet ²	Predicted Equipment Noise Levels, L _{dn} (dB)		
		HVAC ³	Generator ⁴	Combined
1	1,600	32	27	33
Notes: ¹ Receiver location is shown on Figure 1. ² Distance was scaled from the project equipment lease area to the nearest residential use (receiver 1) using the provided site plans and County of Yolo Public Viewer measurement tool. ³ HVAC unit L _{dn} was calculated by conservatively assuming 24 continuous hours of operation. ⁴ Generator L _{dn} was calculated by conservatively assuming 1 hour of continuous operation during nighttime hours.				

As indicated in Table 2, the predicted combined project equipment noise level of 33 dB L_{dn} at the nearest residential use (receiver 1) would satisfy the applicable County of Yolo General Plan normally acceptable noise level standard of 60 dB L_{dn} by a wide margin. As a result, no further consideration of noise mitigation measures would be warranted for the project.

Conclusions

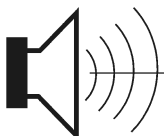
Based on the equipment noise level data and analyses presented above, project-related equipment noise exposure is expected to satisfy the applicable County of Yolo General Plan noise level criteria at the closest residential use. As a result, no additional noise mitigation measures would be warranted for this project.

This concludes our environmental noise assessment for the proposed Taber Ranch AT&T Cellular Facility in Capay (Yolo County), California. Please contact BAC at (916) 663-0500 or darioq@bacnoise.com with any questions or requests for additional information.

Appendix A

Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
L_{dn}	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
L_{eq}	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Masking	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.
Noise	Unwanted sound.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the Maximum level, which is the highest RMS level.
RT₆₀	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 sabin.
SEL	A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy of the event into a 1-s time period.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.



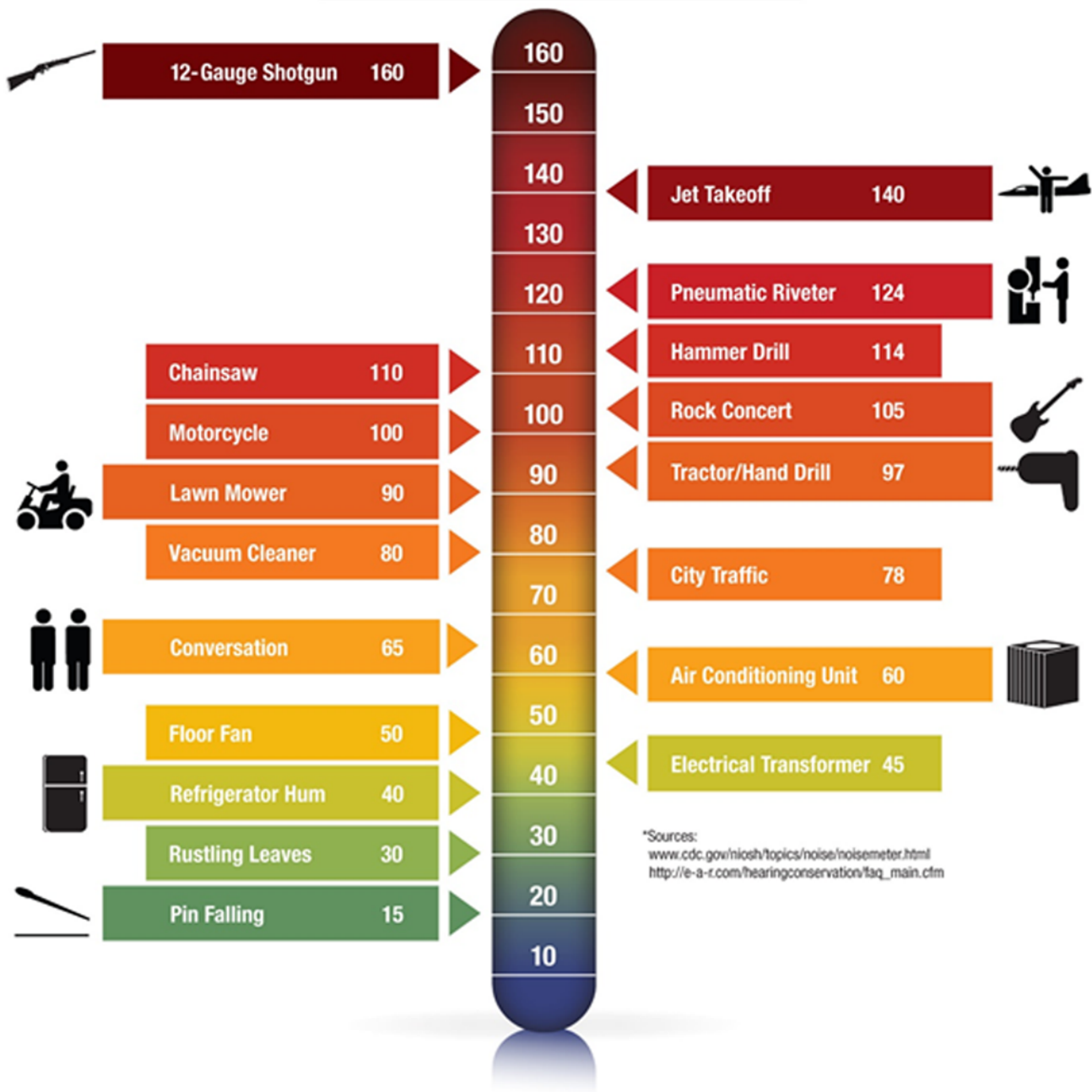
BOLLARD

Acoustical Consultants

Appendix B

Typical A-Weighted Sound Levels of Common Noise Sources

Decibel Scale (dBA)*



*Sources:
www.cdc.gov/niosh/topics/noise/noisemeter.html
http://e-a-r.com/hearingconservation/faq_main.cfm

