California Public Utilities Commission

Fulton-Fitch Mountain Reconductoring Project

Mitigation Monitoring, Compliance, and Reporting Plan

February 2018; Revised September 2019

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ACRONYMS AND ABBREVIATIONS

APM	applicant proposed measure
BMP	best management practice
Cal-IPC	California Invasive Plant Council
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
CPUC	California Public Utilities Commission
EI	Environmental Inspector
EM	Environmental Monitor
FAA	Federal Aviation Administration
GIS	geographic information systems
kV	kilovolt
MM	mitigation measure
MMCRP	Mitigation Monitoring, Compliance, and Reporting Plan
MMRP	Mitigation Monitoring and Reporting Program
MPR	Minor Project Refinement
NAHC	Native American Heritage Commission
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NTP	Notice to Proceed
PEA	Proponent's Environmental Assessment
PRC	Public Resources Code
PTC	Permit to Construct
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
PG&E	Pacific Gas and Electric Company
SF_6	sulfur hexafluoride
SWCRB	State Water Resources Control Board
SWPPP	Stormwater Pollution and Prevention Plan
US	United States
USACE	US Army Corps of Engineers
USFWS	US Fish and Wildlife Service

1 INTRODUCTION

1.1 PROJECT OVERVIEW

1.1.1 Application No. A.15-12-005/Decision No. D.17-12-012

Pacific Gas and Electric Company (PG&E) submitted an application to the California Public Utilities Commission (CPUC) on December 3, 2015, for a Permit to Construct (PTC) the proposed Fulton-Fitch Mountain Reconductoring Project (project). The application included the Proponent's Environmental Assessment (PEA) prepared pursuant to Rule 2.4 of the CPUC's Rules of Practice and Procedure. PG&E proposes to replace the conductor on a 9.9-mile-long section of the Fulton-Hopland 60-kilovolt (kV) Power Line (Fulton-Hopland line or 60-kV line) between Fulton Substation and Fitch Mountain Substation. The project would also include replacing poles along 8 miles of the Fulton-Hopland line, replacing conductor on 1.4 miles of the Geysers #12-Fulton 230-kV Transmission Line (Geysers #12 line or 230-kV line), and making modifications to Fitch Mountain Substation. Project detail maps with the locations of project facilities and construction work areas are provided in Appendix A.

The CPUC prepared an Initial Study/Mitigated Negative Declaration (IS/MND), pursuant to the California Environmental Quality Act (CEQA), the amended State CEQA Guidelines (14 California Resources Code 15000 et seq.), and the CPUC CEQA Rule 2.4, to address the potential impacts of the project on the environment. The CPUC adopted the Final IS/MND (State Clearinghouse No. 2017072049) and granted PG&E's PTC the approved project on December 14, 2017, in accordance with Public Resources Code (PRC) § 15074.

1.1.2 Petition for Modification of Decision No. D.17-12-012

Following CPUC approval of the proposed project, PG&E identified corrosion on the cross-arms of TSPs in the Southern Segment that could potentially cause cross-arm failure during reconductoring activities. On June 29, 2018, PG&E submitted a Petition for Modification (PFM) of Decision No. D. 17-12-012 in accordance with Rule 16.4 of the CPUC's Rules of Practice and Procedure. PG&E's PFM includes proposed modifications to the approved project that were not specified in the 2017 Final MND, including replacing the 21 TSPs in the Southern Segment and related construction activities as part of the reconductoring process.

In 2019, the CPUC prepared an IS and Supplemental MND for PG&E's PFM of the approved project pursuant to Title 14 CCR, §15163 to determine if the proposed modifications would result in any new or substantially greater impacts beyond those identified for the approved project. The results of the IS indicated that the proposed modifications would not result in new substantial environmental impacts. As with the approved project, all potentially significant impacts of the proposed modifications could be avoided or minimized to less-than-significant

levels with implementation of MMs. On September 12, 2019, the CPUC adopted the Supplemental MND and granted PG&E's PFM. Additional maps of the Southern Segment with the approved modifications have been added to Appendix A.

1.2 MITIGATION MONITORING, COMPLIANCE, AND REPORTING PLAN

1.2.1 Authority

PG&E is required to implement applicant proposed measures (APMs) and mitigation measures (MMs)[1], as well as to obtain and implement various agency permits applicable to the project, in order to avoid or reduce potentially significant impacts on the environment. As the CEQA lead agency, the CPUC is responsible for monitoring and enforcing compliance with these requirements, and to adopt a reporting or monitoring program, pursuant to PRC §21081.6 and Section 15097 of the CEQA Guidelines. Chapter 4 of the IS/MND included a Mitigation Monitoring and Reporting Program (MMRP) that describes a recommended framework for preparing and implementing a Mitigation Monitoring, Compliance, and Reporting Plan (MMCRP) prior to construction of the project. The CPUC adopted the MMRP framework with its decision on the project.

This MMCRP was prepared pursuant to the adopted MMRP, and in accordance with PRC § 21081.6 and Section 15097 of the CEQA Guidelines. PG&E was consulted during development of the MMCRP and given an opportunity to comment on its contents. PG&E's comments have been incorporated into the Final MMCRP. The contents of the MMCRP may be updated if necessary to further clarify expectations, add new procedures, or revise procedures.

1.2.2 Contents

The contents of the MMCRP are intended to:

- Ensure project impacts on the environment are avoided or reduced adequately as specified in the IS/MND
- Summarize all mitigating requirements that would be monitored by the CPUC
- Organize the mitigating requirements by category and implementation phase for clarity
- Identify the roles and responsibilities for key project personnel on the PG&E compliance team and the CPUC monitoring team

[1] Current version of APMs and MMs are from the Supplemental MND, which includes minor revisions to MM Traffic-1 (construction traffic management), MM Biology-4 (foothill yellow-legged frog), MM Biology-5 (special-status and protected migratory birds), MM Biology-7 (Revegetation, Restoration, and Monitoring Plan), and MM Biology-9 (sensitive natural plant communities).

- Establish clear expectations for the PG&E and CPUC teams by identifying specific procedures

1.2.3 Schedule

The proposed construction schedule for the project and duration of work for key features is presented in **Error! Reference source not found.**. The actual construction schedule may vary slightly. PG&E is responsible for informing the CPUC of any substantial changes to the proposed construction schedule well in advance. PG&E shall provide the CPUC with construction schedule updates on a frequent basis during construction (refer to Section 4.1.5).

Table 1.2-1 Proposed Construction Schedule

Construction Activity	Period Start	Period End	Estimated Duration
Southern Segment			
Site Development	September 2019	October 2019	4 weeks
Conductor Removal and Installation	October 2019	November 2019	2 months
Cleanup and Restoration	December 2019	December 2019	4 weeks
Total Segment Construction	*September 2019*	*December 2019*	*4 months*
Northern Segment			
Site Development	June 2018	August 2018	3 months
Conductor Removal	August 2018	February 2018	2 months
Pole Removal			4 months
Pole Installation			4 months
Conductor Installation			4 months
Cleanup and Restoration	February 2019	March 2019	2 months
Total Segment Construction	*June 2018*	*March 2019*	*10 months*
Fitch Mountain Substation			
Initial Modifications	June 2018	September 2018	2 months
Final Modifications	March 2019	November 2019	
Road/Surface Paving	November 2019	December 2019	3 weeks
Total Project Construction	**June 2018**	**December 2019**	**19 months**

The MMCRP shall be implemented before, during, and after construction. Implementation of the MMCRP will end when the CPUC Project Manager determines there is no further need for CPUC monitoring of the project. PG&E is required to perform restoration monitoring for up to 5 years following construction (specified in MM Biology-11: Wetland Mitigation). It is anticipated that implementation of the MMCRP would continue through the majority of PG&E's post-construction monitoring period.

2 SUMMARY OF REQUIREMENTS

2.1 REQUIREMENT SOURCES

The scope of requirements addressed in the MMCRP primarily originate from the APMs and MMs identified in the IS/MND, as well as the federal, state, and local permits and authorizations described in the IS/MND, that would have a mitigating effect on the project's environmental impacts. In addition to the requirements described in the IS/MND, the MMCRP identifies procedural requirements to verify and document implementation, as well as communication protocols for the PG&E and CPUC project teams (refer to Section 4, Procedures).

Table B-1 located in Appendix B lists all APMs and MMs from the adopted MMRP. Table B-1 includes the following information:

- Titles and full text of the required APMs and MMs
- Applicable locations where implementation would occur
- Performance standards, and applicable timing and implementation phase
- MMCRP tracking references

Federal, state, and local agencies have jurisdiction over lands and resources in the project area. Potentially applicable permits are identified in the IS/MND Project Description, and several APMs and MMs include requirements to obtain permits and/or agency authorizations.

2.2 REQUIREMENT CATEGORIES AND IMPLEMENTATION PHASES

The project requirements addressed in the MMCRP can be separated into eight categories, which are applicable during one or more implementation phase (e.g, Before Construction, During Construction, After Construction)[2]. Requirement categories for the project are summarized as follows:

- **Permits and Authorizations.** Requirements that involve obtaining a permit or authorization from the CPUC or another agency, or otherwise consulting with an agency prior to an activity.
- **Plans.** Requirements that involve preparing project plans specified in the IS/MND or permits, and submitting such plans to CPUC and jurisdictional agencies for review and approval, where specified. At a minimum, all plans must be submitted to CPUC for record keeping, including plan revisions.

[2] Some requirements are applicable following construction; however, there are no mitigating requirements applicable during the operation and maintenance phase.

- **Notifications.** Requirements that involve notifying the public, CPUC, or other agencies prior to initiating specific project activities, or if issues or the need for changes beyond the scope of the approved project description arise.
- **Worker Training.** Requirements that involve training workers on resource avoidance, impact minimization, communication procedures, and other project requirements.
- **Surveys.** Requirements that involve surveying project areas prior to or during construction to identify potentially sensitive environmental resources.
- **Field Monitoring.** Requirements that involve field monitoring (e.g., inspection or observation) during construction in sensitive areas, or when sensitive resources could be encountered.
- **Avoidance and Minimization.** Requirements that involve specific activities to avoid or minimize impacts on sensitive resources.
- **Reporting.** Requirements that involve documenting and/or reporting construction or compliance activities.

2.2.1 Permits and Authorizations

Table C-1, located in Appendix C, summarizes permits and authorizations that PG&E may be required to obtain from the CPUC and other jurisdictional agencies prior to an activity. The actual need for such permits and authorizations would be determined by the jurisdictional agencies. Table C-1 will be used to track the status of permits and authorizations (refer to Section 5.1.1, Tracking Systems).

Some permits for the project may include their own subset of requirements, including plans, notifications, worker training, field monitoring, impact avoidance and minimization measures, and reporting. Where applicable, permit requirements will be incorporated into the associated requirement tracking tables addressed in this section and located in Appendix C.

2.2.2 Plans

Several of the project APMs and MMs (refer to Table B-1) require PG&E to prepare project-specific plans to guide the implementation of complex mitigation requirements during one or more project phases. Table C-2, located in Appendix C, lists project plans and placeholders for agency submittal and approval dates. Some of the plans would only be required under certain conditions, as specified in the source APM or MM. Table C-2 will be used to track the status of plans for the project, and will be updated on an ongoing basis throughout implementation of the MMCRP.

Project plans require varying levels of review from jurisdictional agencies; however, CPUC review and approval is required for all final versions of plans identified in Table C-2. If agency review of a plan is required, PG&E must submit each agency's comments to the CPUC so the CPUC may verify that the comments were adequately addressed. If plans are revised following CPUC approval, the revised plans must be recirculated for review and comment to all agencies with applicable oversight responsibilities.

As with permits, some project plans include their own subset of requirements, including notifications, worker training, monitoring, impact avoidance and minimization measures, and reporting. Where applicable, plan requirements will be incorporated into the associated requirement tracking tables addressed in this section and located in Appendix C.

2.2.3 Notifications

PG&E is responsible for notifying members of the public, sensitive receptors, and other utilities that may be affected by construction. PG&E is also required to notify the CPUC and entities at certain stages of the project, or under specific conditions, to ensure that stakeholders are aware of important project information. Table C-3, located in Appendix C, lists required notifications, entities to notify, and the dates of notification.

Table C-3 will be used to track the status of required notifications for the project, and will be updated on an ongoing basis throughout implementation of the MMCRP. Notification requirements will be complete when the tracking table is fulfilled, and PG&E provides adequate documentation to the satisfaction of the CPUC.

MMCRP procedures addressed in Section 4 include notification timelines for certain events. These notifications will be tracked separately from the notifications addressed in Table C-3.

2.2.4 Worker Training

2.2.4.1 Environmental Training Program

Multiple APMs, MMs, and project plans specify worker training and communication procedures either prior to working on the site or during morning tailboard meetings. PG&E is responsible for preparing training materials and implementing an environmental training program (ETP) for workers and other project personnel. Worker training requirements are summarized in Table 2.2-1.

All project personnel, including construction workers and compliance monitoring workers, must participate in the ETP prior to working on the project site. Personnel that have not participated in the ETP must be escorted by a designated PG&E or CPUC representative who has received the full ETP training.

Table 2.2-1 Summary of Worker Training Requirements

Requirement Sources	Training Topics
APM BIO-1a: Environmental Awareness Training	Training shall include: discussion of avoidance and minimization measures implemented to protect potential listed and special-status species, and nesting birds, and their presence, life history, and habitat requirements; information provided on wetlands, and other water resources; and consequences of noncompliance with state and federal protection acts.
MM Biology-10: Sudden Oak Death Procedures	Training shall include: requirements and BMPs for reducing the spread of the Sudden Oak Death pathogen.

Requirement Sources	Training Topics
MM Cultural-2: Cultural Resource Training	Training shall address: appropriate work practices necessary to effectively avoid or protect known or discovered historical resources, archaeological resources, tribal cultural resources, and human remains; potential for exposing subsurface resources, basic signs of a potential resource, and required procedures if a potential resource is identified; requirements for working near archaeological resource site CA-SON-1256.
MM Hazards-1: Hazardous Materials Procedures and Worker Training	Training shall include: specific procedures for hazardous materials and emergency response.
MM Hazards-2: Construction Fire Prevention Plan	Training shall include: fire prevention and suppression methods.
APM PAL-2: Worker Environmental Awareness Training	Training shall include: recognition and protection of paleontological resources.

2.2.4.2 Levels of Training

Due to variations in the types of workers and duration of time they may spend on site, three levels of training may be provided, each with graduated levels of access to the project site. Access to some site locations may be restricted to those who have had the appropriate level of training.

Two limited training levels may be acceptable for delivery drivers and site visitors, depending on access location, presence of fully trained personnel, and risk of encountering resources or hazards. Delivery drivers who have limited site access and would only be on site for a short time may receive a shortened training that is focused on select resources and hazards with which they may come into contact. Similarly, site visitors may receive a shortened training, but must be escorted by a designated PG&E or CPUC representative who has received the full training. Workers that receive a limited training must complete the full training before accessing the site without an escort.

Workers must complete specific levels of wildfire prevention training in accordance with their role on the project, as described in the Construction Fire Prevention Plan (CFPP). Designated Environmental Inspectors and Crew Foremen and Superintendents must receive an advanced training on the CFPP and complete an Advanced Training Signature Sheet prior to starting work on the project. All other project personnel must be trained by a designated Environmental Inspector on the contents of the CFPP and provided a CFPP training brochure prior to starting work on the project.

2.2.5 Surveys

Multiple APMs and MMs, as well as project permits and plans, require PG&E to complete field based survey requirements, such as formal or protocol level surveys, reconnaissance inventories and evaluations, or clearances. The frequency, timing, and formality of the survey requirements vary depending on the targeted resource and implementation phase. Survey requirements for the project are summarized in Table 2.2-2 by resource topic.

PG&E is required to submit pre-construction survey results (in some cases reports) to the CPUC, and if necessary USFWS and CDFW, for review and acceptance prior to initiating construction or any other site development activities. PG&E shall provide documentation of USFWS and CDFW acceptance of pre-construction surveys to CPUC prior to initiating construction.

Surveys must be completed by qualified individuals, as applicable and specified in the requirement source. Personnel conducting surveys for several resources must also be approved by the CPUC, and potentially by USFWS and CDFW. Surveyor requirements are the same as those described for specialty monitors addressed in Section 2.2.6.

Table C-4, located in Appendix C, lists the timing and frequency of required surveys, and will serve as an implementation table for these requirements. Table C-4 will be used to track the status and results of surveys, and will also address the need for any monitoring or avoidance and minimization requirements due to the presence of a resource. Table C-4 will be updated on an ongoing basis throughout implementation of the MMCRP. Survey requirements will be complete when PG&E provides adequate documentation that surveys were completed.

Table 2.2-2 Summary of Survey Requirements

Resource/Topic	Requirement Sources	Freq. Before Construction [a]	Freq. During Construction	Freq. After Construction
California tiger salamander	APM BIO-7 SRPCS	Once	Ongoing	--
American badger	APM BIO-8	Once	Ongoing	--
Western pond turtle	APM BIO-9	Once	Ongoing	--
Special-status plants	MM Biology-2 *Special-status Plant Salvage and Replanting Plan	Once during blooming period (within 2 years of construction)	*As needed at the salvage and relocation site only	*Annually until success criteria are met
California red-legged frog	MM Biology-3	Once	Ongoing	--
Foothill yellow-legged frog	MM Biology-4	Once	*Ongoing	--
Nesting birds (e.g., Special-status and Protected Migratory Birds)	MM Biology-5	Once	Approximately weekly during nesting season [b]	--
Special-status and protected bats	MM Biology-6	Once	--	--
Temporarily disturbed areas	MM Biology-7	Once	--	Annually until success criteria are met

Resource/Topic	Requirement Sources	Freq. Before Construction [a]	Freq. During Construction	Freq. After Construction
Sensitive plant communities	MM Biology-9	Once	--	*Annually until success criteria are met
Vegetation infected with Sudden Oak Death	MM Biology-10	Once	--	--
Cultural resources	MM Cultural Resources-3	*Once	--	--
Geotechnical investigation	APM GS-3 MM Geology-1	Once	--	--

Notes:

[a] If construction is delayed for more than 30 days or otherwise specified, pre-construction surveys may need to be repeated, as determined through coordination with CPUC, and potentially USFWS and CDFW.

[b] The nesting bird season is generally from February 1 through August 31, but may be earlier or later depending on species nesting patterns and weather conditions.

* Requirements marked with an asterisk are only applicable under specified conditions, as noted in the requirement source.

2.2.6 Field Monitoring

In addition to the general mitigation monitoring effort addressed in the MMCRP, PG&E is required to assign specific on-site monitoring duties to select personnel. Several project APMs and MMs include specific on-site monitoring requirements that must be performed during or following construction to ensure impacts to resources are reduced or avoided. There are two types of monitoring requirements for the project, specialty monitoring and general monitoring, which are both discussed further below.

Monitoring requirements may depend on the presence of sensitive resources identified during surveys listed in Table 2.2-2. The results of surveys and presences of resources will be tracked in Table C-4.

2.2.6.1 Specialty Field Monitoring

Specialty monitors are required to perform the majority of the monitoring requirements for the project. Personnel performing these tasks must meet the minimum qualifications identified in the associated APMs and MMs. In addition, agency approval is required for many of the specialty monitors performing these roles. Specialty monitor requirements are listed in Table 2.2-3. Specialty monitors assigned by PG&E and approved by the applicable agencies will be listed in Table D-2 located in Appendix D.

Table 2.2-3 Summary of Specialty Field Monitoring Requirements

Monitoring Target	Requirement Sources	Minimum Qualifications [a]	Review/ Coordination
California tiger salamander	APM BIO-1k APM BIO-7 MM Biology-1 SRPCS	Bachelor's degree or above in a biological science field and demonstrated field experience with California tiger salamander	CPUC *CDFW *USFWS
American badger	APM BIO-1k APM BIO-8 MM Biology-1	Bachelor's degree or above in a biological science field and demonstrated field experience with American badger	CPUC *CDFW *USFWS
Western pond turtle	APM BIO-1k APM BIO-9 MM Biology-1	Bachelor's degree or above in a biological science field and demonstrated field experience with western pond turtle	CPUC *CDFW *USFWS
California red-legged frog	APM BIO-1k MM Biology-1 MM Biology 3	Bachelor's degree or above in a biological science field and demonstrated field experience with California red-legged frog	CPUC *CDFW *USFWS
Foothill yellow-legged frog	APM BIO-1k MM Biology-1 MM Biology-4	Bachelor's degree or above in a biological science field and demonstrated field experience with foothill yellow-legged frog	CPUC *CDFW *USFWS
Nesting birds	MM Biology-1 MM Biology-5	Qualified Avian Biologist: Bachelor's degree or above in a biological science field and demonstrated field experience with ornithology, particularly in nesting behavior and nest detection Qualified Burrowing Owl Biologist: Bachelor's degree or above in a biological science field and demonstrated field experience with burrowing owl behavior and detection Avian Monitor: Bachelor's degree or above in a biological science field and demonstrated experience surveying or monitoring nesting birds	CPUC
Special-status and protected bat	MM Biology-1 MM Biology-6	Bachelor's degree or above in a biological science field and demonstrated field experience with special-status and protected bats	CPUC
Special-status plants	MM Biology-1 MM Biology-2	Bachelor's degree or above in a biological science field and demonstrated field experience with field botany and special-status plants in the region	CPUC *CDFW *USFWS
Invasive weeds	MM Biology-1 MM Biology-7	Bachelor's degree or above in a biological science field and demonstrated field experience with field botany or native plant restoration, and familiar with native and invasive plants in the region	CPUC

Monitoring Target	Requirement Sources	Minimum Qualifications [a]	Review/ Coordination
Sensitive natural plant communities	MM Biology-1 MM Biology-9	Bachelor's degree or above in a biological science field and demonstrated field experience with field botany or native plant restoration, and familiar with sensitive plant communities in the project area	CPUC
Sudden Oak Death	MM Biology-1 MM Biology-10	A qualified botanist, biologist, or arborist with demonstrated field experience working with vegetation infected with Sudden Oak Death and procedures for preventing the spread of Sudden Oak Death	CPUC
Wetlands	MM Biology-1 MM Biology-11	Bachelor's degree or above in a biological science field and demonstrated field experience with wetland resources	CPUC
Cultural and tribal cultural resources	APM CR-1 MM Cultural-1	Experience with California/regional history; and local Native American history, traditions, and customs and shall meet the US Secretary of Interior Professional Qualifications Standards as published in 36 CFR Part 61[3]	CPUC
Paleontological resources	MM Paleontology-1 MM Paleontology-2	Qualified Paleontologist: Master's or PhD in geology or paleontology, have knowledge of the local paleontology, and be familiar with paleontological procedures and techniques Paleontological Monitor: Bachelor's degree or above in geology or paleontology and experience in the collection and salvage of fossil remains	CPUC
Erosion, sediment, and pollution control	MM Hydrology-2 SWPPP	Qualified SWPPP Developer (QSD) and Qualified SWPPP Practitioner (QSP)	N/A

Notes:

[a] Minimum qualifications for specialty monitors are specified in the applicable requirement sources. When no specific qualifications were identified, it is expected the individuals performing specialty monitoring will have at least a B.A. or B.S. in a relevant field and sufficient experience and/or training to perform the required monitoring duties adequately.

* Requirements marked with an asterisk are only applicable under specified conditions, as noted in the requirement source.

[3] 36 CRF Part 61 states the minimum qualifications are a graduate degree in archeology, anthropology, or closely related field plus: at least one year of full-time professional experience or equivalent specialized training in archeological research, administration or management; at least four months of supervised field and analytic experience in general North American archeology; and a demonstrated ability to carry research to completion.

2.2.6.2 General Field Monitoring

Any qualified and designated personnel may perform monitoring tasks where there is no discipline or agency approval requirements specified. General monitor requirements are listed in Table 2.2-4. Personnel performing these roles must be provided the necessary training beyond the minimum worker training requirements covered in the ETP (refer to Table 2.2-1).

Table 2.2-4 Summary of General Field Monitoring Requirements

Monitoring Target	Requirement Sources	Training/Designation Requirements
General wildlife entrapment	APM BIO-1k	PG&E-designated and trained personnel (excavation inspection only; any wildlife removal must be performed or overseen by a qualified biological monitor)
Slope stability	MM Geology-1 Geotechnical Investigation Report	PG&E-designated and trained personnel
Fire watch	MM Hazards-2 Construction Fire Prevention Plan	PG&E-designated and trained in accordance with the Construction Fire Prevention Plan

2.2.7 Avoidance and Minimization

All APMs and MMs, as well as project permits and plans, contain general impact avoidance and minimization goals; however, some requirements from these sources include specific actions to implement if resources are identified during pre-construction surveys or construction clearances. This section addresses avoidance and minimization requirements that will be implemented during construction and restoration activities to avoid or minimize impacts to resources that are present. Impact avoidance and minimization requirements for the project can by summarized by the following actions:

- Avoiding sensitive areas by communicating to workers and through the installation of signs, flagging, and/or barriers
- Avoiding sensitive periods or seasons (e.g., nighttime, wet season, or reproductive seasons)
- Using specific work techniques, materials, or equipment known to reduce impacts
- Scheduling work activities during less sensitive periods or seasons
- Providing ongoing reminders and environmental training to workers

The applicability of avoidance and minimization requirements may depend on the presence of sensitive resources identified during surveys listed in Table 2.2-2. The results of surveys and presences of resources will be tracked in Table C-4.

2.2.8 Reporting

Reporting is a key element of the MMCRP for both documentation and communication purposes, and both PG&E and CPUC are responsible for reporting requirements.

2.2.8.1 PG&E

PG&E is responsible for preparing general MMCRP reports to document all construction and compliance activities, as well as specific reports identified in APMs and MMs. Reporting activities may also be required by permits and plans. Table 2.2-5 summarizes PG&E's specific reporting requirements specified in APMs and MMs, and/or project plans. Table 2.2-6 summaries PG&E's general reporting requirements associated with the compliance effort.

Note: A Compliance Checklist PDF form is located in Appendix E. This form should be updated and submitted with each Weekly Compliance Summary Report for the same reporting period. The checklist form will serve to reduce the written reporting effort and give credit to PG&E for complying with day-to-day compliance activities that frequently are not described in the Weekly Compliance Summary Report. The Weekly Compliance Summary Report will be used to elaborate on important details described in the checklist and does not need to address every construction or compliance activity, especially if activities are proceeding in an ongoing and continuous manner. Note: the original PDF form provided with the MMCRP should be copied and updated without changing the format of the PDF (rasterizing or merging with other PDF documents) in order to maintain the form's data field functions.

Table 2.2-5 Summary of Specific PG&E Reporting Requirements

Report	Preparation/Submittal Frequency	Requirement Sources [a]	Contents
Before Construction			
Special-status Plant Survey Report(s)	Survey report(s) submitted to CPUC no less than 30 days prior to construction	MM Biology-2: Special-status Plants	Report shall identify: the botanists' names and qualifications; a description of the survey dates, methods, and a description of the survey efforts, including a list of the species that were searched for; results of the plant inventory evaluation; suitable habitat that was encountered; maps (1: 3,000 scale) that identify final project work areas and access routes; locations of suitable habitat within the project study area; the extent of focused plant surveys that cover project areas located in suitable habitat; enumeration and description of encountered special-status plant individuals or populations; and recommendations for avoiding the plants, where feasible.
Pre-Construction Report (general vegetation and habitat impacts)	Pre-Construction Report to the CPUC at least 30 days prior to construction	MM Biology-7: Revegetation, Restoration, and Monitoring Plan	Report shall: quantify and document anticipated impacts on vegetation resources; identify special-status plant individuals or the characteristics of populations; the types and numbers of tree and shrub individuals; restoration acreages for grassland, woodland, and forest vegetation communities; the baseline conditions for adjacent and comparable vegetation resources; maps (1: 3,000 scale) that identify the types and locations of the vegetation resources that may be impacted; the limits of the planned work areas; and project access routes.
Pre-Project Trail Condition Report	Pre-Project Trail Condition Report is submitted to the CPUC no less than 30 days prior to construction	MM Recreation-1: Trail Conditions and Repairs	Report documents the condition of designated trails located within project work areas or access routes.

Report	Preparation/Submittal Frequency	Requirement Sources [a]	Contents
Geotechnical Investigation Report	Geotechnical Investigation Report is submitted to the CPUC no less than 60 days prior to construction	APM GS-3: Site-specific Geotechnical Investigation MM Geology-1: Geotechnical Investigation Report	Report areas that are suspected to have unstable soils or landslide susceptibility and evaluate the potential for surface fault rupture for poles within and adjacent to potentially active fault traces and earthquake fault zones. Report shall provide site-specific recommendations for poles, work areas, and access routes where there is an elevated risk of geologic hazards.
During Construction			
Monthly ETP Logs	Information collected daily and submitted to CPUC monthly during construction	APM BIO-1a: Environmental Awareness Training MM Biology-10: Sudden Oak Death Procedures MM Cultural-2: Cultural Resource Training MM Hazards-1: Hazardous Materials Procedures and Worker Training MM Hazards-2: Construction Fire Prevention Plan APM PAL-2: Worker Environmental Awareness Training	Training logs and sign-in sheets for staff who have participated in the ETP, including their training level (refer to Section 2.2.4.1).
Monthly Noise Complaint Reports	Information collected daily and submitted to CPUC monthly during construction	MM Noise-1: General Construction Noise	Description of noise complaints received during construction, complaining party information, and response to the complaints including name of responder.

Report	Preparation/Submittal Frequency	Requirement Sources [a]	Contents
Nesting Bird Reports [b]	Information collected daily/as needed and submitted to CPUC monthly during construction occurring within the avian nesting season (generally between February 1 and August 31) Annual summary reports shall be prepared and submitted to CPUC during construction for each nesting season	MM Biology-5: Special-status and Protected Migratory Birds	Description of nests identified during the monthly reporting period including the location, species, exclusion buffer, construction activities within buffers, and monitoring observations. Report should include a map of the locations and buffers. Annual summary of all avian-related monitoring results and outcomes.
*CHRIS Reports	Inadvertent discovery reports are filed with CHRIS and the CPUC	MM Cultural-1: Archaeological Monitoring and Cultural Resource Discoveries MM Cultural-4: Data Recovery	Report shall include the methods and results of the cultural resource evaluation and/or data recovery.
SWPPP Visual Inspection and Storm Reports	Prepared for each qualifying rain event (QRE) (0.5 inch or more of precipitation within a 48 hour or greater period between rain events) and quarterly for non-stormwater discharges. Submitted to the Regional Water Board and CPUC upon request until SWPPP coverage is complete [c]	MM Hydrology-1: SWPPP Development and Implementation MM Hydrology-2: SWPPP Monitoring Program SWPPP	Visual inspection observations, proposed erosion and sediment control details, any corrective actions, the results of water quality sampling, and analysis of stormwater discharges associated with the project site.
SWPPP Numeric Action Level (NAL) Exceedance Reports	Prepared when values for parameters for pH and turbidity are exceeded and submitted to the Regional Water Board and CPUC upon request		Sampling methodology, a description of the best management practices (BMPs) associated with the sample that exceeded the NAL and the proposed corrective actions taken.

Report	Preparation/Submittal Frequency	Requirement Sources [a]	Contents
SWPPP Monthly and Annual Reports	Prepared monthly and annually for each year of SWPPP coverage and submitted to CPUC until SWPPP coverage is complete [c]		Stormwater data, evaluations, required forms, a summary of all corrective actions taken during the compliance year, and identification of any compliance activities or corrective actions that were not implemented.
After Construction			
Post-Construction Report(s) & Annual Monitoring Reports (general vegetation and habitat impacts)	Prepared and submitted to CPUC on an annual basis	MM Biology-7: Revegetation, Restoration, and Monitoring Plan MM Biology-9: Sensitive Natural Plant Communities	Post-Construction Reports: summary tables of actual vegetation impacts with maps. Summary tables shall include the location name/ID for each impact area, anticipated impact acreage from the Pre-Construction Report, and actual impact acreage during construction. The report shall include a brief statement about revegetation, restoration, and monitoring procedures that would be implemented where impacts occurred, as defined in the approved Revegetation, Restoration, and Monitoring Plan. Annual Monitoring Reports: Once revegetation and restoration begin, summary of survey results in restoration areas and revegetation progress or corrective actions until the performance standards and success criteria have been achieved.
Post-Project Trail Condition Report	Prepared and submitted to CPUC once within 30 days following construction in each project segment	MM Recreation-1: Trail Conditions and Repairs	Documentation of trail restoration and comparison with the Pre-Project Trail Condition Report.
*Annual Progress Reports for Special-status Plant Salvage and Relocation	Prepared and submitted to CPUC on an annual basis	MM Biology-2: Special-status Plants *Special-status Plant Salvage and Replanting Plan	Report shall discuss the progress and success of the salvage plan, and any corrective measures.

Report	Preparation/Submittal Frequency	Requirement Sources [a]	Contents

Notes:

[a] Refer to the referenced measures for additional details regarding reporting requirements.

[b] Monthly Nesting Bird Reports are not required if work does not occur within the preliminary buffers during the month as specified in MM Biology-5.

[c] SWPPP coverage and reporting requirements typically begin with the start of construction and extend into the post-construction restoration period. SWPPP coverage ends when the project site is stabilized, disturbed areas reach a minimum of 70 percent vegetation coverage, and Notice of Terminations (NOTs) have been filed ending SWPPP coverage. SWPPP reports and other documents are submitted to the SWRCB via the SMARTS website, and can be downloaded by entering the project Wastewater Discharger Identification (WDID) Number located in the SWPPP.

* Requirements marked with an asterisk are only applicable under specified conditions.

Table 2.2-6 Summary of General PG&E Reporting Requirements

Report	Preparation/Submittal Frequency	Requirement Sources	Contents
During Construction			
Daily Compliance Reports	Prepared daily and submitted to CPUC upon request during construction	MMCRP	Detailed description of the construction and compliance activities, as well as any issues, resolutions, and MMCRP procedures implemented, for each work day. Reports should include supporting photographs.
Weekly Compliance Summary Reports (with completed Compliance Checklist forms)	Prepared and submitted to CPUC weekly during construction	MMCRP *MM Cultural-1: Archaeological Monitoring and Cultural Resource Discoveries	Summary of Daily Compliance Reports with supporting photographs, a completed compliance checklist form (located in Appendix E), and a description of any important meetings during the reporting period. Any Incident Reports and supporting documentation shall be attached. The compliance summary reports will serve as the core method for PG&E to communicate project activities to CPUC and to document their compliance effort. *Summary of the discovery findings and evaluation conclusions of non-historic or unique resource shall be documented and provided.
Incident Reports	Prepared and submitted to CPUC within one business day of observation	MMCRP	Detailed description of incidents as described in Section 4.3.
After Construction			
Final Construction Compliance Report	Prepared and submitted to CPUC once within 90 days following construction	MMCRP	Summary of all construction and compliance activities that occurred prior to and during construction, summary of issues and resolutions, discussion of project outcomes and any lessons learned for future projects, and a status update for all project requirements (Table B-1 and requirement tracking tables).

Note:

* Requirements marked with an asterisk are only applicable under specified conditions.

2.2.8.2 CPUC

The CPUC is responsible for preparing general MMCRP reports to document the status and results of the mitigation monitoring effort, to summarize the information provided by PG&E at an executive level, and to track important information about the project. Table 2.2-7 summarizes the CPUC's general reporting requirements associated with the mitigation monitoring effort.

Table 2.2-7 Summary of General CPUC Reporting Requirements

Report	Preparation Frequency	Requirement Sources	Contents
Daily Inspection Reports	Prepared daily and submitted to CPUC monthly during construction, or upon request	MMCRP	Detailed description of the construction and compliance activities, as well as any issues, resolutions, and MMCRP procedures implemented, for each day CPUC Environmental Monitors (EMs) visits the site
Monthly Monitoring Summary Reports	Prepared and submitted to CPUC monthly during construction	MMCRP	Summary of Daily Monitoring Reports and PG&E's Weekly Compliance Summary Reports and Checklists, important documentation provided by PG&E (e.g., reports and logs), a description of any important meetings and discussions, and MMCRP procedures that were implemented during the reporting period
Post-construction Monitoring Report	Prepared and submitted to CPUC once following construction	MMCRP	Summary of all monitoring activities that occurred prior to and during construction, summary of issues and resolutions, discussion of project outcomes and any lessons learned for future projects, and a status update for all project requirements (Table B-1 and requirement tracking tables) with a summary of any remaining tasks that must be completed
Final Monitoring Report (if necessary)	Prepared and submitted to CPUC once to finalize MMCRP implementation	MMCRP	Summary of all monitoring activities that occurred following construction and compliance with requirements that were not documented as complete in the Post-Construction Monitoring Report The necessity of the report will be determined by the CPUC Project Manager

3 ROLES AND RESPONSIBILITIES

PG&E and CPUC, including their contractors, are collectively responsible for ensuring environmental impacts addressed in the IS/MND are adequately mitigated; however, PG&E is primarily responsible for compliance by implementing project requirements. CPUC is responsible for monitoring PG&E's compliance by verifying that implementation is completed adequately, and enforcing appropriate corrective actions if the project is not in compliance.

This section describes specific PG&E and CPUC roles and responsibilities for the project, and titles that will be assigned to personnel in these roles.

A list of designated personnel who will perform these roles, including their organization and contact information, will be located in Table D-1 located in Appendix D. Table D-1 shall be updated as needed throughout implementation of the MMCRP to reflect personnel changes.

3.1 PG&E

3.1.1 PG&E Compliance Team

3.1.1.1 PG&E Project Manager

PG&E is responsible for designating the project manager who will provide overall direction, management, leadership, and corporate coordination for the project. The PG&E Project Manager's responsibilities shall include:

- Coordinating construction, engineering, and PG&E's environmental personnel
- Integrating environmental responsibilities into all levels of the project organization
- Ensuring compliance with all APMs, MMs, permit conditions, plan requirements, and the MMCRP
- Communicating project activities, schedules, and public relations issues to the project teams

3.1.1.2 PG&E Compliance Manager

PG&E is responsible for designating a compliance manager to oversee the overall compliance effort. The PG&E Compliance Manager shall be the lead PG&E representative responsible for implementing environmental requirements and the MMCRP. The PG&E Compliance Manager's responsibilities shall include:

- Understanding and planning for project requirements and construction needs
- Coordinating PG&E's environmental personnel, and ensuring that qualified monitoring personnel are available and informed of their responsibilities, and have been approved by CPUC when applicable

- Communicating environmental requirements to the PG&E Compliance Team and Construction Managers
- Communicating with the CPUC Monitoring Team regarding environmental requirements, construction needs, construction schedule changes, and MMCRP procedures described in Section 4
- Ensuring compliance with project requirements
- Reporting the effectiveness of mitigation and regularly submitting required reports and documentation to CPUC
- Providing leadership to correct any issues with environmental compliance

3.1.1.3 PG&E Compliance Supervisor

PG&E is responsible for designating at least one person to supervise the day-to-day compliance effort. The PG&E Compliance Supervisor shall support the role of the PG&E Compliance Manager and may perform any duties that are delegated by the PG&E Project Manager and the PG&E Environmental Compliance Manager.

3.1.1.4 PG&E Environmental Inspector(s)

PG&E is responsible for designating at least one environmental inspector who will be regularly present at the project site to oversee and verify the day-to-day compliance effort. The PG&E Environmental Inspector (EI) shall work closely with construction personnel and shall be the primary field employee responsible for verifying and documenting environmental compliance. Multiple PG&E EIs may be needed to effectively monitor compliance during periods of high construction activity or high monitoring demand. The PG&E EI's responsibilities shall include:

- Understanding environmental project requirements and construction needs
- Taking direction from the PG&E Compliance Manager and Compliance Supervisor
- Communicating construction needs and possible conflicts with environmental requirements to the PG&E Compliance Manager and PG&E Compliance Supervisor
- Supporting construction staff to ensure work is conducted in compliance with environmental requirements
- Overseeing specialty monitoring activities, or performing such duties when appropriate and approved to do so
- Implementing communication procedures described in the MMCRP
- Ensuring that resources are avoided, and impacts are minimized as specified by all project requirements
- Determining the effectiveness of mitigation and reporting whether adjustments need to be made to the PG&E Compliance Manager and Compliance Supervisor

3.1.1.5 PG&E Specialty Monitors

PG&E is responsible for designating personnel to perform required or as needed specialty monitoring requirements. Agency approval is required for several specialty monitoring roles as well as minimum qualifications. Specialty monitoring roles for the project are listed in Table 2.2-3 above, including minimum qualifications and agency approval requirements for designated personnel performing these roles. EIs may also perform specialty monitoring roles if

they possess the appropriate qualifications and experience, and have received applicable agency approval. Table D-2 located in Appendix D lists designated specialty monitors, their contact information, and dates of agency approval, if applicable.

3.1.1.6 PG&E General Monitors

Several project requirements require general monitoring tasks. General monitoring can be conducted by any personnel if there are no minimum qualifications or agency approval requirements. General monitor requirements are listed in Table 2.2-4 above. Personnel performing these roles shall be provided training specific to the monitoring responsibility that is more detailed than the minimum worker training requirements included in the ETP (refer to Table 2.2-1). PG&E EIs may perform general monitoring tasks in conjunction with their other inspection and monitoring duties if appropriate.

3.1.2 Construction Workforce

3.1.2.1 Construction Managers

PG&E shall identify Construction Managers for the project who are responsible for work crews. Construction Mangers shall provide support to the PG&E Project Manager and oversee the activities of construction personnel. Construction Manager responsibilities include:

- Implementing contractor compliance with PG&E specifications, construction contracts, and applicable codes
- Coordinating with PG&E Compliance Personnel regarding implementation of project APMs and MMs, permit conditions, plan requirements, MMCRP procedures
- Planning construction activities around environmental requirements and reporting any potentially infeasible requirements and work area constraints to the PG&E Compliance Team
- Communicating construction needs and schedule changes to the PG&E Compliance Team
- Regularly facilitating field meetings with construction and environmental staff

3.1.2.2 Construction Supervisors

At PG&E's discretion, on-site responsibilities for Construction Managers may be delegated to Construction Supervisors (i.e., crew foreman). Construction Supervisors provide support to Construction Managers. Construction Supervisors shall be responsible for communicating with Construction Managers and PG&E EIs to ensure day-to-day construction activities are conducted in compliance with all project requirements.

3.1.2.3 Construction Workers

Construction workers who enter the project site are responsible for following all environmental project requirements. Construction workers are responsible for attending required environmental trainings addressed in the ETP that are applicable to their position. Any questions regarding project requirements shall be directed towards PG&E Construction Managers, PG&E Construction Supervisors, and/or PG&E EIs.

3.2 CPUC

3.2.1 CPUC Monitoring Team

3.2.1.1 CPUC Project Manager

The CPUC Project Manager is the lead representative for the CPUC and the sole CPUC employee on the CPUC Monitoring Team. The CPUC Project Manager shall oversee the mitigation monitoring effort and is responsible for making final determinations regarding MMCRP procedures, requirement clarifications, and compliance issues.

3.2.1.2 CPUC Monitoring Manager

CPUC is responsible for designating a monitoring manager who will support the CPUC Project Manager and provide oversight to the mitigation monitoring effort. The CPUC Monitoring Manager's responsibilities shall include:

- Reviewing CPUC monitoring reports and discussing non-compliance issues with the CPUC PM
- Reviewing reports and other documentation provided by PG&E for MM compliance
- Reviewing NTPs, MPRs and Temporary Extra Work Space (TEWS) requests and submitting to CPUC PM for approval and sign-off
- Acting as a project liaison on the CPUC's behalf to work with PG&E public affairs staff and address community issues and concerns should they arise
- Working with the PG&E Compliance Personnel to resolve any issues and incidents
- Coordinating with other jurisdictional agencies as needed

3.2.1.3 CPUC Monitoring Supervisor

CPUC is responsible for designating a monitoring supervisor who will support the CPUC Project Manager and the CPUC Monitoring Manager by overseeing the day-to-day mitigation monitoring effort. The CPUC Monitoring Supervisor shall perform the delegated duties of the CPUC Monitoring Manager. The responsibilities of the CPUC Monitoring Supervisor include:

- Providing oversight of the CPUC Monitoring Team and conducting routine monitoring activities described in the MMCRP on behalf of the CPUC
- Implementing CPUC's responsibilities for MMCRP procedures, and verifying PG&E fulfills its responsibilities
- Reviewing all pre-construction mitigation plans and preparing draft review memoranda for the CPUC PM, and keeping a record of MMCRP procedures
- Coordinating field personnel for the CPUC Monitoring Team to inspect the project site(s)
- Determining the appropriate frequency of site visits for CPUC environmental monitors (EMs)
- Conducting regular site visits at beginning of construction, with frequency adjusted as appropriate

- Verifying and documenting PG&E's compliance with all project requirements prior to, during, and following construction, and creating an independent record of project compliance
- Documenting any incidents with compliance, reporting them to the CPUC PM, tracking the project compliance incidents record, and working with the CPUC Monitoring Team and PG&E Compliance Personnel to resolve any compliance incidents
- Reviewing all CPUC and PG&E daily and weekly monitoring reports
- Preparing MMCRP monthly compliance reports and submitting to the CPUC
- Preparing NTPs for Monitoring Manager's review and CPUC's review and sign-off
- Reviewing and processing MPRs and TEWS requests
- Reviewing PG&E's compliance reports for consistency with field observations and identifying and reconciling any inconsistencies
- Coordinating all aspects of the project with the PG&E Compliance Personnel

3.2.1.4 CPUC Environmental Monitors

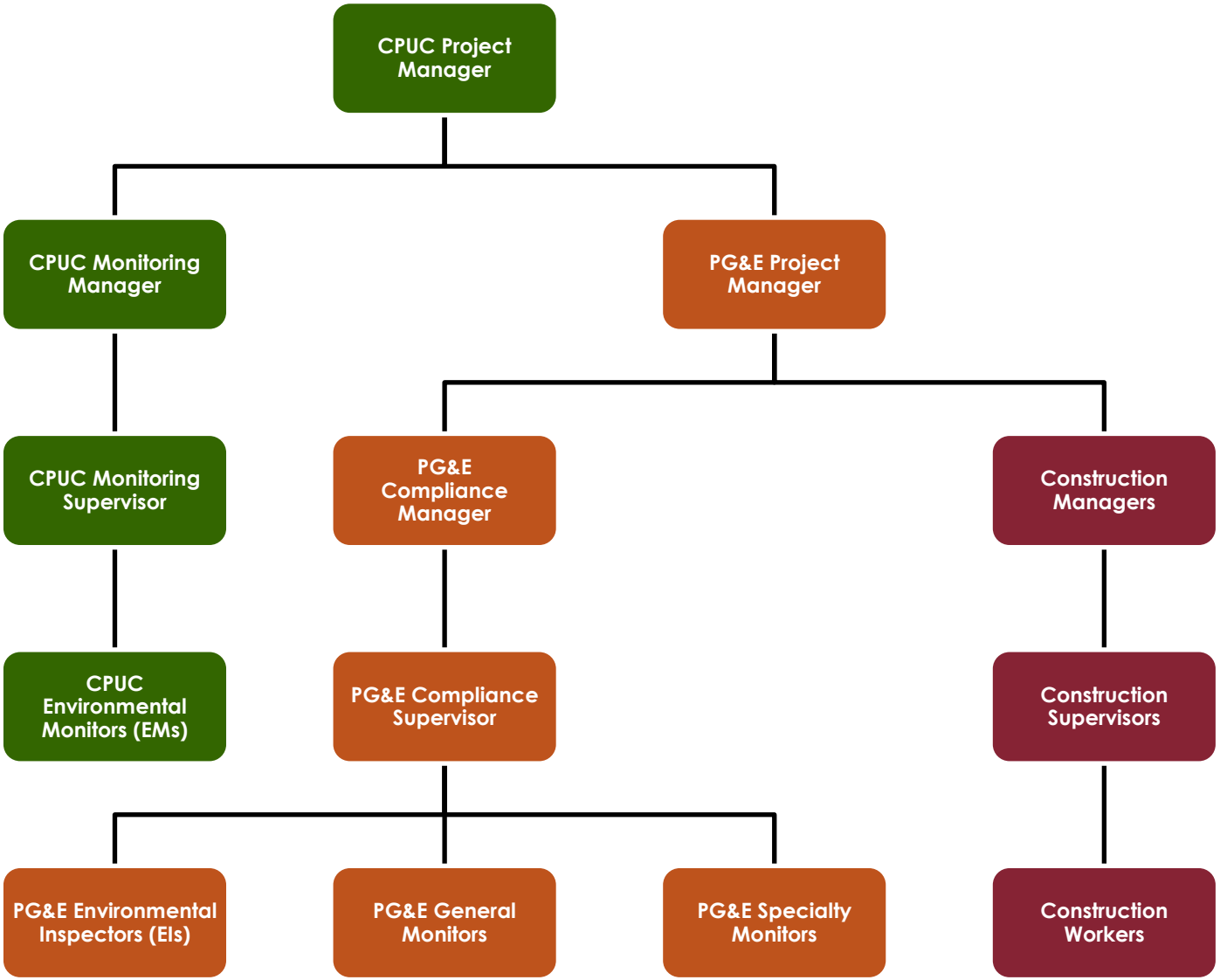
CPUC Environmental Monitors (EMs) shall be identified for the project. CPUC EMs shall be the primary field personnel for CPUC and responsible for verifying compliance with project requirements at the project site as directed by the CPUC Monitoring Team. Additional monitors may be used as needed depending on concurrent construction activities and specific monitoring needs. The responsibilities of the CPUC EMs are:

- Inspecting the project site, documenting construction and compliance activities, and reporting any potential issues and incidents
- Preparing and submitting daily monitoring reports to the CPUC Monitoring Managers, and relaying any important information about the project delivered in the field

3.3 PROJECT ORGANIZATION CHART

An organizational chart of CPUC and PG&E project personnel is shown on Figure 3.3-1. The organization chart illustrates preliminary lines of communication between project team members. The names of individuals performing the roles and their contact information will be listed in Tables D-1 and D-2 located in Appendix D. Both CPUC and PG&E are responsible for keeping one another informed of staffing changes and providing contact information.

Figure 3.3-1 Project Organization Chart



3.4 JURISDICTIONAL AGENCIES

Personnel from jurisdictional agencies may periodically visit the project site to verify compliance, or request information regarding compliance with various project requirements, or in response to a violation, should one occur. PG&E is responsible for satisfying requests from jurisdictional agencies, submitting the permits and authorizations to CPUC, and notifying CPUC of any changes to agency requirements in a timely manner. PG&E shall provide CPUC with documentation (i.e., email correspondence, letters, and/or memoranda) related to final agency approvals, if CPUC is not directly involved with the coordination effort. The CPUC may contact jurisdictional agencies at any time regarding the project and to clarify agency requirements, permit conditions, or approvals relating to their jurisdiction, as needed.

4 PROCEDURES

This section addresses MMCRP procedures for personnel identified in Section 3 that shall be implemented prior to, during, and following construction, in order to facilitate successful implementation and documentation of project requirements. Procedures in this section include general communication guidelines, standard CPUC practices, and documentation tools developed from experience with past CPUC projects that involved mitigation monitoring oversight.

4.1 COMMUNICATION GUIDELINES

Clear communication will be critical for successful implementation of the MMCRP, and will reduce the likelihood of issues that may arise, such as project delays, compliance violations, and safety incidents. Environmental and construction personnel must regularly communicate and maintain professional and responsive communications at all times. The PG&E Compliance Team and CPUC Monitoring Team must coordinate closely to clarify questions regarding implementation before issues occur, to develop expectations regarding compliance documentation, and to resolve any issues that may arise in a timely manner. This section addresses general communication procedures for the project.

4.1.1 Meetings

PG&E or CPUC may request as-needed meetings on an occasional or regular basis to discuss construction and compliance activities, proposed project changes, reporting and documentation procedures, compliance procedures, and to resolve issues. Meetings may be held in the field at the project site or over the phone. Key decision makers from the PG&E and CPUC teams shall be given an opportunity to participate in important meetings. The results of all meetings shall be documented in MMCRP reports prepared by both PG&E and CPUC.

4.1.2 Site Visit Coordination

Field personnel from both PG&E and CPUC shall coordinate site visits with a designated PG&E EI who is familiar with authorized construction activities, project requirements, and any restricted areas (i.e., dangerous conditions, unauthorized work areas or work on private properties, or the presence of sensitive resources). Conditions in the field may change rapidly and PG&E field personnel must ensure that all field personnel are adequately informed of restricted areas, parking locations, and communication procedures on an ongoing basis.

A CPUC EM shall conduct routine site inspections. Site inspections would generally be conducted when project activities are occurring; however, site visits may be conducted during inactive periods if necessary. At a minimum, the CPUC EM will coordinate with a designated

PG&E EI prior to visiting the site. If contact cannot be made, the CPUC monitoring personnel will inspect open project areas on foot. The CPUC EM shall at no time pass through fences unless authorized or escorted by a member of the PG&E Compliance Team who is familiar with the property.

4.1.3 Questions and Clarifications

Questions and the need to clarify project requirements will periodically arise throughout the implementation process. Both PG&E and CPUC shall submit important questions and clarifications in writing via email. Resolutions and any CPUC determinations shall be documented in compliance and monitoring reports, and/or in email correspondence. Questions and clarifications that take an extended period of time to resolve shall be tracked by the CPUC Monitoring Team until a resolution has been reached.

4.1.4 Requests for Documentation

The CPUC Monitoring Team may periodically request written documentation and confirmations from the PG&E Compliance Team that will be entered into the project record. Requests for documentation and confirmations shall be submitted via email. If the information will take an extended period of time to gather, both PG&E and CPUC shall agree upon a timeframe to respond, and the request shall be tracked by the CPUC Monitoring Team until a resolution has been reached.

4.1.5 Schedule Updates

PG&E shall inform the CPUC Monitoring Team immediately of any delays in the construction schedule that may affect the project and implementation of the MMCRP.

4.1.6 Dispute Resolution

Disputes or complaints may develop between PG&E and CPUC if there are conflicting opinions regarding project requirements and procedures. It is expected that the MMCRP will reduce or eliminate the potential for disputes; however, disputes may occur even with the best preparation.

Any issues shall first be addressed informally at the field level between the CPUC EM and PG&E EI, or during project progress meetings. Questions may be directed to other members of the PG&E Compliance Team and the CPUC Monitoring Team as needed. If the issue cannot be resolved informally in the field, the following procedures shall be implemented:

- **Step 1.** Disputes and complaints (including those from the public) should be directed first to the CPUC Project Manager, for resolution. The Project Manager would attempt to resolve the dispute.
- **Step 2.** Should this informal process fail, the CPUC Project Manager may initiate enforcement or compliance actions to address deviations from the approved project or adopted MMRP.

- **Step 3.** If a dispute or complaint regarding the implementation or evaluation of the MMRP cannot be resolved informally or through enforcement or compliance action by the CPUC, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC's Executive Director or his/her designee. This notice should be filed in order to resolve the dispute in a timely manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the Executive Director or designee(s) shall meet or confer with the filer and other affected participants for purposes of resolving the dispute. The Executive Director shall issue an Executive Resolution describing his/her decision, and serve it on the filer and other affected participants.
- **Step 4.** If one or more of the affected parties is not satisfied with the decision as described in the Executive Resolution, such party(ies) may appeal it to the CPUC via a procedure to be specified by the CPUC.

Affected parties may also seek CPUC review through existing procedures specified CPUC's Rules of Practice and Procedure for formal and expedited dispute resolution, although a good faith effort should first be made to use the foregoing procedure.

4.2 NOTICE TO PROCEED PROCESS

PG&E is required to obtain CPUC authorization prior to initiating project activities through the Notice to Proceed (NTP) process. The NTP process involves the PG&E Compliance Team submitting a NTP request package to the CPUC Monitoring Team, and the CPUC Project Manager issuing a NTP Authorization Letter. Project activities may be authorized through one or more NTPs for separate project phases as determined necessary by the PG&E Compliance Team and the CPUC Monitoring Team. At a minimum, NTP request packages shall include the following information:

- NTP request number
- Date submitted to CPUC
- Requested approval date
- Anticipated start and end date for the proposed actions
- A detailed description of the proposed actions requested in the NTP
- A summary list of any previously authorized actions (if applicable) as detailed in NTP Authorization Letters
- A summary list of any actions that have not been proposed or authorized that must be included with future NTP requests
- Updated versions of the four require tracking tables described in Section 5.1.1 (Tables C-1, C-2, C-3, and C-4)
- A summary list of any outstanding requirements and documentation not included with the NTP package, and the anticipated dates it will be provided
- Any Minor Project Refinements or Temporary Extra Workspace related to the proposed actions (refer to Section 4.4)

The CPUC Monitoring Team shall review NTP requests to ensure the proposed actions are consistent with the IS/MND and final CPUC decision, and to verify compliance with all pre-construction requirements. The CPUC Monitoring Team may request additional information during the NTP review process as needed. Once it has been determined that all pre-construction requirements have been completed and documented to the satisfaction of CPUC, the CPUC Project Manager will submit an NTP Authorization Letter to the PG&E Compliance Team. The NTP Authorization Letter will address any conditions of approval, and include applicable documentation as necessary for the authorized actions.

Note: It is highly suggested that PG&E consult the CPUC well in advance of submitting NTP requests to establish clear expectations. Incomplete NTP Requests may result in delays to the construction schedule.

4.3 INCIDENTS

The goal of this MMCRP is to plan for and avoid any issues that could occur during implementation; nonetheless, there is a potential for issues to arise due to a variety of factors. For the purposes of this MMCRP, any issues that are observed with compliance, issues related to health and safety, or public complaints shall be documented as incidents. This section addresses incidents that may occur and procedures that shall be followed to document them.

4.3.1 Incident Categories

Incident categories for the project include compliance level incidents, health and safety incidents, and public complaints.

4.3.1.1 Compliance Level Incidents

PG&E and CPUC are responsible for evaluating compliance and addressing any issues throughout implementation of the MMCRP. Issues with compliance will be documented by assigning one of four severity levels and associated terms. If all project requirements are being followed and no issues are observed, then the project would be at an acceptable compliance level (Level 0: Acceptable) and no further actions are required. A description of compliance levels that will be used for the project and examples of compliance level incidents are listed in Table 4.3-1.

When documenting compliance level incidents, the reporting party shall assign an initial compliance level that appropriately represents the severity of the issue based on factors including, but not limited to the following:

- Scope of the deviation or violation
- Risk of impact to resources
- Actual impact to resources
- Number of repeated issues
- How the incident could have been prevented

Table 4.3-1 Compliance Levels

Compliance Level, Reporting Term, and Severity	Project Definition	Examples
Non-Incident		
Level 0: Acceptable *Compliant*	An event or observation where the project was compliant with all project requirements.	• All project requirements were followed adequately. • No issues were observed.
Incident		
Level 1: Occurrence *At risk of being out of compliance (low severity)*	An event or observation that if left unaddressed has the potential to affect compliance.	• A low amount of trash or construction debris was observed scattered around a work site, but the trash was quickly collected and removed from the site. • A minor fluid leak (i.e., hydraulic hose break) that did not put a resource at risk, and was immediately contained and cleaned according to project requirements.
Level 2: Minor Problem *Out of compliance (low to moderate severity)*	An event or observation that slightly deviates from project requirements, but does not put a resource at unpermitted risk.	• Erosion controls were improperly installed or maintained at a work site, but did not result in discharge of sediment. • Project personnel used an unauthorized turnaround area or access road, but the site was previously disturbed, and the action did not put a sensitive resource at risk.
Level 3: Compliance Issue *Out of compliance (moderate to high severity)*	An event or observation that slightly deviates from project requirements and puts a resource at minor unpermitted risk, but is quickly corrected without impacting the resource.	• Soil or construction material was placed outside of an approved work area in a non-sensitive area, but the material was removed by the end of the day. • A fuel tank was stored overnight within specified limits of a water body without secondary containment, but did not result in the release of hazardous materials. • Project personnel used an unauthorized overland and previously undisturbed turnaround area or access road, but the action did not impact a sensitive resource.
Level 4: Noncompliance *Out of compliance (high severity)*	An event or observation that violates project requirements and puts a resource at unpermitted risk.	• Mobilization of equipment or materials to a work site prior to receiving NTP authorization from CPUC. • Soil or construction material was placed outside of an approved work area in an environmentally sensitive area. • Erosion control BMPs failed during a storm and sediment was discharged into a sensitive area. • Project vehicles entered a sensitive resource exclusion area and damaged a resource. • Project personnel continued to operate equipment after being requested to halt temporarily by the EI or EM.