Appendix C

Marvair

156 Seedling Drive
Cordele, Georgia 31015
229-273-8058

Distance From Unit (Feet)	Marvair Sound Data for the ComPac I and II Air Conditioners (dBA)						
	AVPA24ACA	AVPA30HPA	AVPA36ACA	AVPA42ACA	AVPA48ACA	AVPA60ACA	AVPA72ACA
5	66	69	70	70	72	73	69
10	61	67	66	66	68	70	64
20	56	63	62	62	63	65	60
30	53	61	58	60	61	63	58
40	51	59	56	59	58	61	56
50	50	57	55	57	57	60	55
60	49	56	53	56	56	58	53
70						57	
80						56	

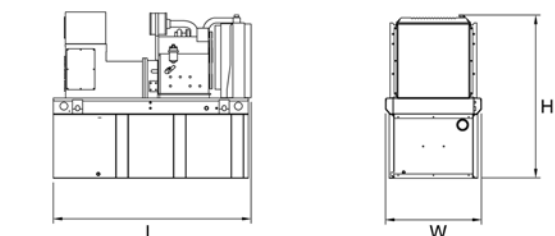
Notes: (1) Test Date: March 1-30, 2011
(2) Background Sound Level: 30 to 33 dBA

A Division of AIRXCEL, Inc.

Appendix D

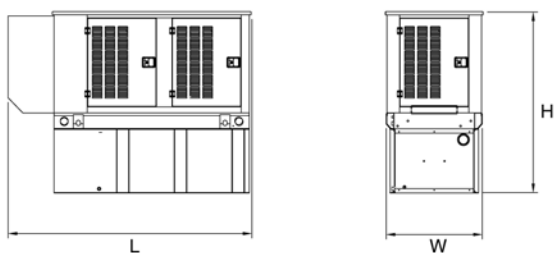
SD030

dimensions, weights and sound levels



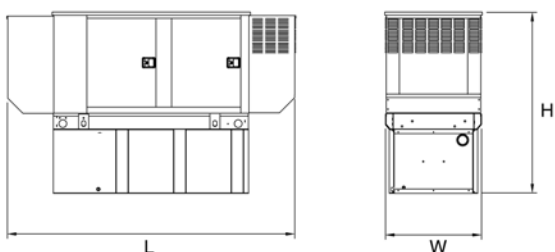
OPEN SET

RUN TIME HOURS	USABLE CAPACITY (GAL)	L	W	H	WT	dBA*
NO TANK	-	76	38	46	2060	82
20	54	76	38	59	2540	
48	132	76	38	71	2770	
77	211	76	38	83	2979	
109	300	93	38	87	3042	



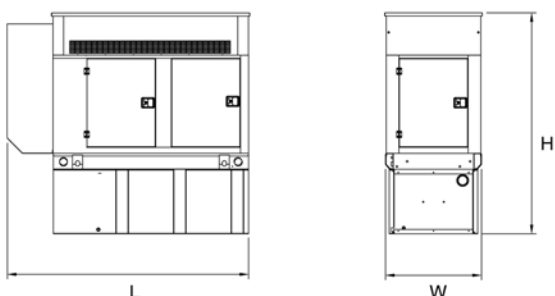
STANDARD ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY (GAL)	L	W	H	WT	dBA*
NO TANK	-	95	38	50	2362	77
20	54	95	38	63	2842	
48	132	95	38	75	3072	
77	211	95	38	87	3281	
109	300	95	38	91	3344	



LEVEL 1 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY (GAL)	L	W	H	WT	dBA*
NO TANK	-	113	38	50	2515	70
20	54	113	38	63	2995	
48	132	113	38	75	3225	
77	211	113	38	87	3434	
109	300	113	38	91	3497	



LEVEL 2 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY (GAL)	L	W	H	WT	dBA*
NO TANK	-	95	38	62	2520	68
20	54	95	38	75	3000	
48	132	95	38	87	3230	
77	211	95	38	99	3439	
109	300	95	38	103	3502	

*All measurements are approximate and for estimation purposes only. Weights are without fuel in tank. Sound levels measured at 23ft (7m) and does not account for ambient site conditions.

Tank Options	
<input type="radio"/> MDEQ	OPT
<input type="radio"/> Florida DERM/DEP	OPT
<input type="radio"/> Chicago Fire Code	OPT
<input type="radio"/> IFC Certification	CALL
<input type="radio"/> ULC	CALL

Other Custom Options Available from your
Generac Industrial Power Dealer

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

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