The need to change initially reported compliance levels may arise if the incident level was over- or under-reported. The CPUC Project Manager shall make final determinations regarding the appropriate compliance level for each incident as needed, and the CPUC Monitoring Team shall maintain a record of all incidents for the project that will be analyzed in the post-construction and final monitoring reports.

4.3.1.2 Health and Safety Incidents

PG&E and CPUC's most important responsibility is maintaining safe working conditions and protecting the public including workers from exposure to hazards related to the project. Any events (i.e., accidents or near misses/close calls) or issues observed with health and safety procedures shall be documented as an incident. PG&E and CPUC shall provide notification and prepare Incident Reports for health and safety incidents; however, health and safety incidents will not necessarily reflect negatively on PG&E's environmental compliance record unless a specific project requirement, permit, or plan requirement was violated.

4.3.1.3 Public Complaints

The public may take issue with one or more aspects of the project. MM Noise-1 includes specific requirements for processing noise complaints from the public. All other public complaints that do not relate to noise shall be documented as an incident. Public complaints may be submitted formally to PG&E or CPUC, or informally to field personnel at the project site.

PG&E may elect to work with members of the public to resolve any complaints. The CPUC Monitoring Team shall not intervene with PG&E's resolution process unless the complaint is related to specific compliance requirements or a previously unidentified impact related to CEQA review. The CPUC Project Manager shall make any final determinations regarding the necessity of corrective actions following public complaints.

Public complaints will not reflect negatively on PG&E's environmental compliance record unless a specific project requirement was violated.

4.3.2 Notification

PG&E and CPUC shall notify one another of incidents within one business day of the initial observation so the issues can be adequately addressed. Response procedures do not need to be finalized when initial notification is provided. Over time the PG&E Compliance Team and CPUC Monitoring Team may collectively agree to reduce the notification requirement for Level 1 Occurrences because, if documented correctly, these issues would be minor and inconsequential. Changes in the notification procedures for incidents must be authorized by the CPUC Project Manager.

Jurisdictional agencies may also require notification if incidents are documented that relate to their jurisdiction over the project. CPUC will determine if other agencies should be notified when incidents are documented and either contact agency representatives directly, or direct PG&E to do so and to provide documentation.

4.3.3 Incident Reports

Incident Reports shall be prepared by the observing party (either PG&E or CPUC) and submitted to the alternate party within one business day of the observation if a Minor Problem, Compliance Issue, or Noncompliance is documented (Levels 2-4). Incidents Reports are not required if an Occurrence (Level 1) is documented. At a minimum, Incident Reports must include the following information:

- Incident Category
- Compliance Level (if applicable)
- Incident Start Date (i.e., date event began if known or initial observation date)
- Summary of Incident (i.e., description of the event or observation, personnel present, and actions taken to resolve the issue)
- Resolution Date (if known)

Incidents shall be addressed in MMCRP reports prepared by both PG&E and CPUC as described in Section 2.2.8 (e.g., daily, weekly, monthly, and post-construction reports), and Incident Reports shall be attached to the MMCRP reports for the applicable period.

In addition to Incident Reports, events rising to the level of Noncompliance may require preparation of memoranda in order to describe the event in greater detail and the corrective actions necessary to bring the project back into compliance.

4.3.4 CEQA Citation Program

The CPUC may exercise the CEQA Citation Program adopted by the CPUC in Resolution E-4550. The program delegates authority to CPUC staff to draft and issue citations and levy fines for non-compliance with CEQA requirements. The Resolution allows Commission staff to efficiently issue fines when needed to quickly address non-compliance incidents that are occurring in the field.

4.4 PROJECT CHANGES

4.4.1 Minor Project Refinements

PG&E may identify a need to refine one or more aspects of the project following CPUC's final decision due to final engineering specifications. In such cases, PG&E is required to submit Minor Project Refinement (MPR) requests to the CPUC Monitoring Team and obtain authorization from the CPUC Project Manager through the process described in this section.

Approval for MPR requests will only be granted if the proposed refinements achieve or exceed the level of environmental protection approved in the IS/MND, are consistent with CEQA requirements, and comply with the APMs and MMs identified in the IS/MND. Requests for project refinements that do not fall within the authority delegated to the CPUC Project Manager as defined in the CPUC's final decision must be sought through a Petition for Modification pursuant to Rule 16.4 of CPUC's Rules of Practice and Procedure. Proposed project refinements

will not be authorized by the CPUC Project Manager through the MPR process if they would meet one or more of the following criteria:

- Involves modifications that would be outside the geographic boundary of the study area utilized in the IS/MND
- Would create a new significant impact or substantial increase the severity of a previously identified significant impact, based on the thresholds used in the IS/MND
- Trigger additional permit requirements that are not defined in the IS/MND or MMCRP
- Conflict with any APM or MM, or any applicable guideline, ordinance, code, rule, regulation, order, decision, statute, or policy
- Require new conditions for approval, without which the modifications would result in a new significant impact or substantially increase the severity of a previously identified significant impact

At a minimum, MPR requests must include the following information:

- MPR request number
- Date submitted to CPUC
- Requested approval date
- Anticipated start and end date for the proposed actions associated with the refinements
- A detailed description of the proposed refinements, including an explanation of why the refinements are necessary
- A summary list of applicable project requirements (e.g., APMs, MMs, project parameters, or other project stipulations) for which the refinements are being requested
- Supporting photos, maps, and other documentation illustrating the difference between the existing conditions in the area, the approved project, and the proposed refinements
- The dimensions and area of any additional work areas and land disturbance associated with the proposed refinements
- A detailed description of potential impacts of the proposed refinements, including a discussion of each environmental issue area that could be affected by the refinements with accompanying verification that there will be no increase in significant impacts to resources affected by the project and no new significant impacts, after application of previously adopted mitigation
- A summary of water feature and stormwater considerations including any changes to jurisdictional features and the use of erosion and sediment control BMPs
- A statement describing if the proposed refinements would conflict with any APM, MM, applicable guideline, ordinance, code, rule, regulation, order, decision, statute, or policy
- Evidence of PG&E's consultation with applicable agencies and any Native American tribes, to the extent applicable

The CPUC Monitoring Team shall review MPR requests to ensure the proposed refinements are consistent with the IS/MND and final CPUC decision. The CPUC Monitoring Team may request additional information during the MPR review process as needed. If it is determined that the MPR request includes sufficient evidence that the proposed refinements are necessary, there are no environmentally preferable alternatives to the refinements, and the refinements would not meet one or more of the exclusionary triggers, then the CPUC Project Manager would authorize the refinements by issuing a MPR Authorization Letter at their discretion. MPR Authorization Letters will address any conditions of approval, and include applicable documentation as necessary.

Examples of potential MPRs, depending on their location, may include the following:

- Adding a temporary extra work area for no more than 60 days of use if the proposed location is in a previously disturbed area with no adjacent sensitive resources or land uses
- Substituting or replacing a previously authorized work area with an alternate work area that is in a previously disturbed area with no adjacent sensitive resources or land uses
- Adjusting the alignment of a project to avoid unanticipated impacts related to cultural artifacts, buried utility infrastructure, hazardous and toxic substances, and other land use impacts including effects on homeowners, so long as the adjustment does not create a new significant impact or a substantial increase in the severity of a previously identified significant impact
- Adjusting the alignment of a project to avoid or adapt to conditions on the ground that vary from the conditions that existed at the time of the original environmental analysis, so long as the adjustment does not create a new significant impact or a substantial increase in the severity of a previously identified significant impact

4.4.2 Temporary Extra Workspace

For the purposes of this MMCRP, TEWS is defined as a preexisting developed space (e.g., no site preparation is required) that would be used by PG&E during construction for a period of up to 60 days, and that was not specifically identified and evaluated during the CEQA process. Additional workspace requests that would be used for more than 60 days must be processed as a MPR (refer to Section 4.4.1). If PG&E determines a need for a construction TEWS, it must submit such a request to the CPUC, consistent with the communication protocol. PG&E will not be permitted to use a TEWS prior to receiving written authorization from the CPUC.

PG&E must demonstrate that:

- The TEWS is located in a disturbed area with no sensitive resources or land uses onsite or within proximity of the proposed work space such that they may be significantly impacted by the work,
- PG&E has the permission of the applicable landowner (e.g., municipality or private) to use the work space, and
- Use of the TEWS will not result in any new significant environmental impacts.

Following is a list of the specific information that PG&E will be required to submit with its TEWS request (see Appendix E for form):

- Date of request
- Location of the TEWS (detailed description, including maps if required)
- Property owner of TEWS
- An explanation of the need for the TEWS
- An analysis that demonstrates no new significant impacts will result from use of the TEWS including: compaction contributing to runoff rates or other stormwater/watershed effects; observed existing impacts to the site, such as the presence of potentially hazardous or polluting substances that could pose a risk to Project personnel or the public; abandoned vehicles, equipment, or other materials; or other sensitive resources
- Biological and botanical surveys if appropriate
- Cultural resource survey if appropriate
- Duration and dates of expected use of the TEWS
- Details of the expected condition of the site after use

4.5 STOP WORK ORDERS

When it is safe to do so, any member of the PG&E Compliance Team or CPUC Monitoring Team has the authority to issue Stop Work Orders to temporarily halt or redirect project activities if a sensitive resource is put in undue risk beyond previously authorized or permitted levels. In addition, the CPUC Monitoring Team may also stop or redirect work if unauthorized project activities are observed, such as use of a work area that has not been approved or if substantial issues remain unresolved. The CPUC Project Manager will make any final determinations regarding Stop Work Orders for the project.

5 RECORDS MANAGEMENT

5.1.1 Tracking Systems

5.1.1.1 Requirements

The CPUC Monitoring Team will track the status and completion of key project requirements using the following matrix tracking tables located in Appendix C:

- Table C-1: Permits and Authorizations Tracking
- Table C-2: Plans Tracking
- Table C-3: Notifications Tracking

The CPUC Monitoring Team and PG&E Compliance Team shall use these tables to communicate status updates and the completion of the listed requirements during the NTP process. The dates and descriptions added to the matrix tracking tables shall be supported by referenced documentation, as specified in the requirement sources (e.g., APMs, MMs, permits, plans, etc.).

Compliance with repetitious requirements that would be implemented throughout construction (e.g., wildlife clearances, field monitoring, avoidance and minimization activities) shall be documented in the daily and weekly reports prepared by PG&E and the CPUC (refer to Section 2.2.8).

5.1.1.2 Requests and Authorizations

CPUC will track the dates and criteria of important requests and authorizations for the project (e.g., NTPs, MPRs, and TEWS) as part of the Monthly Monitoring Summary Report.

5.1.1.3 Incidents

A summary of any incidents will also be tracked as part of the Monthly Monitoring Summary Report, and the CPUC Monitoring Team will maintain a master table of incidents that will be evaluated in the Final Monitoring Report (refer to Section 2.2.8).

5.1.1.4 Supporting Documentation

The CPUC Monitoring Team shall maintain records of all reports, memoranda, and other supporting documentation that are used to verify compliance. These records will be attached to the Monthly Mitigation Monitoring Reports or the Final Mitigation Monitoring Report, unless otherwise determined confidential by the CPUC Project Manager.

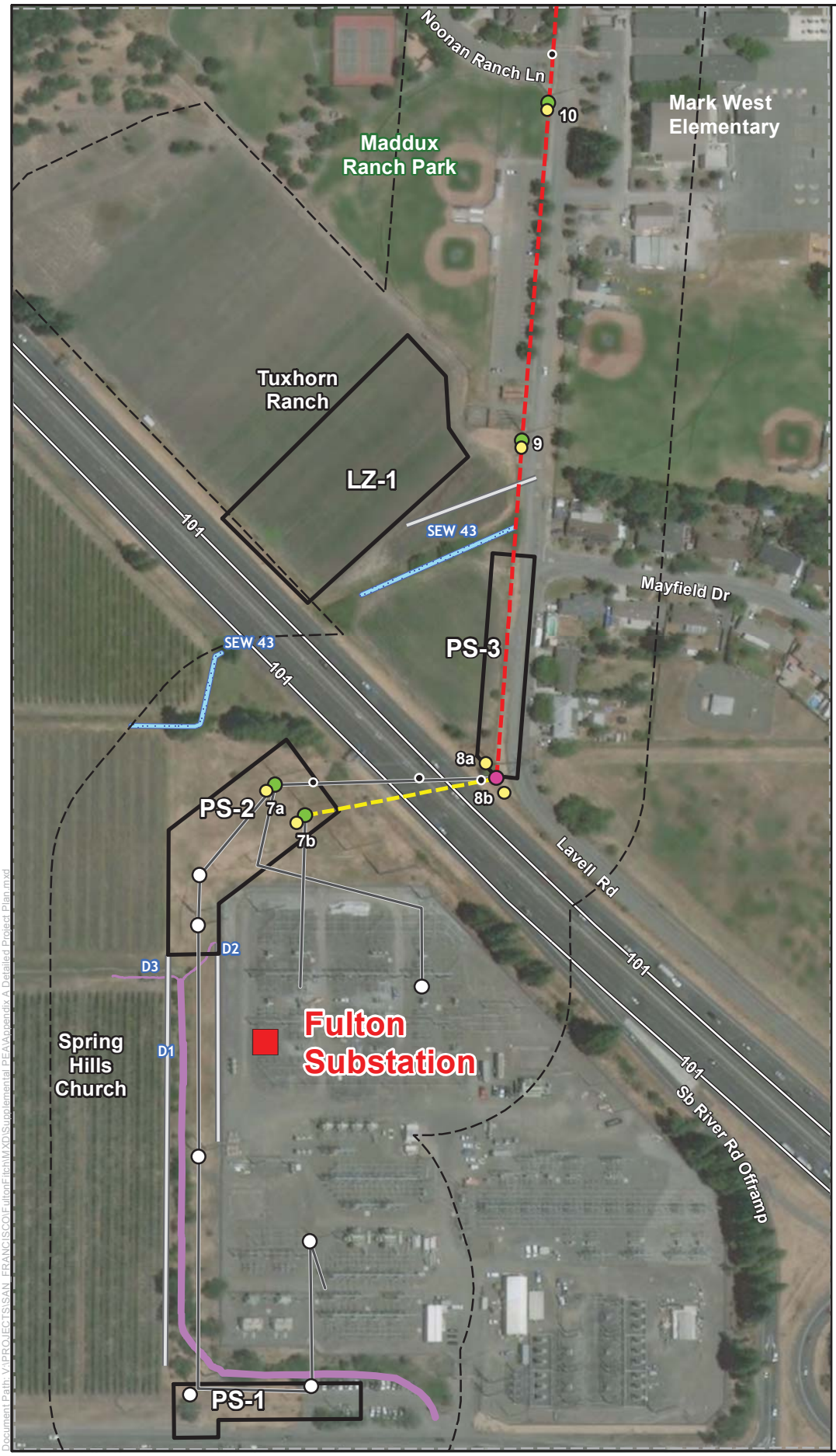
5.1.2 Public Access to Records

The public is allowed access to records used to monitor and track compliance with project requirements. Such records will be made available to the public upon request unless the records are confidential. In order to facilitate public awareness, the MMCRP will be posted on the project website:

http://www.cpuc.ca.gov/environment/info/panoramaenv/Fulton-Fitch/Fulton-Fitch.html

If determined necessary by the CPUC Project Manager, Monthly Monitoring Summary Reports will also be posted on the project website during construction.

APPENDIX A PROJECT DETAIL MAPS



Appendix A:
Detailed Project Plan

Fulton-Fitch Mountain Reconductoring Project

Fulton Substation

Approved Project

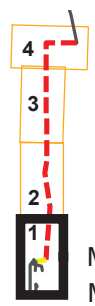
- Project Pole
- Transmission Line
- Construction Work Area
- Guard Structure
- Vehicle Turnaround
- Access Road
- Project Study Area

Proposed Modifications

- Replace Tubular Steel Pole (TSP)
- Replace 2-Pole with 2 Single-Shaft TSPs
- Proposed New Pole Location
- Reconductor Geysers-Fulton #17 230 kV
- Transfer Two 230 kV Circuits to New TSP
- Remove Pull Site
- Temporary Bridge

Waters

- Seasonal Watercourse
- Riparian Woodland
- Channel
- Drainage Ditch (per Bio Report)



Map 1 of 4
Map Index

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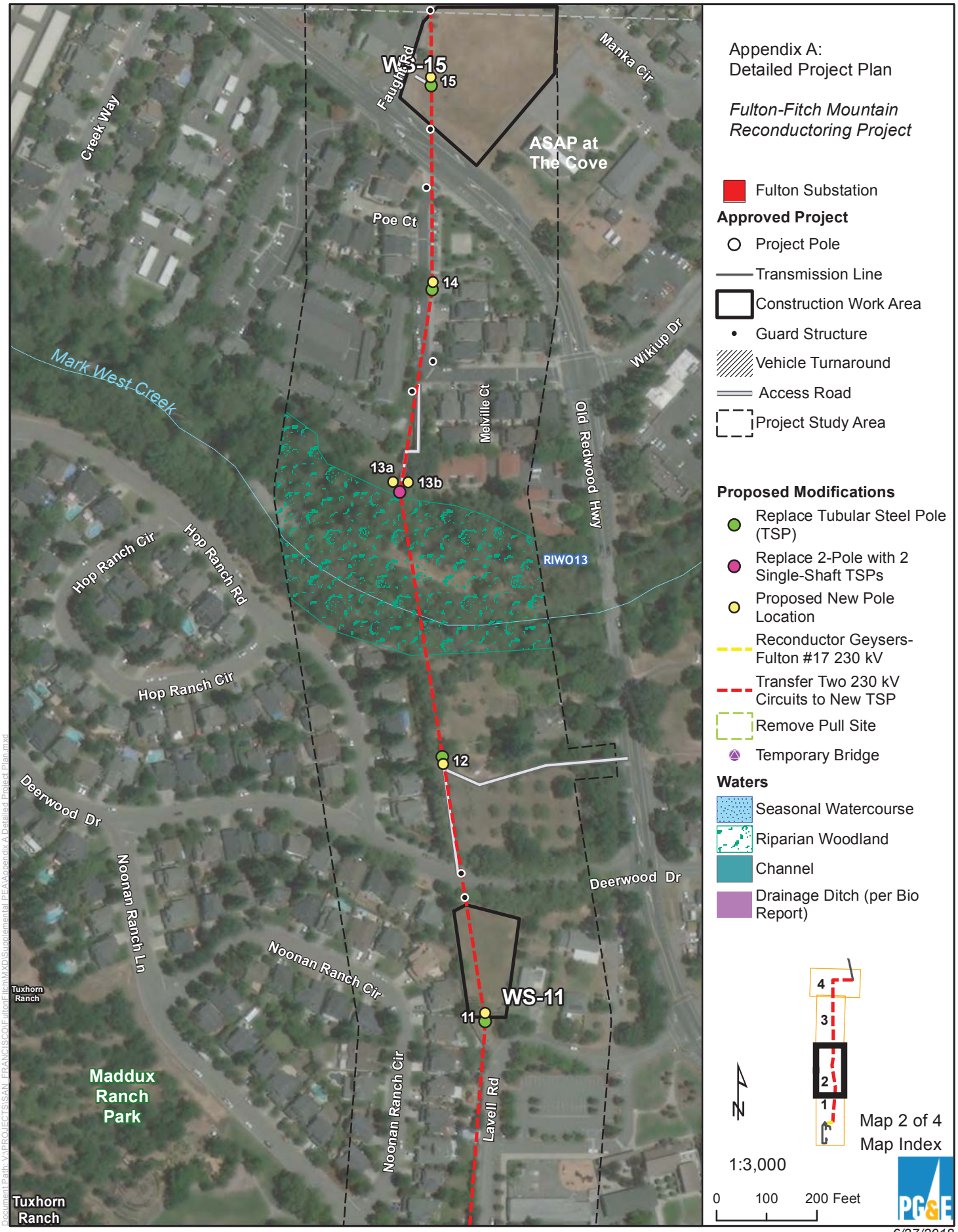
ESRI Basemap 2018



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Waters

- Seasonal Watercourse
- Riparian Woodland
- Channel
- Drainage Ditch (per Bio Report)

Map 2 of 4
Map Index

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ESRI Basemap 2018

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Appendix A:
Detailed Project Plan

Fulton-Fitch Mountain Reconductoring Project

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- Guard Structure
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- Remove Pull Site
- Temporary Bridge

Waters

- Seasonal Watercourse
- Riparian Woodland
- Channel
- Drainage Ditch (per Bio Report)

Map 3 of 4
Map Index

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6/27/2018

ESRI Basemap 2018

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- Temporary Bridge

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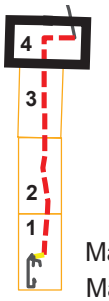
- Seasonal Watercourse
- Riparian Woodland
- Channel
- Drainage Ditch (per Bio Report)



Map 4 of 4
Map Index

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ESRI Basemap 2018

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (Overview)

Legend

- Southern Segment
- Northern Segment
- Substation
- Roadway
- Park
- City
- Map Frame

Fitch Mountain Substation

Fulton Substation

Healdsburg

Windsor

Larkfield-Wikiup

Fulton

Santa Rosa

Foothill Regional Park

Shiloh Ranch Regional Park

Maddux Ranch Regional Park

Map 1

Map 2

Map 3

Map 4

Map 5

Map 6

Map 7

Map 8

Map 9

Map 10

Map 11

Map 12

Map 13

Map 14

Map 15

Map 16

Map 17

Map 18

Map 19

Map 20

Map 21

Map 22

Map 23

Map 24

Map 25

Map 26

Map 27

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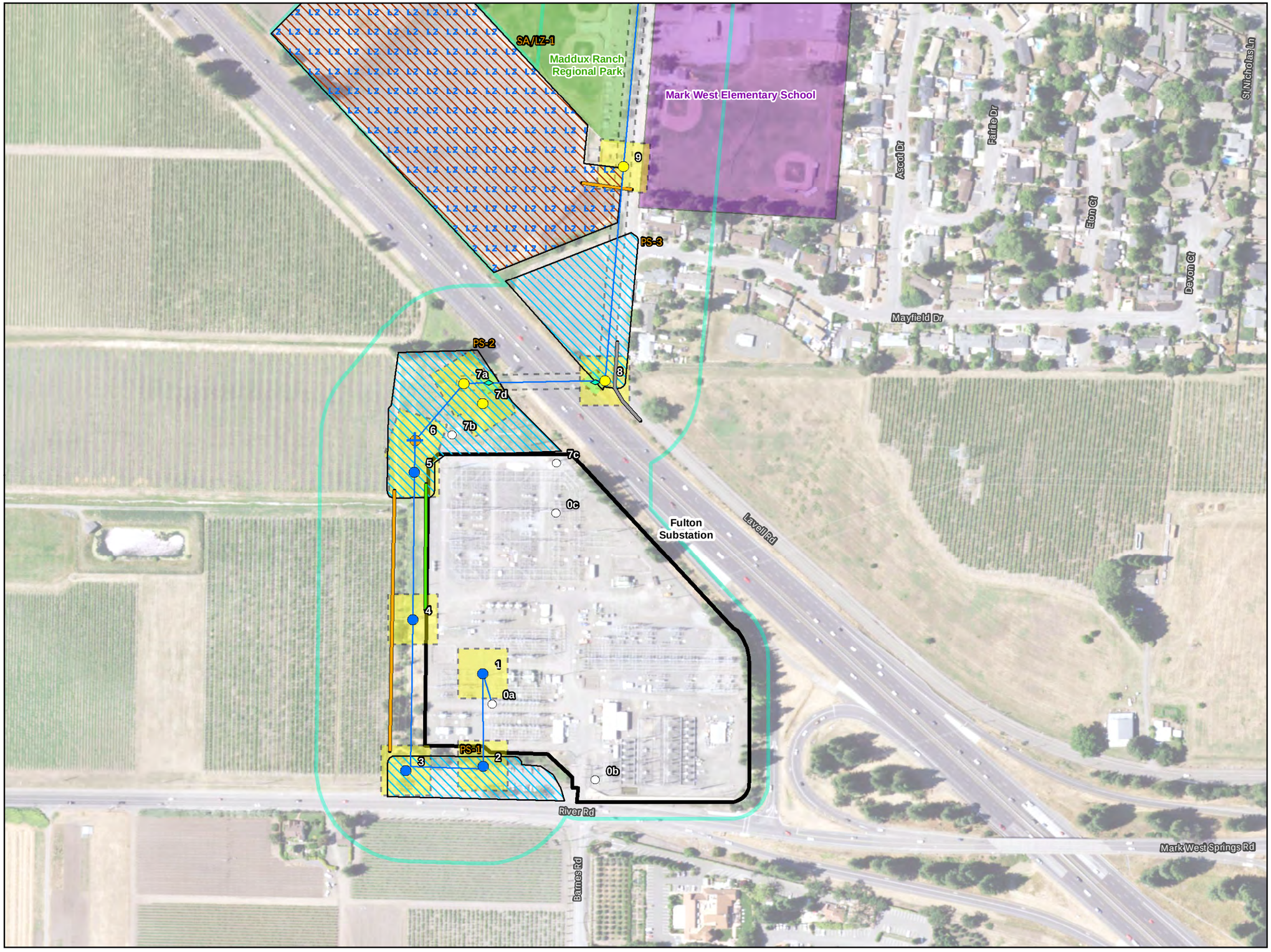


PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (1 of 27)

Legend

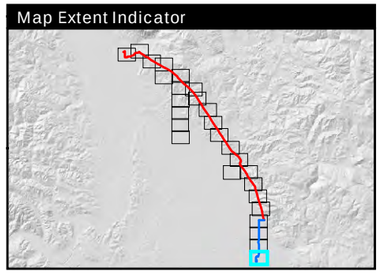
Existing Poles and Proposed Action
- TSP (Replace Insulators)
- Steel H-Frame/Dead-End (Replace Insulators)
- Wood Monopole (Replace with LDSP)
- Adjacent Pole (No Work)
- Guard Structure

Project Alignment
- Southern Segment

Access Routes
- Existing Paved
- Existing Unpaved
- Overland

Anticipated Work Area Limits
- Staging Area/Landing Zone (LZ)
- Pull Site (PS)
- Representative Pole Work Areas
- Representative Guard Structure Work Areas
- Representative Mid-Span Access
- Substation
- Project Study Area
- School
- Parks

Map Extent Indicator



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Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (2 of 27)

Legend

Existing Poles and Proposed Action
- TSP (Replace Insulators)
- Adjacent Distribution Pole (Relocate)
- Guard Structure

Project Alignment
- Southern Segment

Access Routes
- Existing Paved
- Overland

Anticipated Work Area Limits
- Staging Area/Landing Zone
- Limited Staging Area (SA)
- Representative Pole Work Areas
- Representative Guard Structure Work Areas
- Representative Mid-Span Access
- Project Study Area
- School
- Parks

Map Extent Indicator

Scale = 1:3,000

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Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (3 of 27)

Legend

Existing Poles and Proposed Action
- TSP (Replace Insulators)
- Adjacent Distribution Pole (Relocate)
- Guard Structure

Project Alignment
- Southern Segment

Access Routes
- Overland

Anticipated Work Area Limits
- Limited Staging Area (SA)
- Representative Pole Work Areas
- Representative Guard Structure Work Areas
- Representative Mid-Span Access
- Project Study Area
- Church
- School

Map Extent Indicator

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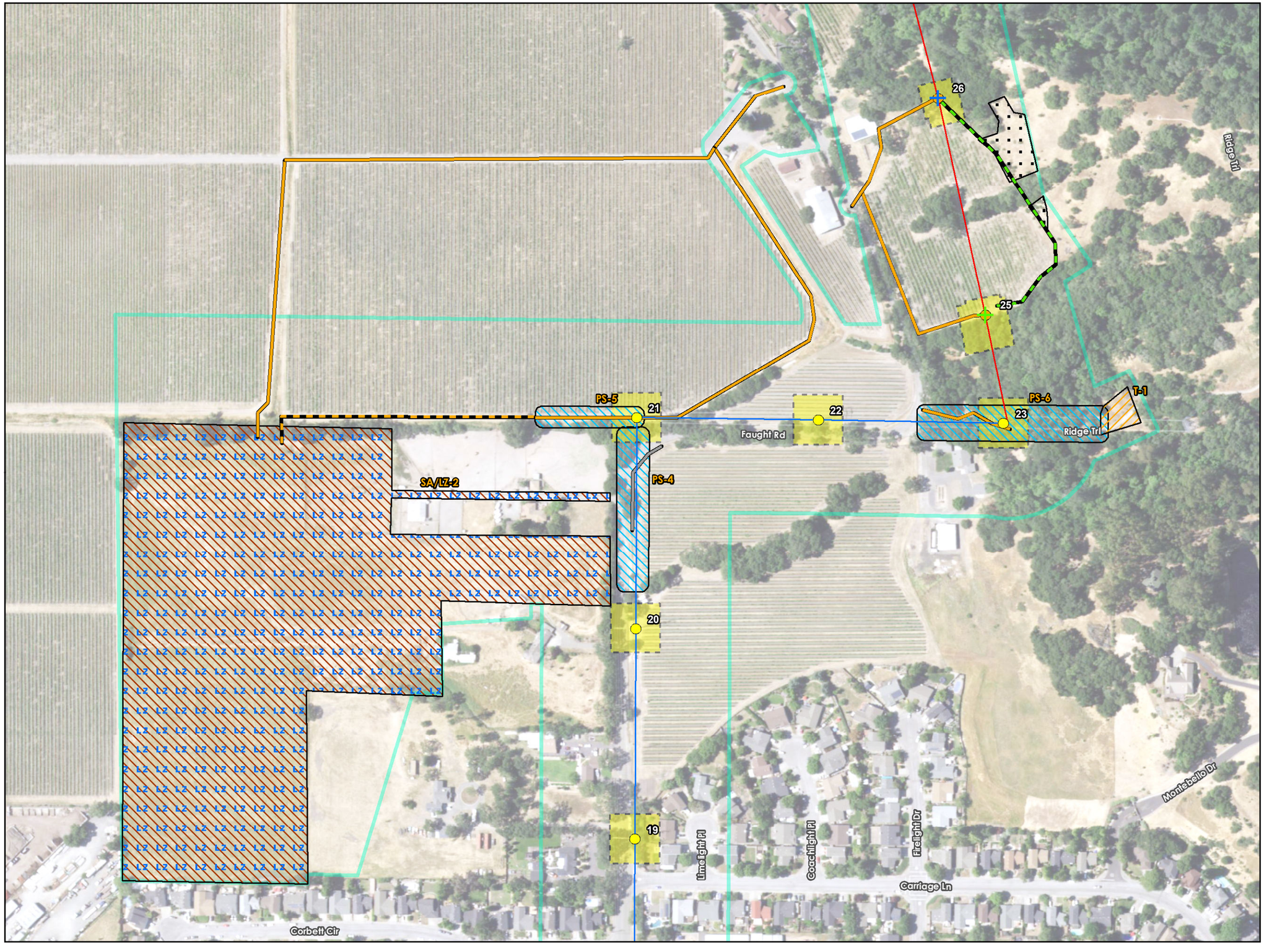


PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (4 of 27) *- Revised*

Legend

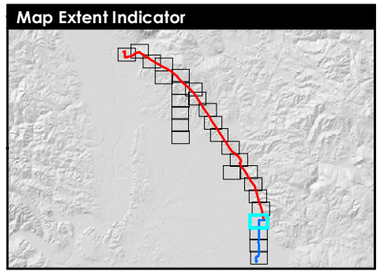
Existing Poles and Proposed Action
- TSP (Replace Insulators)
- Wood Monopole (Replace with TSP)
- Wood Monopole (Replace with LDSP)

Project Alignment
- Southern Segment
- Northern Segment

Access Routes
- Existing Paved
- Existing Unpaved
- Existing Unpaved (Backup Only)
- Overland (Backup Only)

Anticipated Work Area Limits
- Staging Area/Landing Zone (LZ)
- Pull Site (PS)
- Vehicle Turnaround Areas
- Representative Pole Work
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area

Map Extent Indicator



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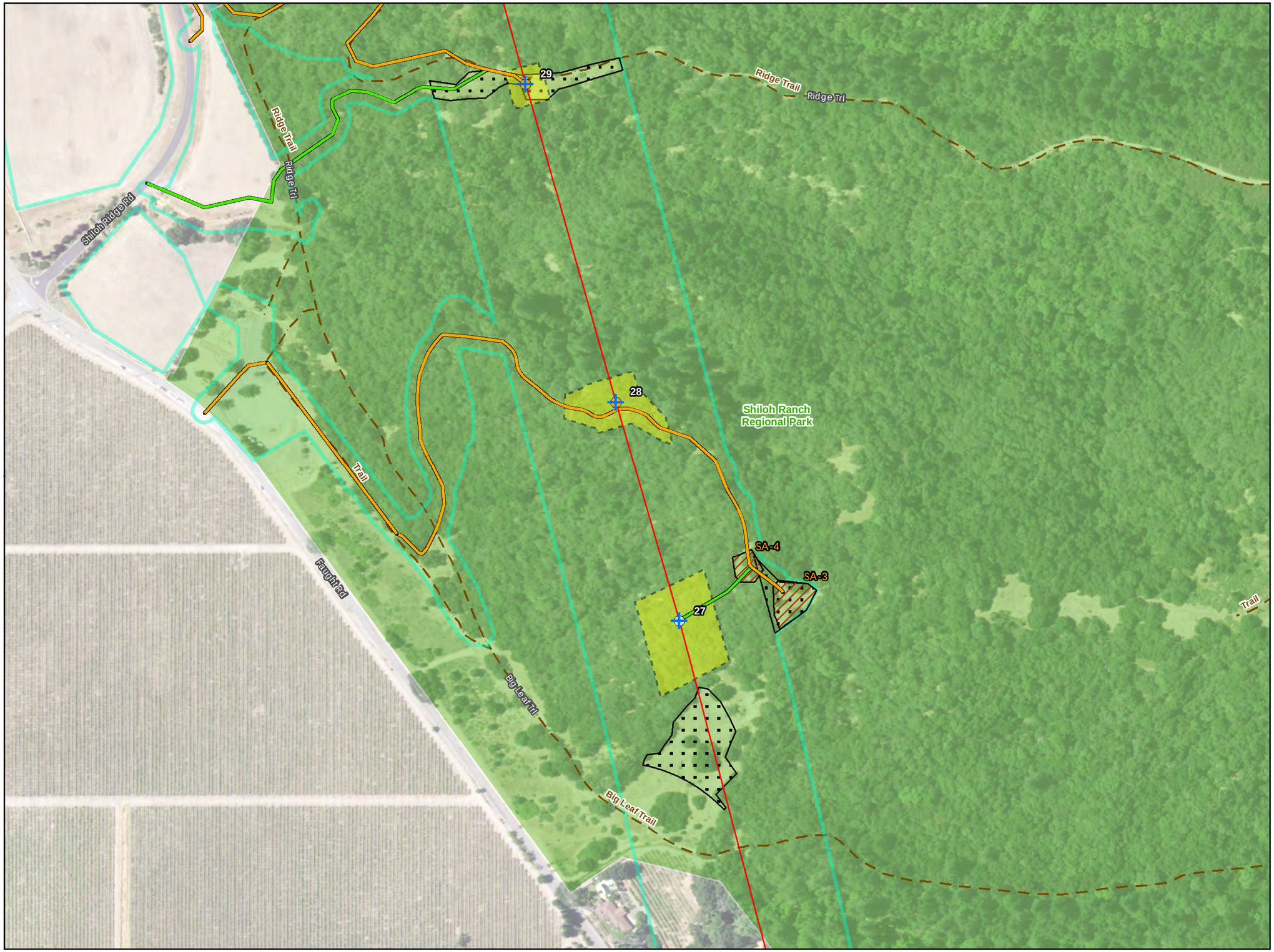


PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (5 of 27)

Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with LDSP)
- LDSP (Replace with LDSP)

Project Alignment

- Northern Segment

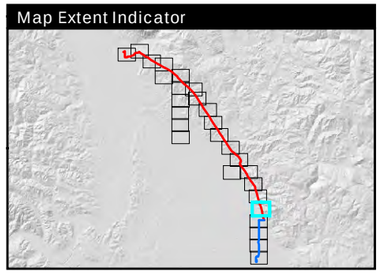
Access Routes

- Existing Unpaved
- Overland

Anticipated Work Area Limits

- Limited Staging Area (SA)
- Representative Pole Work Areas
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area
- Trail
- Parks

Map Extent Indicator



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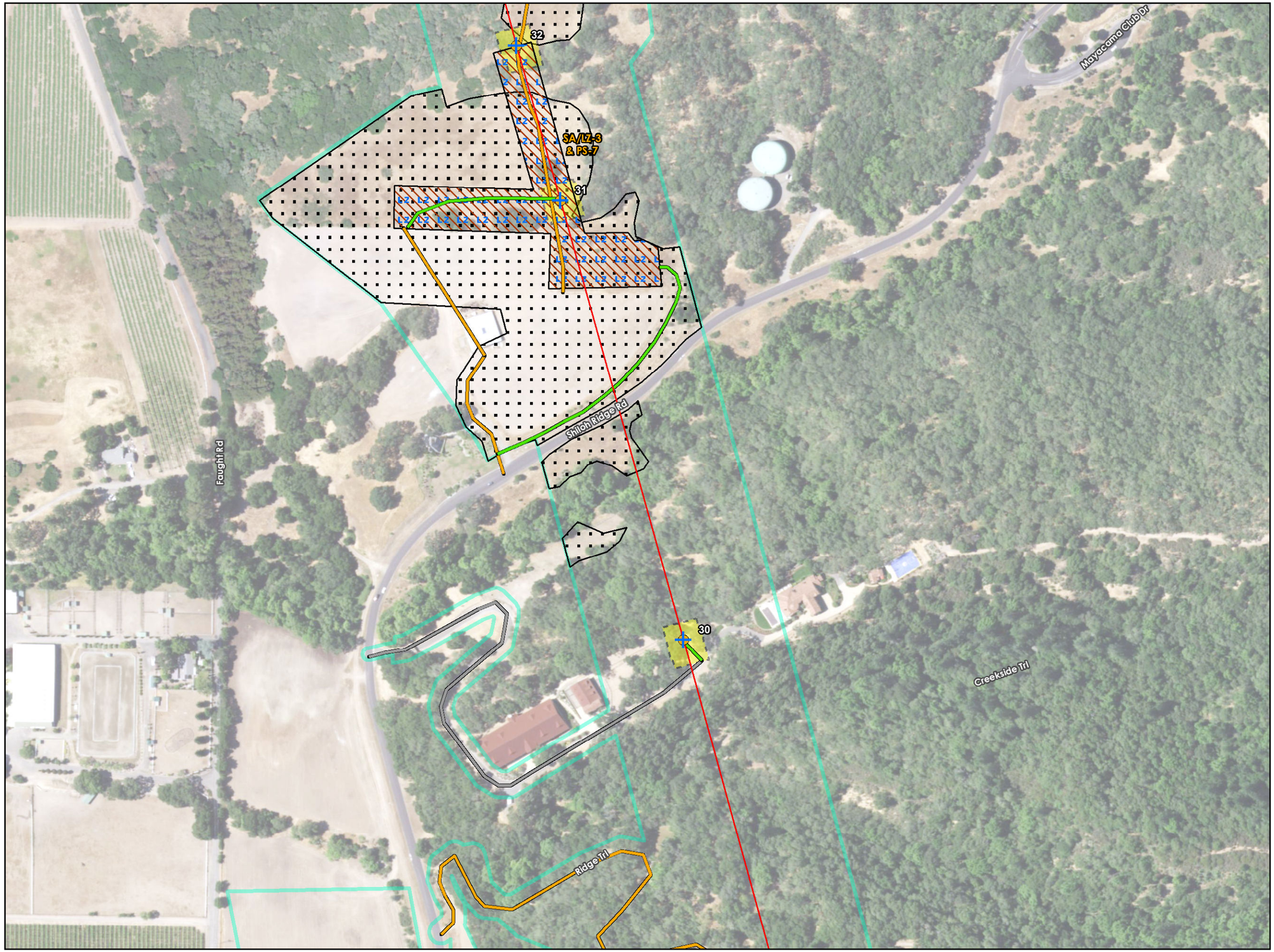
PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps
(6 of 27) *- Revised*



Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with LDSP)

Project Alignment

- Northern Segment

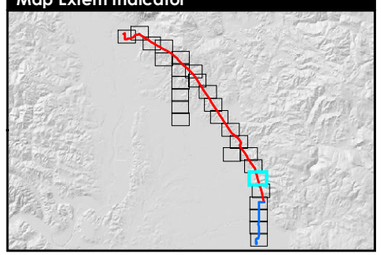
Access Routes

- Existing Paved
- Existing Unpaved
- Overland

Anticipated Work Area Limits

- Staging Area/Landing Zone (LZ)
- Representative Pole Work Areas
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area

Map Extent Indicator



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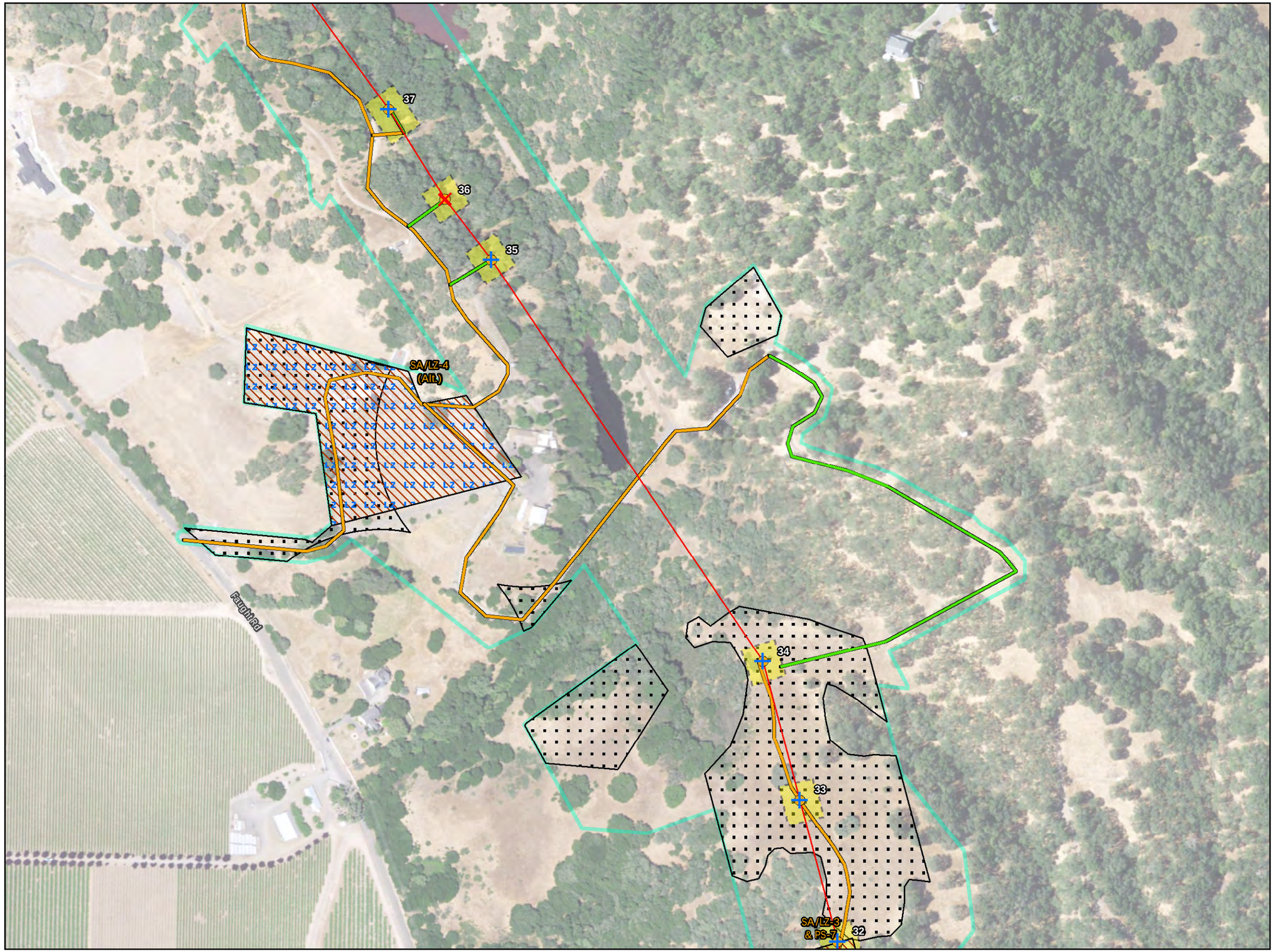


PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps
(7 of 27)

Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with LDSP)
- Wood Monopole (Completely Remove)

Project Alignment

- Northern Segment

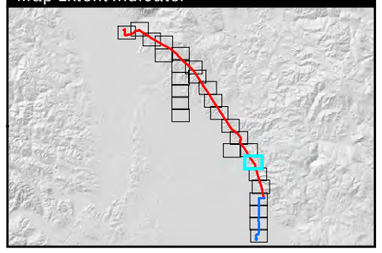
Access Routes

- Existing Unpaved
- Overland

Anticipated Work Area Limits

- Staging Area/Landing Zone
- Representative Pole Work Areas
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area

Map Extent Indicator



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Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps
(8 of 27)

Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with LDSP)
- Wood 3-Pole Structure (Replace with TSP)
- Guard Structure

Project Alignment

- Northern Segment

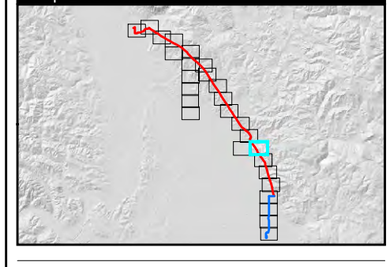
Access Routes

- Existing Unpaved

Anticipated Work Area Limits

- Pull Site (PS)
- Representative Pole Work Areas
- Representative Guard Structure Work Areas
- Project Study Area

Map Extent Indicator



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Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

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PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (9 of 27)

Legend

Project Alignment

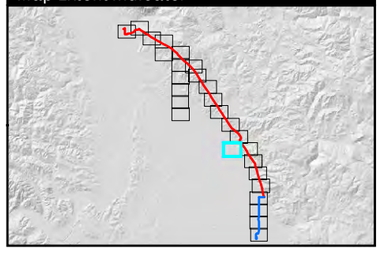
Northern Segment

Access Routes

Existing Unpaved

Project Study

Map Extent Indicator



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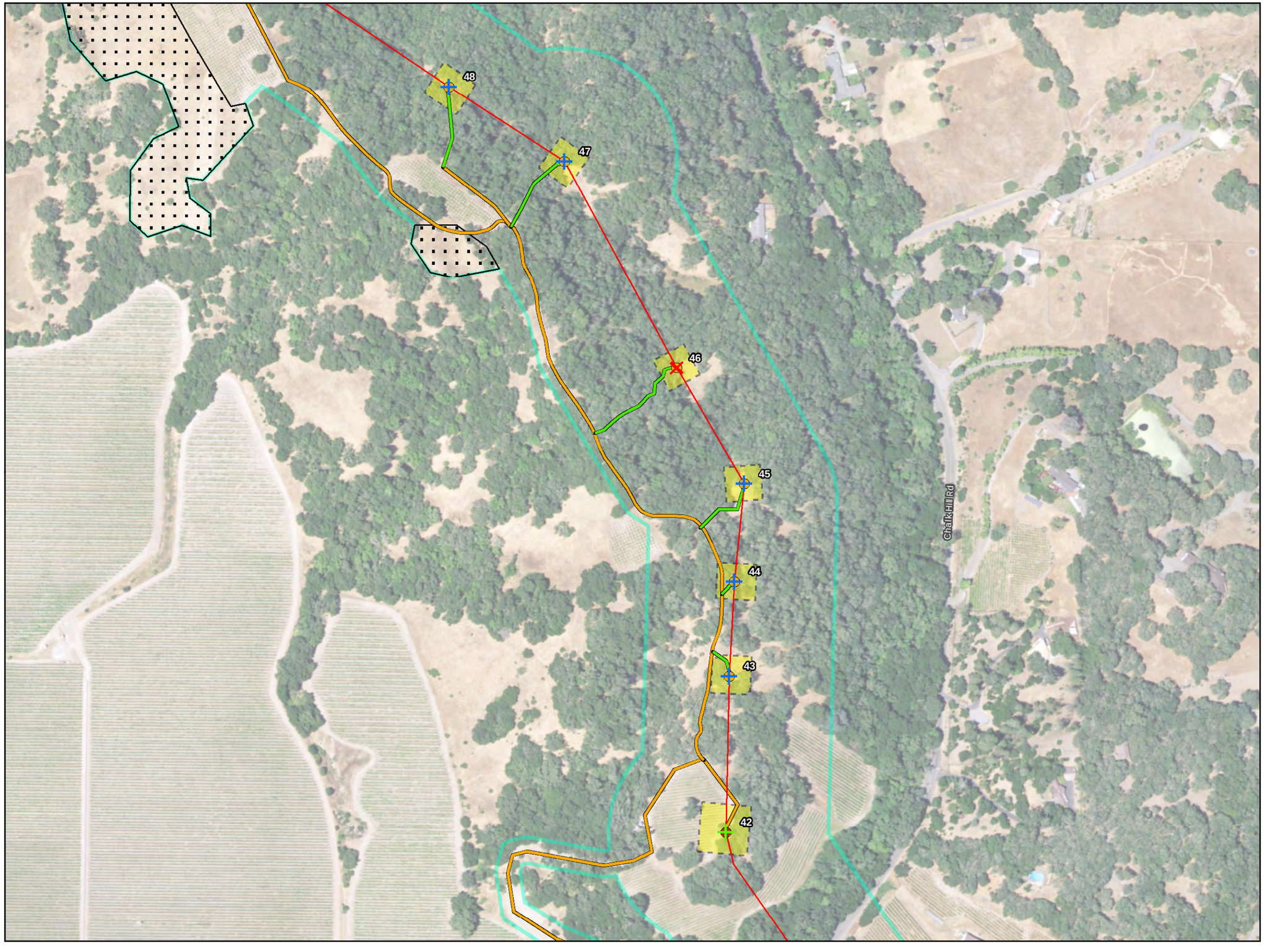


PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (10 of 27)

Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with LDSP)
- Wood Monopole (Completely Remove)
- Wood A-Frame (Replace with TSP)

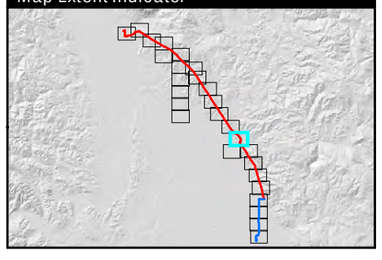
Project Alignment

- Northern Segment

Access Routes

- Existing Unpaved
- Overland
- Representative Pole Work Areas
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area

Map Extent Indicator



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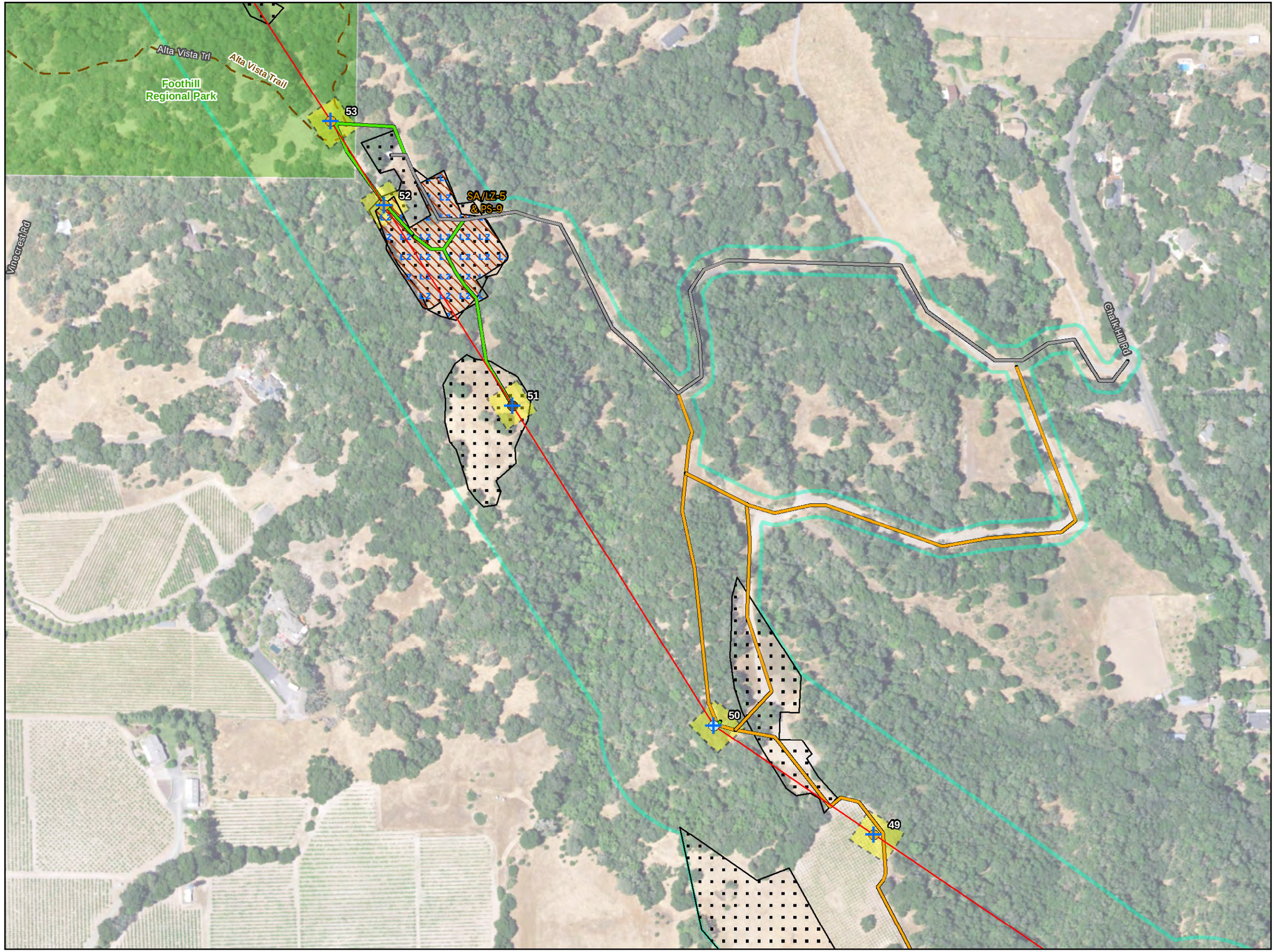


PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (11 of 27)

Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with LDSP)
- Wood 3-Pole Structure (Replace with LDSP)
- LDSP (Replace with LDSP)

Project Alignment

- Northern Segment

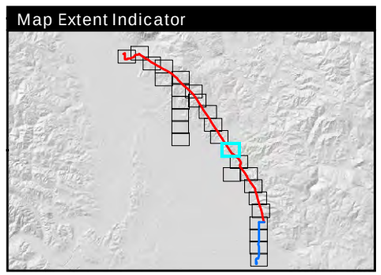
Access Routes

- Existing Paved
- Existing Unpaved
- Overland

Anticipated Work Area Limits

- Staging Area/Landing Zone (LZ)
- Representative Pole Work Areas
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area
- Trail
- Parks

Map Extent Indicator



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Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (12 of 27)

Legend

Existing Poles and Proposed Action

Wood Monopole (Replace with LDSP)

Project Alignment

Northern Segment

Access Routes

Existing Unpaved

Overland

Representative Pole Work Areas

Potential Helicopter Touch Down and Overland Routes

Project Study Area

Trail

Parks

Map Extent Indicator

Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (13 of 27)

Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with LDSP)
- LDSP (Replace with TSP)
- LDSP (Utilize In Place)

Project Alignment

- Northern Segment

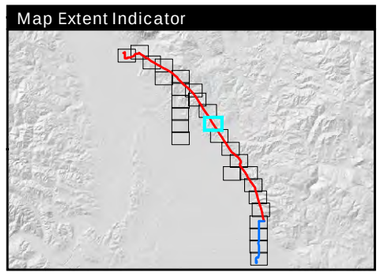
Access Routes

- Existing Unpaved
- Overland

Anticipated Work Area Limits

- Pull Site (PS)
- Vehicle Turnaround Areas
- Representative Pole Work Areas
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area

Map Extent Indicator



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Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps
(14 of 27)

Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with LDSP)
- Wood 3-Pole Structure (Replace with TSP)
- Guard Structure

Project Alignment

- Northern Segment

Access Routes

- Existing Paved
- Existing Unpaved
- Existing Unpaved (Backup Only)
- Overland

Anticipated Work Area Limits

- Staging Area/Landing Zone (LZ)
- Representative Pole Work Areas
- Representative Guard Structure Work Areas
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area

Map Extent Indicator

Scale = 1:3,000
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Aerial Imagery: 6/11/2016
Date Created: 7/5/2017

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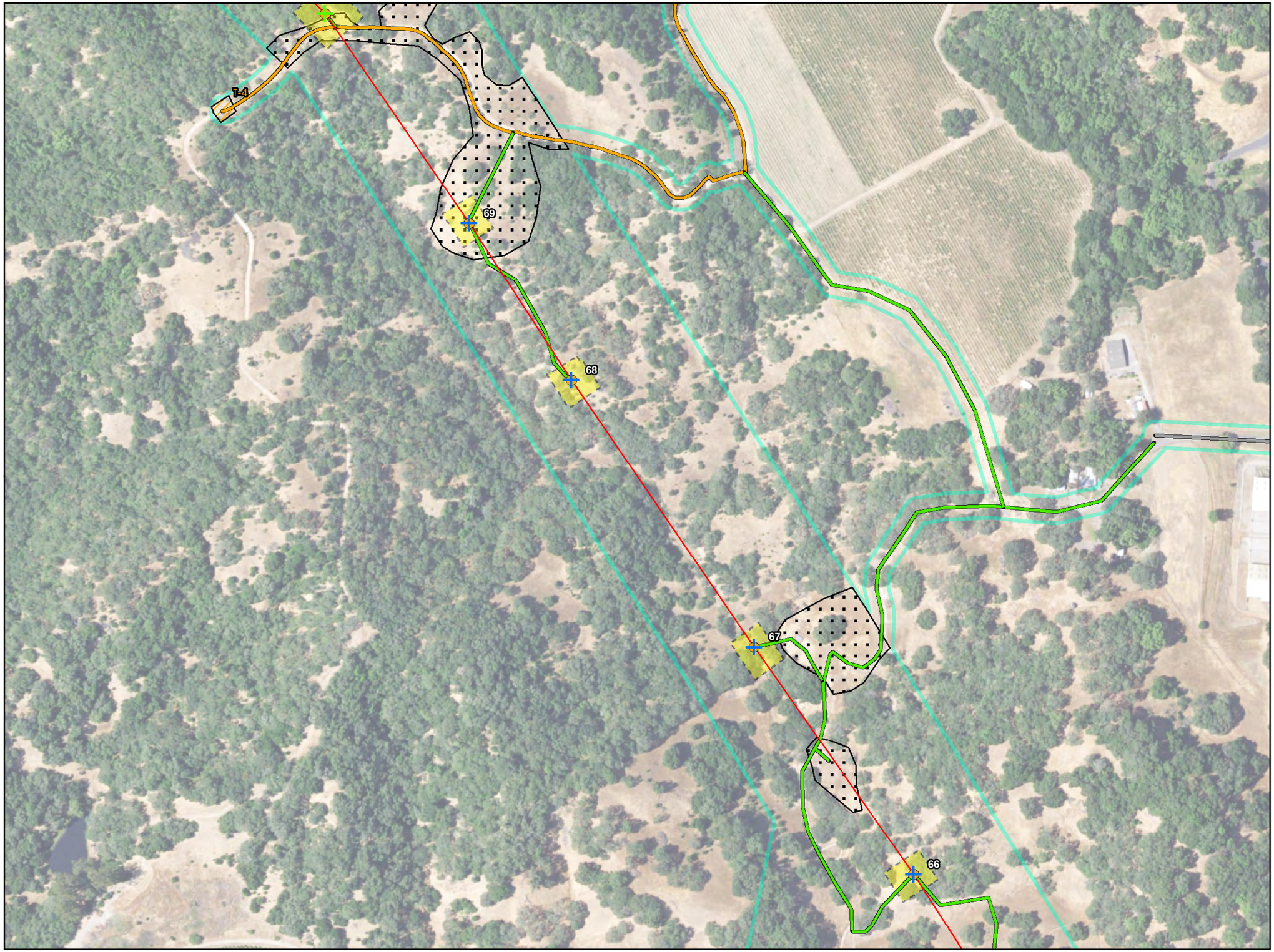


PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (15 of 27)

Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with TSP)
- Wood Monopole (Replace with LDSP)

Project Alignment

- Northern Segment

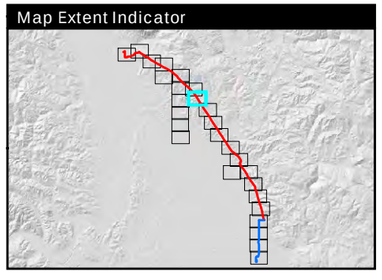
Access Routes

- Existing Paved
- Existing Unpaved
- Overland

Anticipated Work Area Limits

- Vehicle Turnaround Areas
- Representative Pole Work Areas
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area

Map Extent Indicator



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Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (16 of 27)

Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with TSP)
- Wood Monopole (Replace with LDSP)
- Wood 3-Pole Structure (Replace with LDSP)

Project Alignment

- Northern Segment

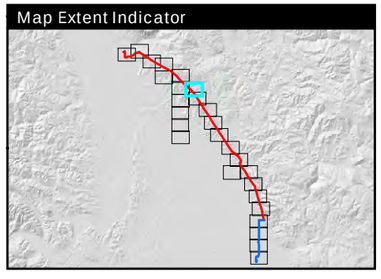
Access Routes

- Existing Unpaved
- Overland

Anticipated Work Area Limits

- Vehicle Turnaround Areas
- Representative Pole Work Areas
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area

Map Extent Indicator



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Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (17 of 27)

Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with LDSP)
- Wood 3-Pole Structure (Replace with LDSP)

Project Alignment

- Northern Segment

Access Routes

- Existing Unpaved
- Overland
- Representative Pole Work Areas
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area

Map Extent Indicator

Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (18 of 27)

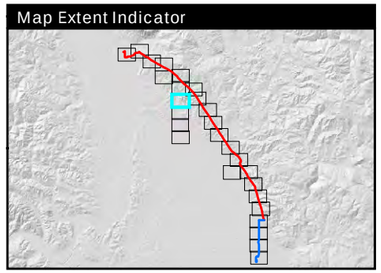
Legend

Access Routes

Existing Unpaved

Project Study Area

Map Extent Indicator



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Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (19 of 27)

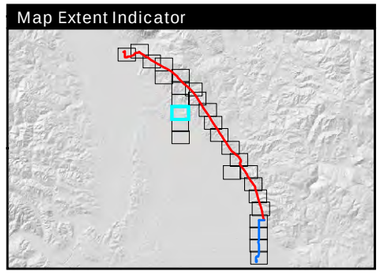
Legend

Access Routes

Existing Unpaved

Project Study Area

Map Extent Indicator



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Date Created: 7/5/2017

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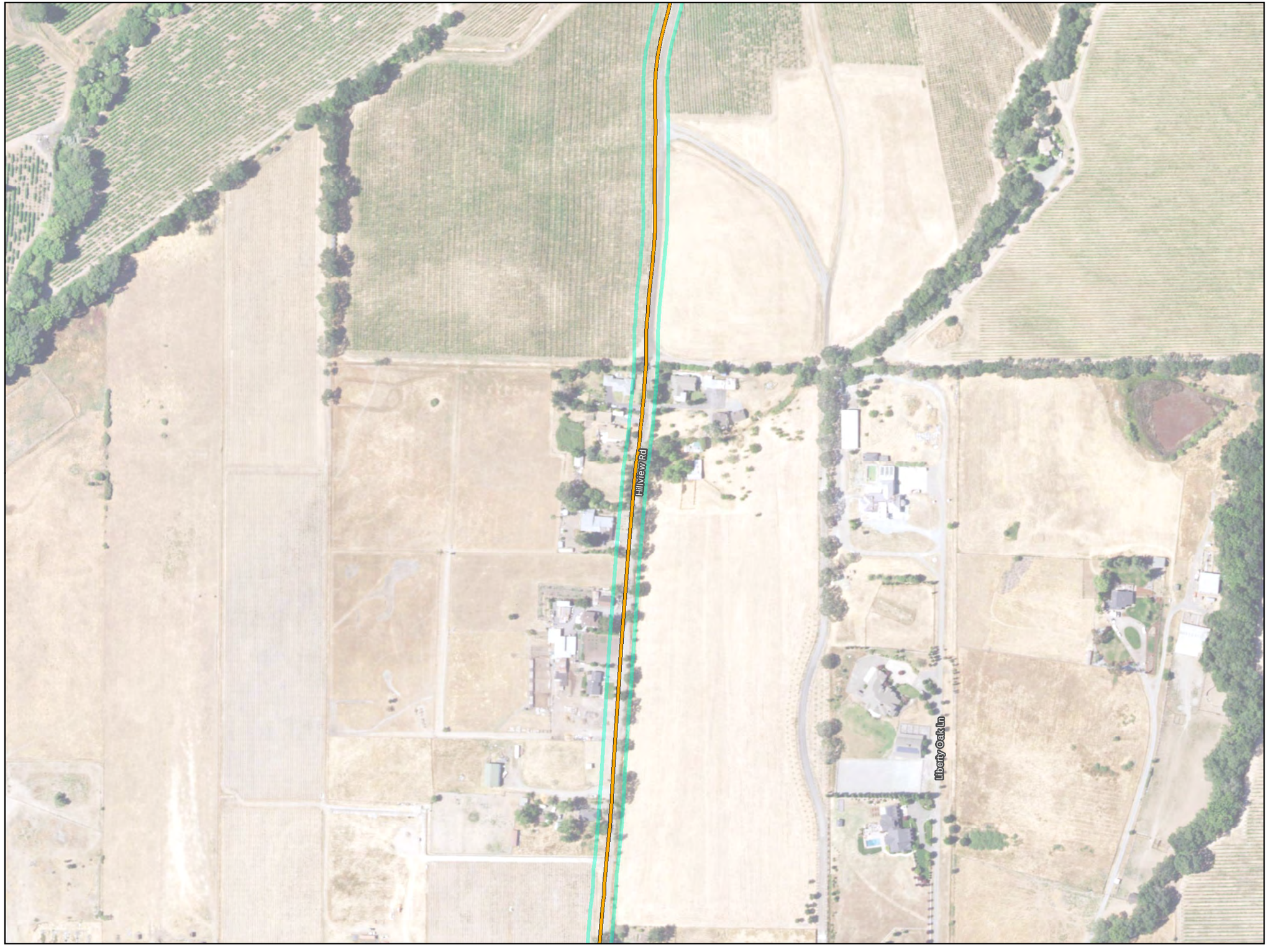


PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (20 of 27)

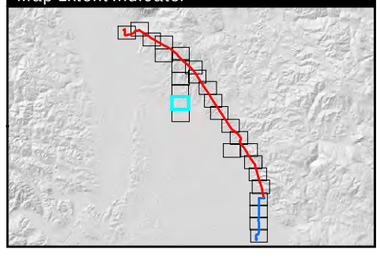
Legend

Access Routes

Existing Unpaved

Project Study Area

Map Extent Indicator



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Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (21 of 27)

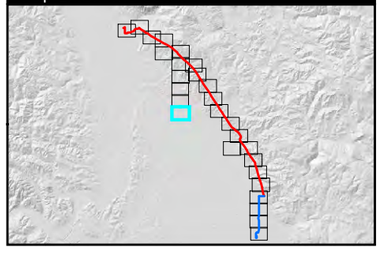
Legend

Access Routes

Existing Unpaved

Project Study Area

Map Extent Indicator



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Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

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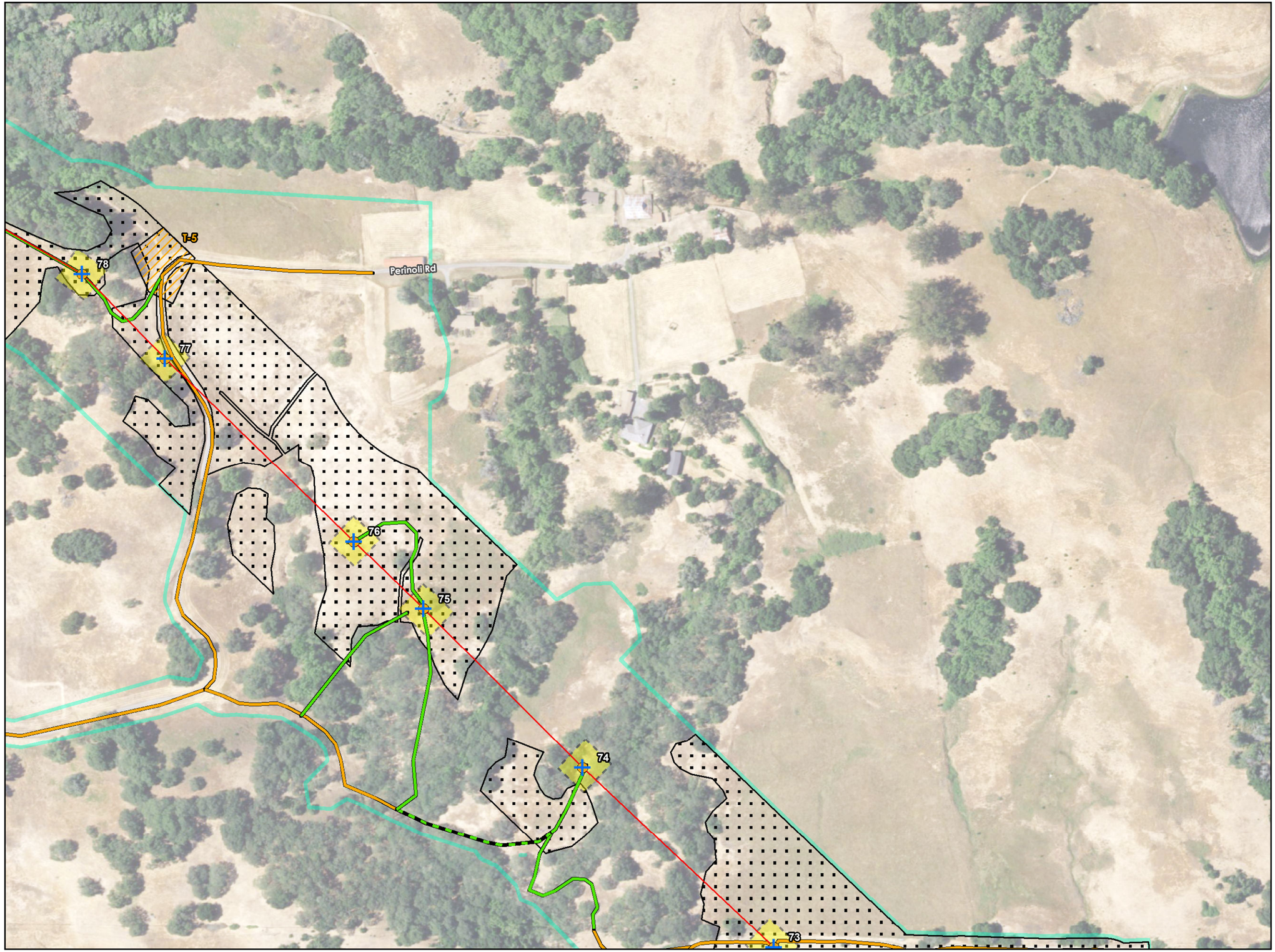


PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (22 of 27) - *Revised*

Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with LDSP)

Project Alignment

- Northern Segment

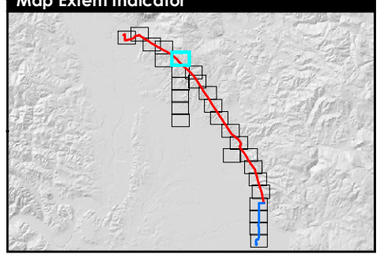
Access Routes

- Existing Unpaved
- Overland
- Overland (Backup Only)

Anticipated Work Area Limits

- Vehicle Turnaround Areas (T)
- Representative Pole Work Areas
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area

Map Extent Indicator



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Aerial Imagery: 6/11/2016

Date Created: 10/4/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (23 of 27) - *Revised*

Legend

Existing Poles and Proposed Action

Wood Monopole (Replace with LDSP)

Project Alignment

Northern Segment

Access Routes

Existing Unpaved

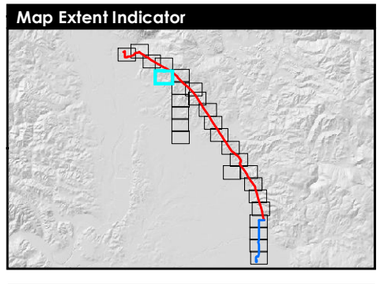
Overland

Representative Pole Work Areas

Potential Helicopter Touch Down and Overland Routes

Project Study Area

Map Extent Indicator



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Aerial Imagery: 6/11/2016

Date Created: 10/4/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (24 of 27)

Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with LDSP)

Project Alignment

- Northern Segment

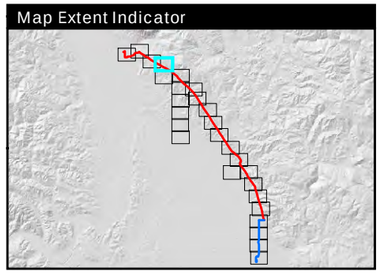
Access Routes

- Existing Unpaved
- Overland

Anticipated Work Area Limits

- Staging Area/Landing Zone
- Vehicle Turnaround Areas
- Representative Pole Work Areas
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area

Map Extent Indicator



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Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (25 of 27)

Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with LDSP)

Project Alignment

- Northern Segment

Access Routes

- Existing Unpaved
- Overland
- Overland (Backup Only)

Anticipated Work Area Limits

- Staging Area/Landing Zone
- Pull Site (PS)
- Vehicle Turnaround Areas
- Representative Pole Work Areas
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area

Map Extent Indicator

Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

Figure A-1: Project Detail Maps (26 of 27)

Legend

Existing Poles and Proposed Action

- Wood Monopole (Replace with TSP)
- Wood Monopole (Replace with LDSP)
- Wood Monopole (Completely Remove)
- Adjacent Pole (No Work)

Project Alignment

- Northern Segment

Access Routes

- Existing Unpaved
- Overland

Anticipated Work Area Limits

- Staging Area/Landing Zone (LZ)
- Limited Staging Area (SA)
- Pull Site (PS)
- Representative Pole Work Areas
- Potential Helicopter Touch Down and Overland Routes
- Project Study Area

Map Extent Indicator

Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

PANORAMA

PG&E Fulton-Fitch Mountain Reconductoring Project

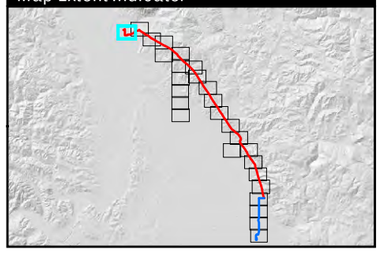
Figure A-1: Project Detail Maps (27 of 27)

Legend

Access Routes

- Existing Unpaved
- Overland
- Substation
- Project Study Area

Map Extent Indicator



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Aerial Imagery: 6/11/2016

Date Created: 7/5/2017

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APPENDIX B FINAL APMS AND MMS

Table B-1 Final APMs and MMs

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
Agriculture and Forestry Resources			
MM Agriculture-1: Minimize Impacts on Active Agricultural Areas PG&E shall minimize disruptions to existing agriculture operations and avoid impacts on agricultural infrastructure (i.e., irrigation lines, wells, pumps, ditches, and drains). Work areas and overland access routes shall avoid active agricultural areas (i.e., farms, orchards, vineyards) and agriculture infrastructure where feasible. If necessary, and upon agreement with farmers, agricultural infrastructure shall be protected with temporary materials (i.e., steel plates, blankets, etc.) to prevent inadvertent damage during construction. Crop removal shall be avoided to the greatest extent feasible. If crops cannot be avoided, impacts shall be limited to the minimum necessary to construct the project, and PG&E shall provide the owner with fair market compensation to replace the crops and any damaged infrastructure. If grading occurs in active agricultural areas, topsoil shall be salvaged and replaced once construction is complete.	Access roads and work areas within agricultural properties	• **Before Construction:** Design access roads and work areas to avoid trees and crops where feasible • **During Construction:** Protect irrigation lines and avoid impacts to agricultural productions where feasible • **After Construction:** Replace any damaged crops	• **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
Air Quality			
APM AIR-1: Fugitive Dust Emissions Per BAAQMD CEQA guidelines, PG&E will implement the following fugitive dust control measures: • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) in active construction zones shall be watered two times per day during dry conditions. • All haul trucks transporting soil, sand, or other loose material off site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers or equivalent method at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 miles-per-hour. • Post a publicly visible sign at work areas where grading/blading and helicopter activities occur near public and residential areas with the telephone number and person to contact at PG&E regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's dust complaint phone number shall also be visible to ensure compliance with applicable regulations. • Helicopter LZs shall be watered prior to takeoff and landings as needed in unvegetated areas in dry conditions.	All project areas	• **Before Construction:** Dust complaint signs are posted adequately • **During Construction:** (1) Exposed surfaces are watered two times a day during dry conditions, (2) Haul trucks are adequately covered, (3) Soil track out is adequately managed, (4) Vehicle speeds limits are maintained, and (5) Helicopter LZs are watered as needed prior to takeoff and landings • **After Construction:** N/A	• **Notifications (Table C-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
APM AIR-2: Exhaust Emissions Per BAAQMD CEQA guidelines, PG&E will implement the following exhaust emission control measures: • Minimize unnecessary construction vehicle and equipment idling time. The ability to limit construction vehicle idling time will depend on the sequence of construction activities and when and where vehicles are needed or staged. Certain vehicles, such as large diesel-powered vehicles, have extended warm-up times following start-up that limit their availability for use following start-up. Where such diesel-powered vehicles are required for repetitive construction tasks, these vehicles may require more idling time. The project will apply a "common sense" approach to vehicle use, so that idling is reduced as far as possible below the maximum of 5 consecutive minutes allowed by California law; if a vehicle is not required for use immediately or continuously for construction activities, its engine will be shut off. Construction foremen will include briefings to crews on vehicle use as part of pre-construction conferences. Those briefings will include discussion of a "common sense" approach to use of diesel-powered vehicles and equipment. Clear signage shall be provided for construction workers at all access points. • Construction equipment will be properly maintained by a certified mechanic. All off-road construction diesel engines not registered under the CARB Statewide Portable Equipment Registration Program will meet at a minimum the Tier 1 California Emission Standards for Off-Road Compression-Ignition Engines as specified in CCR Title 13, Chapter 9, Sec. 2423(b)(1).	All project areas	• **Before Construction:** Brief crews regarding idling limitations • **During Construction:** (1) Idling of construction vehicle and equipment limited to 5 consecutive minutes to the greatest extent possible, and (2) A certified mechanic maintains construction equipment • **After Construction**: N/A	• **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
Biological Resources			
APM BIO-1a: Environmental Awareness Training	N/A	• **Before Construction:** A copy of the training materials is provided to the CPUC at least 30 days before construction • **During Construction:** (1) All project personnel are trained prior to	• **Plans (Table C-2)** – ETP Material • **Worker Training (Table 2.2-1)** • **General Reporting (Tables 2.2-6 and 2.2-7)**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
PG&E will prepare and implement a Worker Environmental Awareness Program (WEAP) that includes conducting training for all construction and on-site personnel prior to working on the project site. Training will include a discussion of the avoidance and minimization measures that are being implemented to protect biological resources (e.g., APM and MM requirements), as well as the terms and conditions of any Biological Opinion or other permits that apply to the project. Training will include information on the federal and state Endangered Species Acts and the consequences of noncompliance with these acts. Under this program, workers shall be informed about the presence, life history, and habitat requirements of all listed and special-status species with a potential to be affected within the project area. Training will also include information on state and federal laws protecting nesting birds, wetlands, and other water resources, as applicable and appropriate to the project. A copy of the training materials shall be provided to CPUC for review and approval no less than 30 days before construction. Training logs and sign-in sheets shall be provided to CPUC monthly.		working on the site, and (2) The CPUC is provided with training logs and sign-in sheets monthly • **After Construction:** N/A	
APM BIO-1f: Litter and Trash Management All food scraps, wrappers, food containers, cans, bottles, and other trash from the project area will be deposited in trash containers with an adequate lid or cover to contain trash. All food waste shall be placed in a securely-covered bin and removed from the site on a weekly basis to avoid attracting animals.	All project areas	• **Before Construction:** N/A • **During Construction:** Litter and trash is contained and disposed of adequately • **After Construction:** N/A	• **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
APM BIO-1g: Parking Vehicles and equipment will be parked on pavement, existing roads or paved road shoulders, developed areas, or approved work areas.	All project areas	• **Before Construction:** N/A • **During Construction:** Vehicle and equipment parking is limited to appropriate areas • **After Construction:** N/A	• **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
APM BIO-1h: Access Route and Work Area Limitations Vehicles will be confined to public roadways and pre-approved access routes (e.g., private paved and unpaved roads, and overland routes), previously disturbed and unvegetated roadsides, and work areas. Access routes and construction work areas will be limited to the minimum necessary to achieve the project goals.	All project areas	• **Before Construction:** N/A • **During Construction:** Vehicle and equipment access is limited to approved areas and access routes • **After Construction:** N/A	• **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
APM BIO-1j: Pets and Firearms No pets or firearms will be permitted at the project site.	All project areas	• **Before Construction:** N/A • **During Construction:** No pets and firearms are brought to the site • **After Construction:** N/A	• **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
APM BIO-1k: Cover Excavations Pole excavations shall be thoroughly covered at the end of each work day to prevent people, wildlife, or livestock from falling in. Trench excavations greater than 2 feet deep will be sloped, or have escape ramps installed that are suitable for the escape of wildlife, or be thoroughly covered at the end of the day. All excavations in active work areas will be inspected for wildlife at the beginning of the work day and prior to backfilling. If a special-status species is discovered in an excavation area, work in the area will be redirected and the special-status species shall first be allowed to leave the area of its own accord. In the event that a special-status species is trapped in an excavation and is unable to leave on its own accord, removal will be performed or overseen by a biological monitor with the applicable permits for handling of the species.	All project areas where qualifying excavation occurs	• **Before Construction:** N/A • **During Construction:** (1) Excavations are covered, sloped, ramped, and marked appropriately, (2) Excavations are inspected for wildlife, (3) Any trapped wildlife is relocated, and (4) Any trapped special-status wildlife is relocated according to applicable USFWS and CDFW authorizations • **After Construction:** N/A	• **General Field Monitoring (Table 2.2-4)** • ***Specialty Field Monitoring (Table 2.2-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
APM BIO-7: California Tiger Salamander Unless otherwise authorized by USFWS and/or CDFW, PG&E shall implement the following procedures to protect CTS that may be present in designated critical habitat for CTS and in areas identified in the Santa Rosa Plain Conservation Strategy (SRPCS) as locations where CTS could be adversely affected: • A qualified biologist, who is approved by USFWS and/or CDFW if required[1], shall conduct a pre-construction clearance survey of the work areas no more than 24 hours in advance of work activities that could adversely affect CTS. • If construction activities must occur during the wet season (October 15 through April 15), a qualified biologist, who is approved by USFWS and/or CDFW if required, will determine if it is appropriate to fence the perimeter of work areas located in areas. Amphibian exclusion fencing will be used. Installation of exclusion fencing will occur under the supervision of a qualified biologist. The amphibian exclusion fencing will remain in place for the duration of construction in that area during the wet season, and will be monitored regularly by environmental inspectors or biologists. Where access is necessary, gates will be installed within the exclusion fence. • Grading and vegetation clearing shall not occur where CTS could be adversely affected during the wet season. • During wet weather or the rainy season, all open holes, pits, and trenches will be protected to ensure that CTS do not become entrapped. Qualified personnel will install protective fencing, coverings, or ramps to either prevent CTS from falling into excavations or to allow for escape. At the end of each work day, trenches will be covered and/or fenced. Excavation sites will be inspected each morning, prior to the start of construction activities, to ensure that no CTS are trapped. • During the wet season or after a rain event (with greater than 0.1 inches of rainfall), construction personnel will check underneath all vehicles (i.e., tires, tracks, etc.) for the presence of CTS. • Best management practices (BMPs) shall be implemented to minimize erosion and prevent sediment from leaving work areas and entering any aquatic habitat. Monofilament netting that could entrap CTS shall not be used for any erosion-control materials. PG&E may consult with USFWS and/or CDFW before beginning work in designated critical habitat for CTS and in areas identified in the SRPCS as locations where CTS could be adversely affected to determine the necessity of implementing the requirements listed above based on the habitat characteristics in the project area. Such considerations may include adjacent land uses and lack of connectivity to suitable habitat where project work areas are located. Any discovered CTS will be reported to the on-site biologist or to PG&E environmental staff. If a CTS is found during work activities, PG&E shall redirect work that poses a risk to the animal, as determined by a qualified biologist, and consult with USFWS and/or CDFW before resuming work in the area. CTS handling and relocation may only occur after consultation with the permitting agencies, and must be conducted by individuals with proper qualifications and agency approval. PG&E shall provide CPUC with any agency permits and determinations regarding CTS for the project.	Work areas located in designated critical habitat for CTS and in areas identified in the SRPCS as locations where CTS could be adversely affected	• **Before Construction:** (1) PG&E provides CPUC with any agency permits or determinations, (2) A pre-construction clearance survey is performed, and (3) CTS exclusion fencing is installed, if and where appropriate • **During Construction:** PG&E implements CTS protection measures in designated habitat for CTS or areas identified in the SRPCS as locations where CTS could be adversely affected, unless otherwise authorized by USFWS and/or CDFW • **After Construction:** N/A	• ***Permits and Authorizations (Table C-1)** – *USFWS and CDFW Incidental Take Permit • **Surveys (Table 2.2-2)** • **Specialty Field Monitoring (Table 2.2-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
APM BIO-8: American Badger A qualified biologist shall conduct a pre-activity survey for active American badger dens within 30 days prior to grading or vegetation clearing in work areas, or use of overland access routes. The pre-activity survey area shall be limited to potentially suitable habitat for American badger (e.g., grasslands and woodlands) located within 250 feet of work areas where grading or land vegetation clearing may occur and within or immediately adjacent to overland access routes. PG&E shall submit the survey results to CPUC prior to construction. PG&E may use cameras to determine if dens are active. If active dens are identified at any time during construction, the dens shall be flagged and avoided. A 250-foot work restriction buffer shall be established around active maternal dens. For non-maternal dens, a 50-foot work restriction buffer shall be established around active dens. Smaller buffers may be established through consultation with CDFW. If an active non-maternal den cannot be avoided, PG&E may consult with CDFW to determine if it would be appropriate to implement passive exclusion techniques, such as sealing the den after animals have vacated. A qualified biologist shall inspect construction activities near active American badger dens on a weekly basis to ensure the work restriction buffers are implemented appropriately and active dens are avoided.	Potentially suitable habitat for American badger (e.g., grasslands and woodlands) within 250 feet of work areas where grading or land vegetation clearing may occur and within or immediately adjacent to overland access routes	• **Before Construction:** Pre-construction surveys are conducted for American badger dens and survey results are submitted to the CPUC • **During Construction:** (1) Work restriction buffers are implemented, and (2) Construction activities near active dens are monitored • **After Construction:** N/A	• ***Permits and Authorizations (Table C-1)** – *CDFW determination regarding passive den exclusion • **Surveys (Table 2.2-2)** • **Specialty Field Monitoring (Table 2.2-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
APM BIO-9: Western Pond Turtle	All project locations within 400 feet	• **Before Construction:** Pre-construction survey for western	• ***Permits and Authorizations (Table C-1)**

[1] For purposes of this measure, approval "if required" means if required by USFWS or CDFW.

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
A survey for western pond turtle shall be performed by a qualified biologist within 24 hours prior to work within 400 feet of potentially suitable habitat (e.g., ponds, lakes, slow streams, or marshes with vegetated borders, rocks, or logs). A qualified biologist shall also conduct daily sweeps during the spring nesting season of work areas and access routes within 400 feet of suitable habitat for western pond turtle prior to work activities. The daily sweeps shall consist of walking the limits of construction areas and access routes to identify any pond turtles that may be present. Individual western pond turtles, if found in the work area during spring/nesting season, shall be relocated out of harm's way and outside of the construction area in the direction of travel, or as directed by the CDFW. Similarly, if found during hibernation movements in winter, individual western pond turtles will be relocated outside of the construction area in the direction of travel, or as directed by CDFW.	suitable habitat for western pond turtle	pond turtle is conducted within 400 feet of suitable aquatic habitat • **During Construction:** (1) Daily sweeps within 400 feet of suitable habitat are conducted during the spring nesting season, and (2) Western pond turtle are relocated out of harm's way in the direction of travel • **After Construction:** N/A	– *CDFW determination regarding relocation areas • **Surveys (Table 2.2-2)** • **Specialty Field Monitoring (Table 2.2-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)**
APM BIO-10: Tree Removal and Mitigation Tree removal will be minimized to what is required to implement the project. For removal of large valley oak trees greater than 20 inches dbh or small valley oaks with a cumulative dbh greater than 60 inches that occurs within the Sonoma County Valley Oak Combining District, PG&E will coordinate with landowners to either replace or pay an in-lieu fee to the County valley oak planting program. Any protected trees that are otherwise removed will be documented and replaced at a 1:1 ratio or other measure derived through coordination with Sonoma County or the Town of Windsor that provides an equal level of compensation.	All project areas where qualifying oak tree removal occurs	• **Before Construction:** PG&E identifies all qualifying oak trees that may be impacted with work areas and access routes • **During Construction:** (1) PG&E documents all qualifying oak trees that are removed, (2) PG&E coordinates with applicable landowners to replace oak trees or pay fee to County tree planting program, and (3) Protected oak trees are replaced at a 1:1 ratio or as determined through coordination with the County • **After Construction:** Ensure success of replanting if trees are replaced	• **Notifications (Table C-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
MM Biology-1: General Biological Monitoring (Supersedes APM BIO-1b and APM BIO-1c) **Biologist Approval and Qualifications.** CPUC-approved qualified biologists will conduct biological surveys and monitoring for the project. Qualified biologists are defined as individuals with a bachelor's degree or above in a biological science field and demonstrated field experience. Approved and qualified biologists shall conduct required surveys and monitoring for special-status species and active nests. Qualified avian biologists are defined as individuals with demonstrated field expertise in ornithology, in particular, nesting behavior and nest detection. Monitoring biologists conducting avian nest checks shall have demonstrated experience surveying or monitoring nesting birds. Qualified botanists are defined as individuals with demonstrated field expertise in botany. Qualified herpetologists are defined as individuals with demonstrated experience with California reptile and amphibian species. Biologists qualified for construction monitoring shall hold at minimum 1 to 2 years of construction-related biological monitoring experience. Biologists qualified as a lead field monitoring biologist shall have 5 or more years of related experience. **General Monitoring Procedures.** The approved biologist shall conduct general biological monitoring during construction activities that may disturb sensitive biological resources. The general biological monitoring (as required by this measure) may be conducted concurrently with other required monitoring activities, as appropriate. The biological monitor shall be responsible for ensuring compliance with avoidance and minimization procedures, regularly attending morning tailboard meetings with workers, and administering the required biological training requirements. **Resource Delineation.** Prior to construction or access in any area containing or potentially containing sensitive habitats, the biological monitor shall mark or otherwise delineate the limits of sensitive habitats and resources (i.e., wetlands and other water features, suitable aquatic habitat) for avoidance, and where necessary, post signs at access route entrances to inform workers of special access considerations (i.e., seasonal restrictions, biological monitor escort, etc.). Resource markings and signs shall be maintained and repaired as needed and as directed by the biological monitor. A biological monitor shall be present during the initial construction access in all unpaved areas to identify and mark sensitive resources for avoidance. The biological monitor shall also be present during all grading and vegetation clearing (e.g., mowing, trimming, and removal) within 50 feet of sensitive habitats or resources unless otherwise agreed by the CPUC biologist, lead environmental monitor, and PG&E's lead biologist. The biological monitor shall have full authority to halt construction once safe to do so if a resource has or may be impacted.	All unpaved work areas within 50 feet of sensitive resources	• **Before Construction:** (1) PG&E submits qualifications for general biological monitor(s) to the CPUC for review and approval, and (2) The extent of work areas in locations with sensitive resource potential are marked • **During Construction:** (1) Biological monitoring is conducted when working in sensitive habitats and at least once a week, and (2) Signs and marking and flagging material are maintained and repaired • **After Construction:** N/A	• **Permits and Authorizations (Table C-1)** – CPUC-approval of specialty monitors • **Specialty Field Monitoring (Table 2.2-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
The biological monitor shall also visit each active work site at least once a week to inspect the work area for the presence of biological resources, verify that all avoidance measures (e.g., flagging or fencing) are in place, and document any species relocation or impacts.			
MM Biology-2: Special-status Plants (Supersedes APM BIO-4) **Focused Surveys**. Qualified botanist(s) shall conduct protocol-level botanical surveys, employing the CNPS "Intuitive Controlled" survey method or other accepted botanical survey protocol. The surveys shall include a floristic inventory and focused search for special-status plants with potential to occur in project areas where suitable habitat is present. Special-status plant surveys shall be conducted during the appropriate blooming period for each species and prior to construction activities. Special-status plant survey(s) shall be conducted within 2 years of mobilization. The survey results shall be summarized in a report and provided to the CPUC no less than 30 days prior to construction. The survey report shall identify the botanists' names and qualifications, and a description of the survey dates, methods, and a description of the survey efforts, including a list of the species that were searched for, results of the plant inventory evaluation, and suitable habitat that was encountered. The report shall include maps (1: 3,000 scale) that identify final project work areas and access routes, the locations of suitable habitat within the project study area as defined in the IS/MND, and the extent of focused plant surveys that cover project areas located in suitable habitat. If any special-status plant individuals or populations are encountered, the plants shall be enumerated and described in the report. Maps in the report shall identify point locations for individual plants and boundaries for plant populations. The report shall include recommendations for avoiding the plants, where feasible. If special-status plants cannot be avoided, the plant impacts shall be enumerated and described in the survey report. PG&E shall consult with USFWS and CDFW should any state- or federally-listed plants be found that cannot be avoided, to determine if permit authorizations are required. PG&E shall provide the CPUC with any permits and authorizations obtained from USFWS and CDFW. Special-status plants within and adjacent to work areas and access routes shall be marked and completely avoided, to the extent feasible, by a qualified botanist. **Salvage and Replanting Plan.** If impacts on the special-status plant species cannot be avoided and if impacts would be substantial, as determined by the CPUC taking into consideration the rarity of the species in the project area and the extent of the impact, PG&E shall prepare and implement a Salvage and Replanting Plan. The plan would specify, at a minimum, the following: • Location of the mitigation site(s) (extent of the plants within and adjacent to project areas). • Procedures for procuring plants, such as transplanting or collecting seed from plants to be impacted, including storage locations and methods to preserve the plants. • Procedures for propagating collected seed, including storage methods. • Quantity and species of plants to be planted or transplanted. • Planting procedures, including the use of soil preparation and irrigation. • Schedule and action plan to maintain and monitor the mitigation site for a minimum 3-year period. • Reporting procedures, including the contents of annual progress reports. • List of criteria (e.g., growth, plant cover, survivorship) by which to measure success of the plantings. • Contingency measures to implement if the plantings are not successful (i.e., weed removal, supplemental plantings, etc.). PG&E shall submit the plan to the CPUC for review and approval no less than 30 days prior to impacting or collecting special-status plants. At a minimum, the transplanted/created population(s) shall have approximately the same characteristics as the impacted population (within 10-percent density, total population number, and non-native/invasive). Seasonal population changes may be taken into account by identifying and documenting the characteristics of an appropriate representative reference site prior to impacting a population. Reference sites that will be used must be identified and described in the Salvage and Replanting Plan. If CPUC determines that the Salvage and Replanting Plan is not likely to be successful (due to the species' life form, habitat requirements, or other factors), then either (1) impacts on the special-status plants in questions must be avoided, or (2) a financial contribution will be made to an organization that restores/protects special-status plant populations in the project region.	All project areas where suitable habitat for special-status plants is present	• **Before Construction:** (1) Special-status plant surveys are conducted during the appropriate blooming period for each species, (2) A survey report is submitted to the CPUC no less than 30 days before construction, (3) if an impact to a special-status plant cannot be avoided, a Salvage and Replanting Plan is submitted to the CPUC for approval, (4) Plant salvage and/or seed collection procedures are implemented, and (5) Special-status plant populations are flagged for avoidance. • **During Construction:** (1) Special-status plants are avoided and monitored appropriately, and (2) Salvaged plants and seed are stored and monitored appropriately • **After Construction:** Replanting procedures and monitoring are implemented until the success criteria are met, or a financial contribution is made to an organization that restores/protects special-status populations in the project region.	• ***Permits and Authorizations (Table C-1)** – *USFWS Incidental Take Permit – *CDFW Incidental Take Permit • **Surveys (Table 2.2-2)** • ***Plans (Table C-2)** – *Special-status Plant Salvage and Replanting Plan • ***Specialty Field Monitoring (Table 2.2-3)** • ***Specific Reporting (Table 2.2-5)** • ***General Reporting (Tables 2.2-6 and 2.2-7)** • ***Avoidance and Minimization**
MM Biology-3: California Red-legged Frog (Supersedes APM BIO-1d, APM BIO-1m, and APM BIO-6) **Habitat Survey and Mapping.** A qualified biologist shall identify potentially suitable aquatic habitat for CRLF (i.e., ponds, creeks, and perennial and seasonal streams) within 500 feet of all project disturbance areas and watercourse crossings. PG&E shall submit maps (1: 3,000 scale) to the CPUC identifying the locations of potentially suitable aquatic habitat features and upland habitat within 500 feet of the project features, no less than 30 days before construction. The maps shall identify access route segments, pole locations, and work area limits that would be surveyed and fenced, monitored, or otherwise avoided as specified below.	Within 500 feet of potentially suitable aquatic habitat for CRLF	• **Before Construction:** (1) CRLF habitat mapping is submitted to the CPUC no less than 30 days prior to construction, (2) Any USFWS permit authorizations are submitted to the CPUC, (3) The names and qualifications of CRLF biologists are submitted to the CPUC for	• ***Permits and Authorizations (Table C-1)** – *USFWS Incidental Take Permit • **Surveys (Table 2.2-2)** • **Specialty Field Monitoring (Table 2.2-3)**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
Substantial barriers or topography that would prevent CRLF dispersal should be identified on the maps. Potentially suitable habitat that is fragmented or disconnected by such barriers shall not be subject to the provisions set forth in this measure, as determined in coordination with the CPUC. **Permits and Agency Authorizations.** PG&E shall consult with USFWS to obtain permit authorizations for any necessary take coverage prior to conducting work activities within aquatic or upland habitat for CRLF. PG&E shall provide the CPUC with any required permits and authorizations obtained from USFWS, including correspondence regarding habitat determinations or avoidance and minimizations procedures. CRLF may only be handled by a qualified biologist with approval and all appropriate permit authorizations from USFWS. **Avoidance, Minimization, and Monitoring.** The following procedures shall be implemented during construction within CRLF habitat, unless conflicts arise between applicable USFWS permit conditions. In such cases, USFWS permit conditions shall supersede these procedures, and CPUC shall be provided with copies of the permits and all associated reports documenting compliance with permit conditions: • The names and qualifications of biologists that would conduct the CRLF procedures described below shall be submitted to the CPUC for approval, unless USFWS has granted prior approval and a copy of the approval letter is submitted to CPUC. • No more than 24 hours prior to initial ground disturbance in mapped CRLF habitat, an approved biologist shall conduct a pre-activity survey for CRLF within the mapped habitat, as defined above. The pre-activity survey shall consist of walking the work area limits and adjacent areas to determine if any CRLF are present. All areas within the survey area shall be inspected that could be used by CRLF for feeding, breeding, sheltering, and movement, including suitable mammal burrows. • Construction activities within watercourse crossings may only occur when the feature is dry or if the crossing method fully spans the feature (refer to MM Hydrology-4). • Aquatic habitat adjacent to work areas and along access routes shall be adequately flagged for avoidance, where necessary. • Construction activities within 500 feet of mapped aquatic habitat shall be restricted to the dry season (April 15 through October 15), to the extent feasible, or when water is not present. If construction activities must occur in these areas during the wet season (October 16 through April 14), an approved biologist shall determine which of the following measures should be implemented at each work area based on the CRLF habitat characteristics and work activities that would occur: – **Option 1 – Install Exclusion Fencing.** Temporary exclusion fencing shall be installed around the limits of work areas and access routes to ensure CRLF cannot enter the area. Installation of exclusion fencing shall occur under the supervision of an approved biologist and immediately following a clearance survey of the area. The fencing shall have a minimum aboveground height of 36 inches, and the bottom of the fence should be keyed in at least 4 inches deep and backfilled with soil, sand bags, gravel, or other means to prevent CRLF from passing under the fencing. The fencing shall be installed in a manner that reduces the potential for trapping migrating wildlife. Cover boards shall be installed along the perimeter of fencing to provide protection from the sun and predators, where necessary and appropriate. Gates shall be installed in the fencing that allow project access and adequately exclude wildlife. The exclusion fencing shall remain in place and maintained for the duration of construction activities at the location during the wet season. Prior to entering and beginning work in fenced areas each day, designated personnel shall inspect the work area and both sides of the fence perimeter for CRLF and any trapped wildlife. The designated personnel must be trained by an approved biologist on CRLF identification, the laws protecting the species, and procedures to implement if the species is observed. If CRLF or trapped wildlife are observed, an approved biologist shall be notified immediately to determine the appropriate procedures to implement. – **Option 2 – Monitor Construction Activities.** In lieu of exclusion fencing, an approved biologist shall monitor the initial ground-disturbing construction activities in each work area. Following the initial activities, at a minimum, an approved biologist shall conduct morning sweeps of each work area prior the start of construction activities. An approved biologist would then conduct spot check-monitoring at each location for the remainder of the work day. Neither Options 1 or 2 would be required if a qualified CRLF biologist determines that non-ground-disturbing activities (i.e., access on established roads or overland routes) would have no potential effect on CRLF. Such exceptions shall be subject to CPUC approval and shall not apply to areas where grading or vegetation clearing would occur. • If any CRLF adults, subadults, juveniles, tadpoles, or eggs are found during the pre-activity surveys, fence installation, daily checks of fencing, or monitoring, construction shall be halted (when safe to do so) in the vicinity of the observation that may pose a risk to the animal, as determined by an approved biologist, and USFWS shall be contacted to determine how to proceed. Alternatively, if a Biological Opinion has been obtained from USFWS for the project that addresses CRLF, then the associated measures and relocation protocols may be implemented. CPUC shall be notified by email within 24 hours of any CRLF observations. • An approved biologist shall oversee the installation of erosion and sediment controls within mapped habitat to ensure the materials do not pose a risk to CRLF. Plastic monofilament or loosely woven erosion control netting, or any similar materials that may entangle special-status wildlife, shall not be used. • Vehicle and equipment speeds shall not exceed 5 mph while on unpaved areas within 300 feet of suitable aquatic habitat.		approval, (4) Pre-activity surveys are conducted, and (5) Any exclusion fencing is installed under Option 1 • **During Construction:** (1) Daily sweeps and monitoring procedures are implemented, (2) Exclusion fencing is maintained under Option 1 or an approved biologist monitors construction, and (3) All avoidance and minimization measures are implemented • **After Construction:** N/A	• **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
• After a rain event (greater than 0.1 inch of rainfall), workers shall check underneath vehicles (i.e., tires, tracks, etc.) for the presence of wildlife. Any discovered wildlife shall be reported to an approved biologist for relocation assistance.			
MM Biology-4: Foothill Yellow-legged Frog (Supersedes APM BIO-1b, APM BIO-1c, and APM BIO-1m) **Habitat Survey and Mapping.** A qualified biologist shall identify potentially suitable aquatic habitat for FYLF (i.e., perennial streams with cobble or rock substrate, or seasonal streams with cobble or rock substrate and standing water, or visible moisture in the immediate vicinity) within ~~10~~ 40 feet of all project disturbance areas and watercourse crossings. PG&E shall submit maps (1: 3,000 scale) to the CPUC identifying the locations of potentially suitable FYLF aquatic habitat~~,~~ and upland habitat within 10 feet of all project disturbance areas and watercourse crossings~~the feature~~, no less than 30 days before construction. The maps shall identify access route segments, pole locations, and work area limits that would be surveyed and monitored, as defined below. **~~Avoidance, Minimization, and Monitoring.~~** ~~No more than 24 hours~~Three to five days prior to initial ground disturbance in mapped FYLF habitat within project disturbance areas, an approved biologist shall conduct pre-activity surveys for FYLF. Survey methodology shall generally follow pages 5 to 7 of *Considerations for Conserving the Foothill Yellow-Legged Frog* (CDFW 2018) and *The Declining Amphibian Task Force Fieldwork Code of Practice* (CDFW 1998). The pre-activity survey shall consist of walking the work area limits and adjacent areas to determine if any FYLF are present. All areas within the survey area that could be used by FYLF for feeding, breeding, sheltering, and movement shall be inspected. The survey shall include an adequate examination of damp areas within or in proximity to creeks. **Avoidance, Minimization, and Monitoring.** If any life stage of FYLF are observed during the pre-activity surveys, PG&E shall submit the survey results to CDFW, evaluate permitting needs with CPUC, and consult with CDFW to determine avoidance measures. At a minimum and if authorized by CDFW, an approved biologist shall conduct daily sweeps of work areas within the mapped habitat for FYLF prior to work activities to identify any FYLF that may have entered the adjacent work area. The daily sweeps shall consist of walking the limits of construction areas and access routes to identify any FYLF that may be present. If FYLF are found in work areas, the animal shall be provided with the opportunity to leave on its own accord. If the animal does not leave on its own accord, PG&E shall halt work at the work area and consult with CDFW to determine appropriate next steps. If necessary, and upon approval by the CDFW, the animal may be moved out of harm's way by an approved biologist in possession of all required permits and authorizations from the CDFW. Any permit conditions that conflict with requirements in this measure shall supersede.	Within 10 feet of all project disturbance areas and watercourse crossings near potentially suitable aquatic or upland habitat for FYLF	• **Before Construction:** (1) FYLF habitat mapping is submitted to CPUC no less than 30 days prior to construction, ~~and~~ (2) Pre-activity surveys are conducted, (3) positive survey results are submitted to CDFW, permitting needs are evaluated with CPUC, and CDFW is consulted regarding avoidance and minimization measures and any permitting requirements • **During Construction:** Daily sweeps of work areas are performed within mapped FYLF habitat, where applicable • **After Construction:** N/A	• ***Permits and Authorizations (Table C-1)** – *CDFW Incidental Take Permit • **Surveys (Table 2.2-2)** • ***Specialty Field Monitoring (Table 2.2-3)** • ***General Reporting (Tables 2.2-6 and 2.2-7)** • ***Avoidance and Minimization**

MM Biology-5: Special-status and Protected Migratory Birds (Supersedes APM BIO-2) **~~Nest~~ Surveys.** ~~If work is scheduled during the nesting season (generally from February 1 through August 31, but may be earlier or later depending on species nesting patterns and weather conditions), n~~Nesting and burrowing bird detection surveys will occur ~~within 7 days~~ prior to the start of work activities at designated construction areas, staging areas, and landing zones to determine nesting or burrowing status. ~~Nest s~~Surveys will be accomplished by ground surveys within 500 feet of work areas, to the extent accessible, and/or by helicopter between 500 feet and 0.5 mile of work areas. Survey areas will generally correspond with the species-specific standard buffers set forth in *Nesting Birds: Species-Specific Buffers for PG&E Activities* located in Appendix D. Surveys will be conducted during the appropriate time of day and season for the species expected to be present. Access for ground surveys will be subject to PG&E's easement and property access permissions. Passerine survey areas will generally be 250 feet from all work areas. The non-special-status raptor survey area will generally be 500 feet from work areas where trees and other suitable nesting substrate are located. Helicopter surveys for special-status raptors will be conducted within 0.5 mile of all project work areas. Surveys for special-status birds shall generally follow CDFW and USFWS recommended guidelines and survey methodology appropriate for the species that may be present to ensure any special-status birds are detected and avoided in accordance with state and federal laws. After construction begins in an area, avian biologists or approved avian monitors shall inspect suitable nesting habitat within 250 feet (passerines) and 500 feet (raptors) of active work areas when and where nesting or burrowing activity could occur ~~on a weekly basis during the nesting season to identify and document any new active nests that may be present~~ (see nest monitoring and reporting below – and considerations for nesting in active work areas). If special-status raptor nests cannot be observed from the ground, weekly checks for special-status raptors may occur by helicopter during periods when helicopters are in use. Helicopter flight restrictions for nest detection surveys may be in effect for densely populated residential areas, and will include observance of appropriate established buffers and avoidance of hovering in the vicinity of active nest sites. A CPUC-approved and qualified avian biologist shall conduct surveys for nesting birds. Biologists that conduct burrow surveys must have sufficient experience to detect potentially active burrows. **Active vs. Inactive Nests and Burrows.** When a bird nest or burrow of any ~~bird~~ species is located within the required survey/potential disturbance area, an approved avian biologist shall determine whether the nest or burrow is active. A nest shall be defined as active once it contains eggs or young, or potentially contains eggs or young if presence cannot be reasonably determined. An inactive nest is defined as a nest that has been abandoned by the adult bird or once fledglings are no longer dependent on the nest site or parental care. Any potentially suitable burrows that show signs of bird activity, or if burrowing birds are observed in the area, shall be considered active until the burrow is fully evaluated generally following appropriate CDFW and USFWS guidelines appropriate for the species that may be present. **Standard ~~Nest~~ Buffers.** If active nests are found, the biologist will establish a species-specific standard ~~nest~~ avoidance buffer around each active nest or burrow, as listed in *Nesting Birds: Species-Specific Buffers for PG&E Activities*. For special-status raptor ~~nest~~s, a ~~nest~~ buffer shall be implemented once an approved avian biologist determines that the nest or burrow territory is occupied by adults. Construction activities would be restricted within the buffers depending on the nature and location of the activities and results of nest monitoring (see below). **Buffer Adjustments.** Where feasible, standard buffers will apply, although the biologist may increase or decrease the standard buffers in accordance with the factors set forth in *Nesting Birds: Species-Specific Buffers for PG&E Activities*. For high-disturbance helicopter activities near work areas with active nests or burrows, standard buffer distances may be increased up to double the distance with agreement between the CPUC biologist, lead environmental monitor, and PG&E's lead biologist. Nest buffers shall not restrict construction-related traffic using existing roads. Nesting pair acclimation to disturbance in areas with regularly occurring human activities will be considered when establishing reduced nest buffers. ~~Nest b~~Buffers shall be implemented until the approved avian biologist determines that the nest or burrow is no longer active. Active nests or burrows will not be impacted ~~during tree or structure removal~~. **Buffer Reductions.** The standard buffer distances for nests may be reduced on a case-by-case basis based on site-specific conditions set forth in *Nesting Birds: Species-Specific Buffers for PG&E Activities*, such as avian biology, nest concealment, existing conditions, habituation, environmental conditions, and level of project activity, upon agreement between the CPUC biologist, lead environmental monitor, and PG&E's lead project biologist. Buffer reductions for special-status birds shall adhere to the procedures described in *Nesting Birds: Species-Specific Buffers for PG&E Activities* and may require CDFW or USFW consultation. If necessary, PG&E shall obtain incidental take permits from CDFW and USFWS that may be required for conducting work activities within the standard buffer distance of listed threatened or endangered or candidate bird nests or burrows. Buffer reductions will be included in the weekly monitoring report and will document: • Species and listing status • Location description • Pre-existing conditions present on site • Description of the work to be conducted within the reduced buffer, including equipment type, and start date	Within 0.5 mile (special-status raptors), 500 feet (all other raptors), and 250 feet (passerines) of all project areas	• **Before Construction:** PG&E conducts pre-construction surveys for active bird nests and burrows • **During Construction:** (1) PG&E conducts on-going monitoring of any active bird nests and burrows, (2) No-disturbance buffers are enforced, and (3) PG&E submits weekly documentation ~~nest information~~ to the CPUC • **After Construction:** N/A	• **Surveys (Table 2.2-2)** • **Specialty Field Monitoring (Table 2.2-3)** • **Specific Reporting (Table 2.2-5)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References

- Size and expected duration of proposed buffer reduction
- Reason for buffer reduction
- Name of the biologist(s) who observed the nest and approved the buffer reduction
- Proposed frequency of monitoring necessary for the nest given the type of bird and surrounding conditions as determined by the approved avian biologist

~~Nesting in~~ **Active Work Areas.** If birds are found building nests within the standard buffer distance after specific project activities begin and the activities are not expected to increase in duration, intensity, or distance from the nest, it shall be assumed that the birds are tolerant of those specific project activities. If the specific project activities change within the standard buffer increase in duration, intensity, or distance, the avian monitor shall observe the nest until it can be determined the birds are tolerant of the new activities. If the avian monitor determines that the nesting birds are not tolerant of project activities, the buffer shall be expanded and may be expanded beyond the standard buffer distance if necessary.

If birds are found burrowing within the standard buffer distance, all work within the standard buffer distance of potentially active burrows shall be halted until the burrows are fully evaluated and determined to be inactive (refer to Active vs. Inactive Nests and Burrows) or consultation with CDFW has determined that work can proceed within the buffer zone.

Nest Monitoring. Active nests and burrows will be periodically monitored at a frequency and length of time necessary to ensure that ~~nesting pairs~~birds ~~continue to tend the nest~~are not impacted by project activities~~, and until the monitoring biologist has determined that the young have fledged,~~ or once construction ends. At minimum, nest monitoring will occur weekly~~.~~ and burrow monitoring will occur daily. For reduced buffers, nest monitoring will initially occur daily to determine whether a larger buffer is necessary. Daily nest monitoring will occur during helicopter operations within standard buffer distances. Per the discretion of the monitoring biologist and CPUC biologist, vegetation removal by hand may be allowed within standard nest buffers or in areas of potential nesting activity. The monitoring biologist will have authority to order the cessation of nearby project activities, once safe to do so, if nesting or burrowing birds ~~pairs~~ exhibit signs of disturbance.

Reporting. Survey results shall be submitted to the CPUC on a weekly basis. Nest and burrow locations and buffers shall be mapped using a Geographic Information System (GIS). Nest and burrow information and monitoring observations shall be documented and provided to the CPUC weekly, and include the following information:

- Date, time, and length of observation period
- ~~Nest s~~Status (active or inactive)
- Species and listing status
- ~~Nest l~~Location, including approximate nest height
- Behavioral observations
- Site conditions, including construction activities
- Estimated incubation start date, if possible
- Estimated fledge date
- Number of eggs or hatchlings, if observed
- Buffer size implemented

No avian reporting shall be required for construction activities outside of the nesting season unless species are observed nesting outside of the normal season or special-status bird species are observed in the project area.

Nesting Deterrents. As appropriate, nest deterrent strategies may be used to prevent birds from nesting in construction equipment or staged materials. Nest deterrent strategies may include exclusion netting, covering equipment with tarps, or covering small holes. The monitoring biologist shall review bird netting use daily due to risk of entanglement. Any deterrents designed for special-status species must be approved by CDFW or USFWS.

Design Guidelines. PG&E shall adhere to recommendations published by the Avian Power Line Interaction Committee, Reducing Avian Collisions with Power Lines: The State of the Art in 2012, as feasible.

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
MM Biology-6: Special-status and Protected Bats (Supersedes APM BIO-5) **Roosting Habitat Assessment.** Prior to construction, a CPUC-approved qualified biologist with expertise in bats shall conduct a pre-construction assessment for suitable special-status or otherwise protected[2] bat roosting habitat that may be impacted within approximately 50 feet of project work areas and access routes where grading and vegetation removal may occur. The qualified biologist shall identify all suitable bat roosts that may be impacted, including man-made structures, snags, rotten stumps, mature trees with broken limbs, trees with exfoliating bark, bole cavities or hollows, and dense foliage. The qualified biologist shall document the results of the pre-construction assessment and record the location of suitable bat roosts. The potential use of these roosts (e.g., day roost, night roost, maternity roost, hibernation roost) shall also be described. The results shall be submitted to the CPUC at least 30 days prior to construction. **Avoidance and Minimization.** Where suitable special-status or otherwise protected bat roosts are identified, the following procedures shall be implemented: • Suitable bat roosts shall be marked and avoided to the extent practicable. • When possible, removal of trees identified as providing suitable bat roosting habitat should be conducted during seasonal periods of bat activity, including: – (1) Between March 1 and April 15, or after evening temperatures rise above 45 degrees Fahrenheit and/or no more than ½ inch of rainfall within 24 hours occurs; or – (2) Between September 1 and about October 15, or before evening temperatures fall below 45 degrees Fahrenheit and/or more than ½ inch of rainfall within 24 hours occurs. • If it is determined that a special-status or otherwise protected bat maternity roost is potentially present, the roosts shall not be removed during the breeding season (April 15 to August 31) to the extent practicable. If such a potential bat maternity roost must be removed during the breeding season, then the following shall be implemented: – (1) Acoustic emergence surveys or other appropriate methods shall be conducted/implemented to further evaluate if the roost is an active maternity roost; the methods and findings of this work would both be subject to CPUC approval; – (2) If it is determined that the roost is not an active maternity roost, then the roost may be removed in accordance with the other requirements of this measure; – (3) If it is found that an active maternity roost is present, the roost shall not be physically disturbed during the breeding season and an approved bat biologist shall determine if any buffers around the roost are needed. • Potential suitable non-maternity roosts that cannot be avoided shall be removed on warm days in late morning to afternoon when any bats present are likely to be warm and able to fly. • An approved bat biologist shall oversee removal of suitable roosts. The biologist shall first inspect all crevices and cavities and attempt to expose any bats that may be present by carefully peeling away bark or cover material and opening crevices, to the extent possible. • Prior to trimming or removing suitable roosts, the approved bat biologist shall instruct workers to create noise and vibration disturbance on the roost (e.g., concussive hitting with tools and/or chainsaw cutting) for several minutes. • If a cavity cannot be thoroughly inspected on a tree, snag, or stump, clearing crews shall remove smaller limbs and sections above the cavity and carefully expose it so bats may crawl out and fly away. Clearing crews shall wait up to 10 minutes in between each cut to determine if the cavity is empty. Sections of trees and branches that may contain bats shall be set aside and away from work areas so that any remaining bats may escape.	Within 50 feet of suitable special-status or otherwise protected bat roosting habitat	• **Before Construction:** A pre-construction survey is conducted for active special-status or otherwise protected bat roosts in locations where grading or vegetation removal could occur within 50 feet of potentially suitable habitat • **During Construction:** (1) Bat avoidance measures are implemented prior to tree removal with active special-status or otherwise protected bat roosts and (2) Adequate no-disturbance buffers are established around active special-status and otherwise protected bat maternity roosts, if found within 50 feet of construction • **After Construction:** N/A	• **Surveys (Table 2.2-2)** • ***Specialty Field Monitoring (Table 2.2-3)** • ***General Reporting (Tables 2.2-6 and 2.2-7)** • ***Avoidance and Minimization**

[2] For purposes of this measure, "otherwise protected" bats will include any significant local breeding population that could be adversely impacted by the project, as defined by a local bat expert, and approved by the CPUC.

MM Biology-7: Revegetation, Restoration, and Monitoring Plan (Supersedes APM BIO-1I and APM BIO-4) PG&E shall prepare and implement a Revegetation, Restoration, and Monitoring Plan that addresses procedures for quantifying vegetation impacts from construction activities and revegetation and/or restoration requirements for applicable vegetation resources. The plan shall include appropriate revegetation and/or restoration performance standards, monitoring procedures, and reporting procedures for the following vegetation resources, as defined below, and the referenced measures: • Special-status plant populations (refer to MM Biology-2). • Suitable habitat for special-status plants and wildlife (specifically grassland, woodland, and forest). • Sensitive natural plant communities (specifically riparian habitat and Oregon oak woodland) (refer to MM Biology-9). • Large valley and small valley oaks of qualifying size (refer to APM BIO-10). The plan shall be submitted to the CPUC for review and approval no less than 60 days before construction. **Performance Standards.** All temporarily disturbed areas shall be restored to near pre-construction conditions to ensure potentially significant permanent impacts do not occur as a result of the project. Pre-construction conditions, including vegetation cover estimates and percentage of Cal-IPC list invasive weeds (plants rated as "High" and "Moderate"), shall be documented for each project work area as described below in the Pre-Construction Report. Annual performance standards and final success criteria shall be developed for each vegetation resource that demonstrates an adequate progression toward pre-construction conditions such that habitat functions and values and species composition of the restored vegetation are comparable to those of nearby comparable vegetation within 3 years. The plan shall define annual quantitative thresholds for both vegetation resources and invasive plant species and identify corrective actions to implement if the annual thresholds are not achieved. Work sites that have been proven to meet the final success criteria shall not require further monitoring and reporting. If a CDFW permit is required (refer to MM Biology-9), performance standards, monitoring procedures, compensatory mitigation, and other permit conditions regarding impacts to riparian habitat shall be incorporated into the Revegetation, Restoration, and Monitoring Plan. Any CDFW permit conditions for impacts to riparian habitat that conflict with mitigation requirements shall supersede the mitigation requirements. **Monitoring Procedures.** A qualified biologist or botanist shall monitor vegetation resources that are impacted. The plan shall identify appropriate post-construction monitoring procedures for each vegetation resource, including specific methods, frequencies, and timing for seasonal requirements. **Pre-Construction Report(s).** Prior to construction, a qualified biologist or botanist shall survey all final work areas and overland access routes to identify the vegetation resources that may be impacted, including their location, composition, condition, and extent of planned project disturbance. Survey efforts may be conducted in conjunction with focused surveys required for special-status species, as described in applicable measures. Anticipated impacts on vegetation resources shall be quantified and documented in the report, such as special-status plant individuals or the characteristics of populations (i.e., estimated size and cover estimates); the types and numbers of tree and shrub individuals; and restoration acreages for grassland, woodland, and forest vegetation communities). The baseline conditions for adjacent and comparable vegetation resources shall also be documented in the report. Such areas may be used as a control for post-construction monitoring to determine relative restoration performance and account for seasonal fluctuations in invasive species composition, general growth rates, and overall coverage. The report shall include maps (1: 3,000 scale) that identify the types and locations of the vegetation resources that may be impacted, the limits of the planned work areas, and project access routes. An initial report shall be submitted to the CPUC no less than 30 days before construction. Separate reports may be submitted for each project segment, if necessary. If new impacts or restoration procedures are identified, the plan shall be updated and submitted in track changes to the CPUC. **Post-Construction Reports.** PG&E shall prepare and submit Post-Construction Reports to the CPUC on an annual basis until construction is complete. Post-Construction Reports shall include table summaries of actual project impacts, and maps of the areas that identify the limits of actual impacts. The summary table shall include the location name/ID for each impact area, anticipated impact acreage from the Pre-Construction Report, and actual impact acreage during construction. The report shall include a brief statement about revegetation, restoration, and monitoring procedures that would be implemented where impacts occurred, as defined in the approved plan. **Annual Monitoring Reports.** Once revegetation and restoration begins, PG&E shall conduct surveys during the growing season and submit Annual Monitoring Reports to the CPUC. The reports shall summarize revegetation and restoration efforts for each applicable impact area, provide data on performance standards and success criteria, and detail any corrective actions necessary to close out sites. Monitoring results will be updated in the plan only when applicable (i.e., seasonally or annually). Once the success criteria have been achieved for each location, monitoring and reporting would no longer occur for the location. PG&E shall provide written updates to CPUC upon request regarding seasonally dependent restoration and corrective actions prior to submission of the annual monitoring reports.	Where vegetation resources occur in project areas that could be impacted	• **Before Construction:** (1) PG&E submits a Revegetation, Restoration, and Monitoring Plan to the CPUC at least 60 days prior to construction, and (2) PG&E submits a Pre-Construction Report to the CPUC at least 30 days prior to construction • **During Construction:** N/A • **After Construction:** (1) PG&E implements revegetation and restoration procedures from the approved plan, (2) PG&E submits Post-Construction Report(s) to the CPUC, and (3) PG&E submits written updates upon request and annual monitoring reports to the CPUC	• **Plans (Table C-2)** – Revegetation, Restoration, and Monitoring Plan • **Surveys (Table 2.2-2)** • **Specialty Field Monitoring (Table 2.2-3)** • **Specific Reporting (Table 2.2-5)**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
MM Biology-8: Minimize Noxious Weeds Precautions shall be taken to minimize the introduction of any invasive weeds. Construction equipment shall be cleaned of caked-on dirt and plant materials before entering unpaved project areas. Erosion control materials and planting seed mixes shall not introduce invasive weed species. Only certified weed-free straw and mulch shall be used on the site.	All work areas	• **Before Construction:** N/A • **During Construction:** Equipment and vehicles are clean prior to use on site • **After Construction:** (1) Planting seed mixes and any restoration plants shall not introduce invasive weed species, and (2) Erosion control materials, straw, and mulch are weed-free	• **Avoidance and Minimization**
MM Biology-9: Sensitive Natural Plant Communities Prior to construction, a qualified biologist shall survey all final work areas and identify the extent of sensitive natural plant communities, specifically riparian habitat and Oregon oak woodland, as described in MM Biology-7 in the Pre-Construction Report. If sensitive natural plant communities are found in work areas and overland access routes, work areas and overland access routes shall be repositioned where possible to avoid adverse impacts to the sensitive natural plant communities. If tree impacts cannot be avoided in sensitive natural plant communities, PG&E shall attempt to trim native trees rather than removing them. Native trees over 6-inch diameter at breast height (dbh) trimmed over 25 percent will be assessed by an arborist. Should the arborist conclude that it is likely the trees will not survive the trimming, PG&E shall ensure the trees are replaced at a 1:1 ratio. Native trees over 6-inches dbh that are removed shall be replaced at a 1:1 ratio in the closest appropriate location, by planting seed and/or container stock. Sensitive natural plant communities shall be restored at a ratio of 1:1, or as required by a CDFW Lake and Streambed Alteration Agreement. Sensitive natural plant communities that are impacted during construction, and any replanting sites, shall be addressed in the Annual Monitoring Reports, as described in MM Biology-7.	All project areas where sensitive natural plant communities are located	• **Before Construction:** (1) PG&E conducts a survey to identify the extent of sensitive natural plant communities and results are submitted with the Pre-Construction Report, and (2) Work areas and access routes are repositioned where possible to avoid sensitive plant communities • **During Construction:** Sensitive natural plant communities are avoided to the extent feasible • **After Construction:** (1) Qualifying trees that are trimmed more than 25 percent are assessed by an arborist and replaced, if necessary; (2) Qualifying trees that are removed are replaced at a 1:1 ratio, or as required by a CDFW Lake and Streambed Alteration Agreement, and (3) Impacted sensitive natural plant communities are restored and addressed in the Annual Monitoring Reports	• **Surveys (Table 2.2-2)** • ***Specialty Field Monitoring (Table 2.2-3)** • ***Specific Reporting (Table 2.2-5)** • ***General Reporting (Tables 2.2-6 and 2.2-7)** • ***Avoidance and Minimization**
MM Biology-10: Sudden Oak Death Procedures All workers shall be trained on requirements and BMPs for reducing the spread of the Sudden Oak Death pathogen prior to working on the site. All equipment, vehicles, and tools shall be thoroughly cleaned of plant material and soil prior to entering unpaved project areas. A qualified botanist, biologist, or arborist shall inspect all work areas and access routes for signs of vegetation infected with the Sudden Oak Death pathogen prior to construction. If any work areas are found that contain infected vegetation, PG&E shall implement the following BMPs for Sudden Oak Death recommended by California Oak Mortality Task Force, to the extent feasible: • Cleaning stations shall be set up at staging yards and all wash water shall be contained within the cleaning area. • Mud and debris shall be scraped, brushed, or hosed from vehicles, equipment, and tools within designated cleaning areas at project staging yards if working within infected areas. • A power washer shall be used, where feasible. • All personnel shall clean boots and clothing of mud and vegetation debris if working within infected areas. Work in infected areas shall be performed during the dry season (May through October), to the extent feasible, to avoid tracking out infected mud.	Areas where Sudden Oak Death-infected vegetation are observed	• **Before Construction:** PG&E surveys for infected vegetation • **During Construction:** (1) Vehicles, equipment, and tools are cleaned before showing up at the project site, and (2) Vehicles, equipment, and tools are cleaned before leaving any infected work areas • **After Construction:** N/A	• **Surveys (Table 2.2-2)** • **Plans (Table C-2)** – ETP Material • **Worker Training (Table 2.2-1)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
MM Biology-11: Wetland Mitigation Waters of the US and state shall be avoided by the project where possible, and impacts shall be minimized to the extent practicable using BMPs during construction. These practices shall include delineating wetlands and waters on project maps and flagging the extent of wetlands and waters within work areas to keep workers and equipment out of the area to be preserved, and using erosion control measures, such as straw wattles, hay bales, and drain inlet controls to keep sediment and debris from entering jurisdictional waters. Design and installation of temporary bridges, such as steel plates, shall be such that the water flow (velocity and low-flow channel width) is not impaired. During project construction, a biological monitor shall be on site to monitor the integrity of wetlands and other waters while major earth moving activities are underway. For those wetland areas that are impacted as part of the proposed project, appropriate permits shall be acquired from USACE and RWQCB prior to any impacts occurring to regulated waters of the US and/or state. Copies of applicable permits from USACE and RWQCB shall be provided to the CPUC prior to grading, and any conditions in these permits shall become a condition of project approval. Any other conditions that are stipulated for wetland impacts by USACE and/or RWQCB shall also become conditions of project approval. Impacted wetland areas shall be compensated for at a 2:1 ratio via (1) purchase of mitigation credits from a USACE- and RWQCB-approved wetland conservation bank or (2) wetland creation/habitat enhancement. • **Option 1 – Purchase of Wetland Mitigation Credits.** Prior to purchasing mitigation credits from a qualified conservation bank, approval from USACE and RWQCB shall be required. Mitigation credits shall be purchased prior to breaking ground on the project site. • **Option 2 – Wetland Creation/Enhancement.** If PG&E elects to create/enhance wetlands on site in lieu of purchasing mitigation credits from an approved mitigation bank, compensation wetlands shall be created/enhanced on site and shall resemble those wetlands affected by the project (i.e., in-kind replacement). If wetlands cannot be created in-kind and on-site, wetland creation/enhancement shall be implemented offsite. Any wetland creation/enhancement plan shall be submitted to the CPUC, USACE and RWQCB for approval. Mitigation requirements shall include that all impacted wetlands are replaced at a minimum 2:1 ratio (for each square foot of impact, one square foot of wetland would be enhanced/created) or as otherwise specified in permitting conditions imposed by USACE and/or RWQCB. Any site where wetlands are created/enhanced must be preserved in perpetuity via recordation of a perpetual restrictive deed recorded on the Title of the property. In addition, a 5-year monitoring plan shall be implemented by a qualified biologist. At the end of the 5-year monitoring period, USACE and RWQCB shall render a conclusion if the created/enhanced wetlands are successful.	Where wetland impacts occur	• **Before Construction:** Copies of any USACE and RWQCB required permits are provided to the CPUC. • **During Construction:** Wetlands and waters are identified on project maps and their extent flagged within work areas. • **After Construction:** Mitigation identified in USACE and RWQCB permits is completed.	• ***Permits and Authorizations (Table C-1)** – *USACE Section 404 Permit – *RWQCB Section 401 Permit • ***Plans (Table C-2)** – *Wetland Creation/Enhancement and Monitoring Plan • **Specialty Field Monitoring (Table 2.2-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)**
Cultural Resources			
APM CR-1: Avoid Cultural Resources Archaeological resource CA-SON-1256 shall be avoided by restricting equipment and vehicle access to paved or graveled surfaces along the roadway. If travel off paved or graveled surface is necessary within the site boundary for any reason, PG&E shall place rubber mats across the site surface to protect against any inadvertent damage to the site by driving on the surface. PG&E shall also establish a protection zone by flagging the site boundary along the roadway with exclusion fencing to ensure that no vehicles will inadvertently enter the site boundary without the above-mentioned protection measures. A qualified archaeologist shall monitor all construction activity on unpaved surfaces within the resource site.	Confidential CA-SON-1256 site location disclosed to monitoring personnel	• **Before Construction:** N/A • **During Construction:** (1) Equipment within the site boundary is restricted to paved or gravel surfaces, or on rubber mats if work occurs on bare ground, and (2) Monitoring occurs if work occurs on bare ground within the site boundary • **After Construction:** N/A	• ***Specialty Field Monitoring (Table 2.2-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
MM Cultural-1: Archaeological Monitoring and Cultural Resource Discoveries (Supersedes APM CR-2) **Archaeological Monitoring for Previously Undiscovered Cultural Resources.** A CPUC-approved cultural resources specialist/archaeologist shall be onsite to spot-check the initial 10 feet of pole hole augering greater than 3 feet in diameter (limited to TSPs) and grading in previously undisturbed areas greater than 6 inches in depth. If qualifying excavations occur simultaneously at multiple locations, the cultural resources specialist/archaeologist shall spot-check each location throughout the workday until ground-disturbing activities are complete at each location. If signs of a resource are encountered during spot-checking, monitoring shall become full time until ground-disturbing activities are complete in the work area. The cultural resources specialist/archaeologist must have experience with California/regional history and local Native American history, traditions, and customs and shall meet the US Secretary of Interior Professional Qualifications Standards as published in 36 CFR Part 61. The cultural resources specialist/archaeologist shall be responsible for evaluating any cultural resources discovered during construction for signs of prehistoric Native American culture and for coordinating outreach efforts with the NAHC and local Native American tribes if potential tribal cultural resources are found. If they request to participate, Native American tribes shall be given the opportunity to monitor construction activities within 100 feet of identified prehistoric Native American resources or tribal cultural resources. Any tribal monitoring activities should be coordinated with the cultural resources specialist/archaeologist. **Cultural Resource Discoveries.** If signs of a previously undiscovered cultural resource are encountered, all construction activities within 100 feet of the resource site shall halt, and the cultural resources specialist/archaeologist shall be contacted to implement required evaluation and treatment procedures, described below. Construction supervisors and workers shall be informed that the site is off-limits, and if necessary, the cultural resources specialist/archaeologist shall install flagging to designate the limits of the site. If the resource is located within Caltrans right-of-way, PG&E shall also immediately notify the Caltrans Office of Cultural Resources Studies, District 4 of the discovery. The cultural resources specialist/archaeologist shall evaluate the resource and determine whether it is (1) a historic resource as defined in CEQA Guidelines Section 15064.5 and thus eligible for listing in the CRHR, (2) a unique archaeological resource as defined in PRC §21083.2(g), or (3) a potential tribal cultural resource as defined in PRC §21074(a). If it is determined that the resource does not meet any of these criteria, work may resume in the area, and a summary of the discovery findings and evaluation conclusions shall be documented and provided to the CPUC with Weekly Compliance Reports. The methods and results of the evaluation shall also be documented in a professional-level technical report to be filed with the California Historical Resources Information System (CHRIS). If the resource meets any of the criteria listed above and is therefore considered a significant resource under CEQA, work shall remain halted at an appropriate distance from the find, and the cultural resources specialist/archaeologist shall consult with the CPUC regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA Guidelines Section 15064.5(b). If the cultural resources specialist/archaeologist determines that the resource could be a tribal cultural resource, he or she shall, within 48 hours of the discovery, notify each Native American tribe identified by the NAHC to be traditionally and culturally affiliated with the geographic area of the project site of the discovery. The responding tribes shall be given an opportunity to participate in determining the appropriate mitigation methods in consultation with the CPUC. The CPUC shall request that the tribes respond to the notifications within 3 days. Preservation in place (i.e., avoidance) is the preferred method of mitigation for cultural and tribal cultural resources and shall be required to mitigate impacts on previously undiscovered resources. Other methods of mitigation shall only be used if the cultural resources specialist/archaeologist, in coordination with the CPUC, determines that the method would provide equivalent or superior mitigation of the impacts on the resource. The alternative methods of mitigation may include data recovery and documentation of the information contained in the site to answer questions about local history and prehistory (see MM Cultural-4). Work in the area may commence upon completion of treatment, as approved by the CPUC.	All project areas	• **Before Construction:** Adequate personnel are identified for the cultural resources specialist/archaeologist • **During Construction:** (1) Work within 100 feet of discovered resources stops, (2) The required personnel and agencies are notified, (3) Adequate reporting and documentation occurs, (4) Significant resources are completely avoided or mitigated from impacts, and (5) Work only resumes near the resource after required procedures are complete, to the satisfaction of CPUC. • **After Construction:** N/A	• ***Notifications (Table C-3)** • ***Specialty Field Monitoring (Table 2.2-3)** • ***Specific Reporting (Table 2.2-5)** • ***General Reporting (Tables 2.2-6 and 2.2-7)** • ***Avoidance and Minimization**
MM Cultural-2: Cultural Resource Training All project personnel shall receive adequate cultural resource training prior to working on the project. The training shall address appropriate work practices necessary to effectively implement project requirements, including APMs and mitigation measures, for historical resources, archaeological resources, tribal cultural resources, and human remains. The training shall address the potential for exposing subsurface resources, basic signs of a potential resource, and required procedures if a potential resource is identified consistent with the procedures set forth in MM Cultural-1, MM Cultural-3, MM Cultural-4, and all procedures required under Health and Safety Code § 7050.5 and PRC §§ 5097.94, 5097.98, and 5097.99 for the discovery of human remains. The training shall also identify requirements for working near archaeological resource site CA-SON-1256, as defined in APM CR-1. PG&E shall submit the cultural resource training material to the CPUC for approval no less than 30 days before construction, and it may be submitted in conjunction with the general Worker Environmental Training Program for the project.	N/A	• **Before Construction:** The cultural resource training material is submitted to the CPUC at least 30 days before construction • **During Construction:** Workers receive the CPUC-approved cultural resource training prior to working on the site • **After Construction**: N/A	• **Plans (Table C-2)** – ETP Material • **Worker Training (Table 2.2-1)** • **General Reporting (Tables 2.2-6 and 2.2-7)**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
MM Cultural-3: Pre-Construction Cultural and Tribal Cultural Resource Surveys Prior to construction at any project area, PG&E shall compare areas of proposed ground disturbance with the project geographic information system (GIS) layers that show cultural resource survey areas. PG&E shall verify that proposed ground disturbance areas have been surveyed for cultural resources. If the areas of proposed ground disturbance have been surveyed (and no known resources are located in the area), then no additional measures are required and construction may commence. If the areas have not been surveyed (such as due to minor relocation of a project feature or access road), no ground disturbance shall be permitted prior to completion of surveys by a CPUC-approved cultural resource specialist/archaeologist. If a resource is found, it shall be avoided. If it cannot be avoided, PG&E shall follow the procedures in MM Cultural-1.	Work areas not previously surveyed for cultural and tribal cultural resources	• **Before Construction:** Work areas not previously surveyed for cultural resources are surveyed prior to construction • **During Construction:** Any resources found during pre-construction surveys are evaluated and, if necessary, treated • **After Construction:** N/A	• ***Surveys (Table 2.2-2)** • ***General Reporting (Tables 2.2-6 and 2.2-7)** • ***Avoidance and Minimization**
MM Cultural-4: Data Recovery If a CRHR-eligible, unique archaeological, or tribal cultural resource cannot be completely avoided or protected from direct project impacts, data recovery investigations shall be required to reduce adverse effects to the characteristics of each site that contribute to its significance or CRHR-eligibility. For sites eligible under Criterion (d), significant data shall be recovered through excavation and analysis. For sites eligible under Criteria (a), (b), or (c), data recovery may include historical documentation, photography, collection of oral histories, architectural or engineering documentation, preparation of a scholarly work, or some form of public awareness or interpretation. Data gathered during the evaluation-phase studies shall guide plans and data thresholds for data recovery. Treatment shall be based on the resource's research potential beyond that realized during resource recordation and evaluation studies. If data recovery occurs, PG&E shall prepare a Research and Data Recovery Plan for each individual site where data recovery is necessary. The plans shall be submitted to the CPUC for approval, and data recovery procedures shall not occur at the sites until authorized by the CPUC. The plan shall describe the specific procedures that would be implemented during data recovery, as appropriate for the type of resource. Sampling for data recovery excavations shall follow standard statistical sampling methods, but sampling shall be confined to the direct impact area. The methods and results of evaluation and data recovery work at an archaeological find shall be documented in a professional-level technical report to be filed with CHRIS, a copy of which shall be submitted to the CPUC. Artifacts collected during data recovery shall be cataloged and permanently curated with an appropriate institution.	Any work areas where a previously undiscovered resource is identified	• **Before Construction:** N/A • **During Construction:** (1) Research and Data Recovery Plans are submitted to the CPUC for approval, (2) Data recovery methods are implemented after CPUC approval, (3) Field Closure Reports are filed with the appropriate entities, (4) Professional-level technical reports are filed with CHRIS, and (5) Recovered artifacts are cataloged and submitted to appropriate institutions • **After Construction:** N/A	• ***Plans (Table C-2)** – *Research and Data Recovery Plan • ***Specific Reporting (Table 2.2-5)**
Geology, Soils, and Mineral Resources			
APM GS-1: Soft or Loose Soils Where soft or loose soils are encountered during project construction, appropriate measures will be implemented to avoid, accommodate, replace, or improve such soils. Depending on site-specific conditions and permit requirements, these measures may include: • Locating construction facilities and operations away from areas of soft and loose soil; • Over-excavating soft or loose soils and replacing them with engineered backfill materials; • Increasing the density and strength of soft or loose soils through mechanical vibration and/or compaction; • Installing material over access roads such as aggregate rock, steel plates, or timber mats; and • Treating soft or loose soils in place with binding or cementing agents.	All project areas	• **Before Construction:** N/A • **During Construction**: Appropriate measures are implemented that adequately stabilize soft and loose soils where they cannot be feasibly avoided • **After Construction:** N/A	• **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
APM GS-3: Site-specific Geotechnical Investigation A geotechnical investigation will be conducted to evaluate the potential for surface fault rupture for poles within and adjacent to potentially active fault traces and earthquake fault zones. Where significant potential for surface fault rupture exists, pole locations will be adjusted, where possible, to minimize any potential for damage based on the conclusions in the report.	All project areas in the Northern Segment	• **Before Construction:** New poles are positioned after considering the findings in the geotechnical report • **During Construction:** N/A • **After Construction:** N/A	• **Surveys (Table 2.2-2)** • **Specific Reporting (Table 2.2-5)**
MM Geology-1: Geotechnical Investigation Report (Supersedes APM GS-2) PG&E shall have a professional geotechnical engineer conduct a geotechnical investigation in areas that are suspected to have unstable soils or landslide susceptibility and shall add the analysis to the Geotechnical Investigation Report required by APM GS-3. The Geotechnical Investigation Report shall provide site-specific recommendations for poles, work areas, and access routes where there is an elevated risk of geologic hazards. PG&E shall submit the Geotechnical Investigation Report to the CPUC no less than 60 days prior to construction. Where geotechnical hazards are found to occur, appropriate engineering design and construction measures from the Geotechnical Investigation Report shall be incorporated into the final project designs, as deemed appropriate by a California-licensed Geotechnical	All project areas that are suspected to have unstable soils or landslide susceptibility, underlain by a fault, or that could be subject to strong	• **Before Construction:** (1) Geotechnical Investigation Report is submitted to the CPUC no less than 60 days prior to construction, and (2) Appropriate engineering design and construction measures from the Geotechnical Investigation Report	• **Surveys (Table 2.2-2)** • **General Field Monitoring (Table 2.2-4)** • **Specific Reporting (Table 2.2-5)**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
Engineer or Certified Engineering Geologist. Design measures that would mitigate seismic and landslide-related impacts shall include, but are not limited to, retaining walls, removal of unstable materials, and avoidance of highly unstable areas. Disturbed and engineered slopes shall be monitored by qualified construction personnel on an occasional basis (bi-monthly or as needed) until the slope is fully stabilized and no longer poses an increased risk of failure or erosion as compared to similar undisturbed slopes in the immediate vicinity.	ground shaking and ground failure	are incorporated into final project designs • **During Construction:** Disturbed and engineered slopes are adequately monitored by qualified construction personnel • **After Construction:** N/A	
Greenhouse Gas Emissions			
APM GHG-2: Minimize Sulfur Hexafluoride Emissions • Incorporate Fitch Mountain Substation into PG&E's system-wide sulfur hexafluoride (SF6) emission reduction program. CARB has adopted the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear sections 95350 to 95359, title 17, California Code of Regulations, which requires that company-wide SF6 emission rate not exceed 1 percent by 2020. Since 1998, PG&E has implemented a programmatic plan to inventory, track, and recycle SF6 inputs, and inventory and monitor system-wide SF6 leakage rates to facilitate timely replacement of leaking breakers. PG&E has improved its leak detection procedures and increased awareness of SF6 issues within the company. X-ray technology is now used to inspect internal circuit breaker components to eliminate dismantling of breakers, reducing SF6 handling and accidental releases. As an active member of USEPA's SF6 Emission Reduction Partnership for Electrical Power Systems, PG&E has focused on reducing SF6 emissions from its transmission and distribution operations, and has reduced the SF6 leak rate by 89 percent and absolute SF6 emissions by 83 percent. • Require that the breakers at Fitch Mountain Substation have a manufacturer's guaranteed maximum leakage rate of 0.5 percent per year or less for SF6. • Maintain substation breakers in accordance with PG&E's maintenance standards. • Comply with California Air Resources Board Early Action Measures as these policies become effective.	Fitch Mountain Substation	• **Before Construction:** Purchase circuit breakers with a guaranteed leak rate of 0.5 percent per year or less of SF6 • **During Construction:** Install circuit breakers that meet the required maximum leak rate • **After Construction:** Maintain circuit breakers according to PG&E maintenance standards	• **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
Hazards and Hazardous Materials			
APM HM-3: Smoking and Fire Rules Smoking will not be permitted on site, except in barren areas that measures a minimum of 20 feet in diameter and are cleared to mineral soil. Under no circumstances will smoking be permitted during the fire season (approximately July through October) while employees are operating equipment, or while walking or working in grass and woodlands.	All project areas	• **Before Construction:** N/A • **During Construction:** Smoking is restricted to appropriate areas and seasons • **After Construction:** N/A	• **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
APM HM-4: Carry Emergency Fire Suppression Equipment PG&E construction crew trucks and large equipment shall have, at a minimum, a standard round-point shovel and a fire extinguisher. If construction activities likely to cause sparks (e.g., welding, grinding, or grading in rocky terrain) are conducted, emergency fire tool boxes shall be readily available to crews. The emergency fire tool boxes shall contain fire-fighting items such as shovels, axes, and water.	All project areas	• **Before Construction:** N/A • **During Construction:** (1) A shovel and fire extinguisher are available in all worker vehicles and construction equipment, and (2) Emergency fire tool boxes are available at each active work area during higher risk activities (e.g., activities that could cause sparks) • **After Construction:** N/A	• **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
MM Hazards-1: Hazardous Materials Procedures and Worker Training (Supersedes APM HM-1, HM-2, and APM BIO-1i) PG&E shall develop and implement specific hazardous material procedures as an element of the SWPPP (MM Hydrology-1) to ensure hazardous materials are properly handled, stored, and transported, and that any inadvertent leaks or spills are adequately cleaned and reported. At a minimum, the SWPPP shall address the following procedures related to the use of hazardous materials during construction and emergency response: • Proper disposal of contaminated soils and materials (i.e., cleanup materials). • Daily inspection of vehicles and equipment for leaks, particularly in parking areas near sensitive resource areas during construction and spill containment procedures. • Emergency response and reporting procedures to address hazardous material releases.	All project areas	• **Before Construction:** SWPPP containing specific hazardous material procedures is submitted to the CPUC no less than 30 days before construction • **During Construction:** (1) Appropriate measures are implemented that limit the potential for spills, and (2) Any inadvertent spills are cleaned appropriately	• **Plans (Table C-2)** – SWPPP – ETP Material • **Worker Training (Table 2.2-1)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
• Fueling of any vehicles, equipment, and helicopters in staging yards or on streets paved with secondary containment and away from sensitive resource areas (e.g., preserves, designated open space areas, conserved habitat). • Fuels and lubricating oils for vehicles and heavy equipment will not be stored or transferred within 100 feet of any waterbodies, unless otherwise isolated from waterbodies by secondary containment. • Emergency spill supplies and equipment shall be available to respond in a timely manner if an incident should occur. • Response materials such as oil-absorbent material, tarps, and storage drums shall be available at the project site at all times during construction and shall be used as needed to contain and control any minor releases. • The absorbent material shall be removed promptly and disposed of properly. • Placement of as needed, minor amounts of fuel, lubricants, and hydraulic fluid for equipment operation in appropriate storage tanks on the bed of fueling vehicles. • Location of bulk lubricating oil, hydraulic fluids, and other materials used for vehicle and equipment maintenance shall be stored at the main construction yard. • Use of secondary containment and spill rags when fueling. • Discourage "topping-off" fuel tanks. • Spill kits for all fuel trucks and fueling areas. All workers shall be trained on the specific procedures for hazardous materials and emergency response as an element of the required worker environmental training prior to working on the project site.		• **After Construction:** N/A	
MM Hazards-2: Construction Fire Prevention Plan PG&E shall prepare a Construction Fire Prevention Plan that addresses procedures for fire prevention at active construction sites. The Construction Fire Prevention Plan shall include requirements for carrying emergency fire suppression equipment, conducting "tailgate meetings" that cover fire safety discussions, restricting smoking, idling vehicles, and restricting construction during red flag warnings. The Construction Fire Prevention Plan shall address the following fire risk reduction measures: • Training and briefing all personnel working on the project in fire prevention and suppression methods. • Conducting a fire prevention discussion at each morning's safety meeting. • Storage of prescribed fire tools and backpack pumps with water within 50 feet of work activities. • Water sources including water storage tanks or water trucks that would be used in case of a fire. • Assigning personnel to conduct a "fire watch" or "fire patrol" to ensure that risk mitigation and fire preparedness measures are implemented, immediate detection of a fire, and to coordinate with emergency response personnel in the event of a fire. The Construction Fire Prevention Plan shall be submitted to the CPUC for review and approval at least 30 days prior to construction within the Northern Segment.	Northern Segment	• **Before Construction:** Construction Fire Prevention Plan is submitted to the CPUC for review and approval at least 30 days prior to construction • **During Construction:** (1) Workers receive fire prevention training, and (2) Fire prevention tools and water are maintained on site • **After Construction:** N/A	• **Plans (Table C-2)** – Construction Fire Prevention Plan – ETP Material • **Worker Training (Table 2.2-1)** • **General Field Monitoring (Table 2.2-4)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
Hydrology and Water Quality			
MM Hydrology-1: SWPPP Development and Implementation (Supersedes APM WQ-1) A Qualified Stormwater Pollution and Prevention Plan (SWPPP) Developer (QSD) shall prepare a SWPPP for the project in accordance with the State Water Resources Control Board (SWRCB) Construction General Permit (CAS-2012-006-DWQ). The SWPPP shall address adequate procedures and standards required for specific project activities including, but not limited to, BMPs for erosion and sedimentation control; dewatering; hazardous materials identification, handling, storage, and disposal; and emergency response and cleanup. The SWPPP shall include an inspection and monitoring program that conforms to the requirements included in MM Hydrology-2. A QSD shall oversee implementation of the SWPPP and monitoring program. PG&E shall submit the SWPPP to the CPUC for review and comment no less than 30 days prior to construction. PG&E shall submit all filings, revisions, and Notices of Termination to the CPUC, as well as inspection reports, rain event action plans, and annual reports upon request. BMP materials identified in the SWPPP shall be stored and available on site prior to initiating ground-disturbing activities. All necessary erosion and sediment control BMPs shall be installed prior to conducting grading or vegetation clearing activities during the wet season and before the onset of any anticipated storm events. Temporary BMPs such as silt fences or wattles, which are intended to minimize sediment transport from temporarily disturbed areas, shall remain in place until disturbed areas have stabilized.	All project areas	• **Before Construction:** (1) A draft version of the SWPPP is submitted to CPUC at least 30 days prior to construction, and (2) the SWPPP addresses BMPs for all construction activities, and includes a monitoring program • **During Construction:** The SWPPP is implemented appropriately until all project areas are sufficiently stabilized, SWPPP coverage is complete, and erosion, sedimentation, and pollution runoff from project activities is prevented • **After Construction:** N/A	• **Permits and Authorizations (Table C-1)** – SWRCB General Permit • **Plans (Table C-2)** – SWPPP • **Specific Reporting (Table 2.2-5)** • **Avoidance and Minimization**
MM Hydrology-2: SWPPP Monitoring Program (Supersedes APM WQ-2)	All disturbed areas	• **Before Construction:** N/A	• **Permits and Authorizations (Table C-1)**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
SWPPP monitoring shall be completed by a Qualified SWPPP Practitioner (QSP) on a weekly basis during the construction period and at least once every 24 hours before, during, and after forecast rain events (any likely precipitation event forecast of 50 percent or greater probability). The purpose of the monitoring program shall be to ensure all BMPs described in the SWPPP are installed, maintained, and functioning adequately. Should any BMP failure be observed during monitoring, additional BMPs shall be implemented to prevent further erosion or sedimentation to downstream waters. A checklist form identified in the SWPPP shall be completed for each inspection by the QSP. The checklist forms shall be submitted to the CPUC with weekly monitoring reports. Annual reports prepared in accordance with the Construction General Permit shall also be submitted to the CPUC. The CPUC shall be notified within 24 hours of any BMP failures or discharge violations and provided with a description of corrective actions that have or will be implemented to resolve the issue. SWPPP monitoring shall occur until all project areas are sufficiently stabilized, as defined in the SWPPP. At a minimum, all disturbed areas must achieve 70 percent or greater vegetation cover and meet the Construction General Permit requirements for filing Notices of Termination to end SWPPP coverage and the associated BMP and monitoring requirements.		• **During Construction:** (1) A QSP inspects disturbed project areas and BMPs on a weekly basis, for storm events during construction, and as needed following construction, (2) BMPs are adequately installed and maintained, and any BMPs that are not functioning properly are replaced in a timely manner, and (3) Monthly SWPPP reports are submitted to the CPUC during construction, and annual reports are submitted until SWPPP coverage ends • **After Construction:** All disturbed areas are stabilized as required and Notices and Termination are filed to end SWPPP coverage	– SWRCB General Permit • **Plans (Table C-2)** – SWPPP • **Specialty Field Monitoring (Table 2.2-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
MM Hydrology-3: Dewatering Procedures (Supersedes APM WQ-3) Groundwater extracted during construction dewatering shall not be discharged to any surface waters or storm drains. If dewatering is necessary, the water shall either be used (1) to irrigate upland areas, (2) for dust control, or (3) for other construction process (e.g., concrete production). Any groundwater that is suspected of contamination shall be tested at a state certified laboratory and shall be stored in a Baker Tank until water quality testing has been completed. Any contaminated groundwater encountered during dewatering shall be disposed of in accordance with all applicable laws and the procedures described in the SWPPP.	Any excavations where dewatering occurs	• **Before Construction:** N/A • **During Construction:** Dewatering procedures are implemented adequately, and water is not discharged into drainages or storm drains • **After Construction:** N/A	• **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
MM Hydrology-4: Watercourse Avoidance and Crossing Plan (Supersedes APM WQ-3 and APM BIO-3) PG&E shall prepare a Seasonal Watercourse Avoidance and Crossing Plan that defines specific methods for (1) completely avoiding impacts on wetlands and streams, to the extent feasible, and (2) defining specific water quality impact minimization measures that would be implemented at each crossing location that cannot be fully avoided by construction activities. PG&E shall submit the plan to the CPUC no less than 60 days prior to use of construction of surface water crossings or work within 50 feet of surface water resources. At a minimum, the plan shall provide the following information for each location where a wetland or watercourse is crossed by an access route or is within 50 feet of a work area: • Available methods for complete avoidance (i.e., fencing, flagging, or alternative routes) or an explanation why complete avoidance is not feasible, where applicable. • Proposed crossing methods. • Anticipated impacts that cannot be avoided and anticipated permitting requirements for those impacts with an explanation why alternate crossing methods are not feasible. • Methods that would be implemented to reduce water quality impacts, avoid inadvertent impacts on aquatic resources, and avoid direct impacts on potentially suitable aquatic habitat for CRLF and FYLF (refer to MM Biology-3). Methods could include restricting crossing to dry periods; installing temporary bridges; or placing fiber-glass mats, steel plates, or wooden beams to protect the feature. PG&E shall obtain all necessary state and federal permits for impacts on waters of the state and/or US and supply copies of all permits to the CPUC prior to construction. PG&E shall comply with all applicable Nationwide Permit regional and general conditions for any impacts on waters subject to federal jurisdiction under the Clean Water Act. PG&E shall submit agency permits or verification documents and proof of compliance to the CPUC no less than 30 days prior to impacting waters of the state or US.	Water feature crossings	• **Before Construction:** (1) A draft plan is submitted to the CPUC no less than 60 days prior to construction, and (2) PG&E obtains all necessary state and federal permits for impacts on waters of the state and US that cannot be avoided and supplies copies to the CPUC no less than 30 days prior to impacts • **During Construction:** Impacts on wetlands and waters are avoided to the extent feasible and avoidance and minimization measures are implemented adequately • **After Construction:** Any post-construction permitting requirements are implemented as applicable	• ***Permits and Authorizations (Table C-1)** – *USACE Section 404 Permit – *RWQCB Section 401 Permit – *CDFW Lake and Streambed Alteration Agreement • **Plans (Table C-2)** – Watercourse Avoidance and Crossing Plan • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
MM Hydrology-5: Culvert Design PG&E shall design any repaired or replaced culverts to meet the standards outlined in the Sonoma County Flood Control Design Criteria. At a minimum, all culverts shall be designed to avoid any increase in flooding or erosion on adjacent stream banks or slopes. Design features shall be avoided that decrease water flow or impede the movement of aquatic wildlife. The culvert design shall be provided to	Any repaired or replaced culverts	• **Before Construction:** N/A • **During Construction:** PG&E designs culverts to meet Sonoma County Flood Control Design Criteria	• ***Permits and Authorizations (Table C-1)** – *Sonoma County culvert design approval

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
Sonoma County for review, and any approvals shall be obtained prior to construction. Any Sonoma County comments or approvals for the culvert design shall be submitted to the CPUC for record keeping.		• **After Construction:** N/A	• ***General Reporting (Tables 2.2-6 and 2.2-7)**
Noise			
MM Noise-1: General Construction Noise PG&E shall implement the following procedures for all construction activities: • **Public Notice.** Noise-sensitive receptors (e.g., residences and officials for schools, places of worship, and parks) within 500 feet of work areas shall be provided written notice at least 7 days prior to beginning construction to inform them of the scheduled construction activities and potential noise disruptions. The notice shall describe procedures for submitting any noise complaints during construction, including a phone number for submitting such complaints. • **Mufflers and Maintenance.** Construction equipment shall be properly equipped with feasible noise control devices (e.g., mufflers) and properly maintained in good working order. • **Idling.** Vehicles and equipment shall only idle when necessary. • **Stationary Equipment.** Stationary equipment (i.e., compressors and generators) shall be positioned as far away from sensitive receptors as practicable, and equipped with engine-housing enclosures. • **Sensitive Periods.** To the extent practicable, construction activities that have a high likelihood of resulting in a noise nuisance for residents in the vicinity shall not be scheduled during sensitive morning or evening periods (7:00 am to 9:00 am, and 7:00 pm to 10:00 pm), to limit the potential for noise nuisance. Nighttime work between the hours of 10:00 pm and 7:00 am shall not occur, with the exception of installing and removing guard structures at the US 101 crossing. • **Noise Complaints.** A Construction Noise Coordinator shall be designated to be responsible for responding to any local complaints about construction noise. The Construction Noise Coordinator shall determine the likely cause of the complaint and ensure that reasonable adjustments in the work activities are made to address the problem, to the extent possible. The phone number for noise complaints shall be clearly posted at key work areas in public locations, such as at the entrances to staging areas. Noise complaints shall be addressed within 1 week. PG&E shall provide monthly reports to CPUC that include a record of any complaints received with a description of the likely cause and how the complaint was resolved.	All project areas within 500 feet of noise-sensitive receptors	• **Before Construction:** (1) Receptors within 500 feet are provided adequate notice, (2) Construction Noise Coordinator is designated, and (3) Noise complaint phone number is adequately posted at key work areas • **During Construction:** (1) Equipment is equipped with mufflers and adequately maintained, (2) Stationary equipment is positioned appropriately and equipped with engine-housing enclosures, (3) Loud construction activities are scheduled outside of sensitive periods to the extent practicable, and (4) Noise complaints are adequately addressed and reported to CPUC • **After Construction:** N/A	• **Notifications (Table C-3)** • **Specific Reporting (Table 2.2-5)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
MM Noise-2: Schools PG&E shall coordinate with school administrators for Mark West Elementary School and San Miguel Elementary School prior to helicopter activities within 500 feet to determine the schedule for noise-sensitive periods, defined as but not limited to instructional periods when school is in session. PG&E shall schedule helicopter activities, within these distances, when school is not in session (i.e., before or after instructional periods). PG&E shall provide CPUC with a summary of coordination efforts, including the names and contact information for school administrators who were consulted, the locations of noise-sensitive facilities, and the schedules used to determine the least disruptive timing for construction to occur. Helicopter activities within 500 feet of noise-sensitive school facilities shall not occur during the school day, unless school administrators agree to shorter distances in writing.	Where project helicopter activities would occur within 500 feet of a school, including flight paths	• **Before Construction:** (1) PG&E coordinates with school administrators and (2) Construction activities are scheduled to occur when school is not in session • **During Construction:** Helicopter activities within 500 feet of schools during the school day does not occur • **After Construction:** N/A	• **Notifications (Table C-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
MM Noise-3: Helicopter Activities PG&E shall implement the following procedures for helicopter activities: • **Public Notice.** Residences and places of worship (e.g., The Cove) within 500 feet from any location where helicopter activities may occur, including flight paths if applicable, shall be provided written notice at least 30 days prior to beginning helicopter activities to inform them of the schedule for helicopter use and potential noise disruptions. Methods for receptors to reduce noise in structures shall be included in the notice (i.e., closing doors and windows facing the alignment). The notice shall describe procedures for submitting any noise complaints during construction and provide a phone number for submitting such complaints, as required by MM Noise-1. • **Flight Paths.** Helicopter flight paths shall be planned along routes that would result in the least noise exposure possible to receptors. If helicopter noise complaints are received, work crews will attempt to adjust the flight paths to reduce noise exposure to the complainant, without substantially increasing noise exposure to other receptors. • **Helicopter Hovering.** Light/medium lift helicopters shall not operate closer than 50 feet from any receptors. Heavy lift helicopters shall not operate closer than 400 feet from receptors, unless actively working at pole locations along the alignment. Helicopters may operate closer than these distances if all affected receptors agree in writing to a shorter distance. Prior to reducing the minimum distance from receptors, PG&E shall provide the CPUC with the names, contact information, and written agreements for all affected	Where project helicopter activities would occur within 500 feet of a receptor, including flight paths, and where heavy lift helicopters would land within 4,000 feet of a school	• **Before Construction:** (1) Receptors within 500 feet of helicopter activities are provided adequate notice, and (2) PG&E provides the CPUC with adequate documentation of notification and coordination requirements • **During Construction:** (1) Helicopter flight paths and LZs are positioned to limit noise exposure to adjacent receptors, (2) Helicopter activities in the Southern Segment do not disrupt school instruction or regularly scheduled church service, and (3) Any helicopter noise complaints are	• **Notifications (Table C-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
persons within the applicable distances. The written agreements shall clearly identify the anticipated helicopter noise levels, daily schedule, and duration of helicopter activities in the vicinity. • **Helicopter LZs.** Helicopter LZs within staging areas shall be positioned as far as possible from receptors. Helicopter LZs shall not be positioned closer than 500 feet from any receptor. Helicopter LZs for heavy lift helicopters shall not be positioned closer than 4,000 feet from schools. Helicopters may land closer than these distances if all affected receptors agree in writing to allow a shorter distance. • **Helicopter Touch Down.** Helicopter touch down shall not occur in the Southern Segment or within 500 feet of receptors in the Northern Segment. Helicopter touch down may occur closer than these distances if all affected receptors agree in writing to allow a shorter distance.		adequately addressed and reported to CPUC • **After Construction:** N/A	
Paleontological Resources			
APM PAL-2: Worker Environmental Awareness Training PG&E shall provide environmental awareness training on the recognition and protection of paleontological resources to project personnel. Training shall be required for all personnel before construction commences and repeated for all new personnel before they begin work on the proposed project. This training may be administered by the CPUC-approved, qualified Principal Paleontologist as a stand-alone training or included as part of the overall environmental awareness training as required by the project. The training will include at minimum, the following: • Types of fossils that could occur at the project site. • Types of lithologies in which the fossils could be preserved. • Procedures that should be followed in the event of a fossil discovery. • Penalties for disturbing paleontological resources. The training materials shall be submitted to the CPUC for approval at least 30 days prior to the start of construction.	N/A	• **Before Construction:** The training program materials are submitted to the CPUC 30 days prior to construction • **During Construction:** All project personnel undergo the training • **After Construction:** N/A	• **Plans (Table C-2)** – ETP Material • **General Reporting (Tables 2.2-6 and 2.2-7)**
MM Paleontology-1: Paleontological Monitoring (Supersedes APM PAL-3) Paleontological monitoring shall be required for all construction that involves cutting of previously undisturbed soils within geologic units with moderate to high paleontological sensitivity, as identified in Table 3.12-1 [of the Final IS/MND]. Paleontological monitoring shall be conducted by qualified paleontological monitors under the direction of a CPUC-approved, qualified paleontologist. The qualified paleontologist shall have a Master's or PhD in geology or paleontology, have knowledge of the local paleontology, and be familiar with paleontological procedures and techniques. Paleontological monitors shall have experience in the collection and salvage of fossil remains. At a minimum, spot-check monitoring shall occur during pole hole augering more than 3 feet in diameter (limited to TSPs) within qualifying geologic units until the maximum depth has been reached. The tailings from such pole hole augering shall be temporarily preserved in place until the paleontological monitor can inspect them for presence of paleontological resources. Full-time monitoring shall be required during grading activities that are greater than 6 inches in depth in previously undisturbed areas, and greater than 2 feet in depth in previously disturbed areas (i.e., historically disked areas, etc.), or beyond the known depth of disturbance, in qualifying geologic units. If no paleontological resources are found after at least 50 percent of qualifying grading is completed at a work site, then full-time monitoring shall be reduced to spot-check monitoring at the discretion of the paleontologist with notification to the proponent's specialists and the CPUC. If a potential paleontological resource is identified when the monitor is not present, the monitor shall be contacted immediately and work shall temporarily stop in the immediate area until the potential resource can be evaluated by the monitor per provisions in MM Paleontology-2. Monitoring activities shall be documented in monitoring logs and reports, which shall include the activities observed, geology encountered, description of any paleontological resources encountered, and measures taken to protect or salvage discovered resources. Photographs and other supplemental information shall be included as necessary.	Qualifying excavation within geologic units that have a moderate or high paleontological sensitivity	• **Before Construction:** N/A • **During Construction:** (1) Construction activities are monitored where qualifying excavation occurs, and (2) Monitoring activities are documented and reported adequately • **After Construction:** N/A	• **Specialty Field Monitoring (Table 2.2-3)** • **Specific Reporting (Table 2.2-5)**
MM Paleontology-2: Previously Undiscovered Paleontological Resources (Supersedes APM PAL-1 and APM PAL-4) In the event that a previously undiscovered paleontological resource is uncovered during project implementation, all ground-disturbing work within 50 feet of the discovery shall be halted and the paleontological resource specialist shall be immediately notified. A CPUC-approved, qualified paleontologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, no further effort shall be required. If the resource cannot be avoided and may be subject to further impact, the qualified paleontologist shall evaluate the resource and determine whether it meets the definition of "unique" under CEQA, Appendix G, Part V. If the resource is determined to be unique, a determination and associated plan for	All project areas	• **Before Construction:** N/A • **During Construction:** (1) Activities within 50 feet of a discovery halts and the qualified paleontologist is notified, (2) Resources are evaluated by the qualified paleontologist if they cannot be avoided, (3) Unique resources are	• ***Plans (Table C-2)** • ***Specialty Field Monitoring (Table 2.2-3)** • ***Specific Reporting (Table 2.2-5)** • ***General Reporting (Tables 2.2-6 and 2.2-7)** • ***Avoidance and Minimization**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
protection of the resource shall be provided to CPUC for review and approval. If the resource is determined not to be unique, work may commence in the area. If the resource is determined to be a unique paleontological resource, work shall remain halted, and the qualified paleontologist shall consult with PG&E staff, CPUC staff, and the landowner regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA. Preservation in place (i.e., avoidance) is the preferred method of mitigation for impacts on paleontological resources and shall be required unless there are other equally effective methods. Other methods may be used but must ensure that the fossils are recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of the CPUC-approved, qualified paleontologist. All recovered fossils shall be curated at an accredited and permanent scientific institution according to the 2010 Society of Vertebrate Paleontology standard guidelines, or as relevant at the time of project implementation. Work may commence upon completion of treatment, as approved by CPUC. If a unique paleontological resource is discovered, a final summary report shall be completed and submitted to the CPUC. This report shall include discussions of the methods used, stratigraphy exposed, fossils collected, and significance of recovered fossils. The report shall also include an itemized inventory of all collected and catalogued fossil specimens.		preserved in place or treated appropriately, (4) Recovered fossils are curated appropriately, (5) Work does not resume within 50 feet of a discovery until authorized by CPUC, and (6) A final summary report is submitted to CPUC • **After Construction:** N/A	
Recreation			
APM REC-1: Coordination with Park Management and Signage PG&E will coordinate closely with park management for temporary public land and trail closures during project construction activities. If any park or trail closures are necessary during construction, PG&E would post signs advising recreational facility users of construction activities, including directions to alternative trails and/or bikeways at entrance gates to regional parks. Signage will be posted at least 1 week in advance of parks or trail closures.	Maddux Ranch Regional Park, Shiloh Ranch Regional Park, and Foothill Regional Park	• **Before Construction:** Coordinate with Sonoma County Regional Parks District prior to park or trail closures • **During Construction:** Post signage at least 1 week prior to park or trail closures • **After Construction:** N/A	• **Notifications (Table C-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)**
MM Recreation-1: Trail Conditions and Repairs PG&E shall prepare a Pre-Project Trail Condition Report prior to construction that documents the condition of designated trails located within project work areas or access routes. The Pre-Project Trail Condition Report shall be submitted to the CPUC no less than 30 days before construction. PG&E shall repair all damage to trails (e.g., rutting) caused by construction vehicles and equipment by the completion of construction. PG&E shall prepare a Post-Project Trail Condition Report documenting the final state of all trails within project work areas and access routes. The Post-Project Trail Condition Report shall be submitted to the CPUC within 30 days of completing construction in each project segment. PG&E shall complete all trail repairs to the approval of the CPUC.	Shiloh Ranch Regional Park and Foothill Regional Park	• **Before Construction:** Pre-Project Trail Condition Report is submitted to the CPUC no less than 30 days prior to construction • **During Construction:** Trail damage from the project is adequately repaired by the completion of construction • **After Construction:** Post-Project Trail Conditions Report is submitted to the CPUC within 30 days of completing construction	• **Specific Reporting (Table 2.2-5)**
MM Recreation-2: Trail Detours and Notifications PG&E shall provide temporary trail detours in regional parks, where feasible. Trail detours must be located on existing trails or unvegetated areas, and shall not be located where they could impact a sensitive biological and cultural resources. Trail detours may be placed along the perimeter of active work areas or through inactive work areas when it is safe to do so. Proposed trail detours within regional parks shall be agreed upon by the Sonoma County Regional Parks Department prior to implementation. Signs shall be posted at park and trail entrances to inform park users of construction activities that may be encountered, such as vehicles and equipment on trails, excavations, and helicopter activities. The signs shall include a map of trail closures, trail detours, and construction areas to avoid.	Maddux Ranch Regional Park, Shiloh Ranch Regional Park, and Foothill Regional Park	• **Before Construction:** PG&E coordinates with park officials at least 90 days prior to construction • **During Construction:** (1) PG&E installs and maintains signs directing trail users of detours or closures, and (2) any trail detours are located within disturbed areas and do not create permanent new trails • **After Construction:** N/A	• **Notifications (Table C-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
Transportation and Traffic			
MM Traffic-1: Construction Traffic Management **Construction Traffic.** ~~Construction traffic shall be routed around roadways and intersections that are currently operating below LOS standards t~~To the greatest extent possible~~, including the intersection at Faught Road and Old Redwood Highway. C~~ construction traffic through the intersection at Faught Road and Old Redwood Highway shall be avoided by using Airport Boulevard and alternate local roads to access the project alignment. Construction traffic through the intersection shall be limited to an absolute minimum~~ and shall not exceed 10 vehicle trips during weekday peak commute periods (7:00 am to 9:00 am, and 4:00 pm to 6:00 pm)~~. **Lane and Road Closures.** Lane closures shall be limited to the minimum number necessary. Guard structures shall be installed to prevent lane closures where possible. At least one lane must remain open on all roadways unless full road closures are necessary for safety purposes or to complete a short-term construction activity. Full road closures shall not occur frequently or last for more than a few ~~minutes~~ days at a time. ~~Lane closures in the Southern Segment shall not occur during weekday peak commute periods (7:00 am to 9:00 am, and 4:00 pm to 6:00 pm). In addition, lane closures shall not occur on Lavell Road and Faught Road during pickup times at San Miguel Elementary School and Mark West Elementary School (1:00 pm to 3:45 pm Monday, Tuesday, Thursday, and Friday, and 12:15 pm to 1:45 pm Wednesdays when school is in session).~~ ~~Should a lane closure be unavoidable during peak commute hours or school commute hours, a traffic model shall be run to demonstrate that the lane closure and detour routes do not cause a significant impact to LOS, as defined in this traffic analysis. If modeling shows that significant impacts to LOS could occur, other measures shall be incorporated and remodeled to demonstrate less than significant impacts, or the closure shall be limited to off-peak and off-school commute hours.~~ Access shall be maintained to driveways, residential communities, and parking lots. Guard structures shall be installed if overhead reconductoring activities would affect access for more than 15 minutes per day. **Detour Routes.** Detour routes shall be selected in coordination with Caltrans and Sonoma County when encroachment permits are obtained. ~~Traffic detours shall not divert existing traffic volume that would cause roadway or intersection LOS to drop below acceptable standards (LOS D for roadways and LOS F for intersections).~~ Safe detour routes shall be provided for pedestrians and cyclists along lane closures, and where traffic control occurs. Barriers shall be installed between the pathway and vehicle traffic, if necessary, to provide a safe clearance from traffic. **Encroachment Permits.** PG&E shall obtain encroachment permits from Caltrans prior to working within the US 101 ROW and from Sonoma County prior to working within the Sonoma County ROW. PG&E shall provide the CPUC with all encroachment permits obtained from Caltrans and Sonoma County prior to work in the State or County ROW. Any modified or updated encroachment permits shall also be provided to the CPUC.	All public roadways	• **Before Construction:** N/A • **During Construction:** (1) Construction traffic avoids congested intersections to the greatest extent possible~~ follows the designated routes that limit impacts to traffic circulation~~, (2) Lane and road closures are limited to the minimum number necessary~~ do not occur during peak weekday commute periods or during school pick-up and drop-off periods~~, (3) Detour routes are adequately identified and implemented, (4) Encroachment permits from Caltrans and Sonoma County are obtained and implemented adequately, and submitted to the CPUC • **After Construction:** N/A	• **Permits and Authorizations (Table C-1)** – Caltrans Encroachment Permit – Sonoma County Encroachment Permits • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**
MM Traffic-2: Overhead Construction Safety Guard structures shall be installed where necessary and feasible during reconductoring activities. Alternatively, flaggers may be positioned to maintain public access. If public access cannot safely continue during overhead activities, PG&E shall clearly mark the unsafe area with signs and flagging to keep the public from accessing the area. If access to properties must be closed during overhead activities or residences must be temporarily evacuated during helicopter activities in the Southern Segment, PG&E shall coordinate the timing of construction activities with the affected property owners and residents.	All locations where the project alignment crosses public thoroughfares	• **Before Construction:** N/A • **During Construction:** (1) Public access is maintained to the greatest extent feasible using guard structures and flaggers, (2) Areas that must be closed are flagged-off from public access, and (3) Construction activities are coordinated with any residents that may need to temporarily evacuate properties during helicopter activities in the Southern Segment • **After Construction:** N/A	• **Permits and Authorizations (Table C-1)** – FAA Congested Area Plan for External Helicopter Loads • ***Notifications (Table C-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)** • **Avoidance and Minimization**

Measures	Applicable Locations	Performance Standards and Timing	MMCRP Tracking References
MM Traffic-3: Roadway Damage PG&E shall conduct a Pre-Construction Road Condition Assessment along public roadways where construction would occur, heavy equipment would travel frequently, and at the entrances of all staging areas to document any existing roadway damage to the asphalt or concrete curbs. PG&E shall submit photos and coordinates of any existing roadway damage to the CPUC, Caltrans, and Sonoma County no less than 30 days prior to construction. If roadways are damaged by construction activities, the damaged area(s) shall be documented and repaired no more than 60 days following construction activities. If the damage could cause a substantial traffic hazard, the location shall be marked appropriately and repaired within 48 hours. Any roadway damages shall be repaired to pre-project conditions and following applicable Caltrans and Sonoma County repair standards.	Public roadways where construction would occur	• **Before Construction:** Existing roadway damages are assessed and PG&E submits documentation to the CPUC, Caltrans, and Sonoma County no less than 30 days prior to construction • **During Construction:** Any roadway damage that could cause a substantial traffic hazard is marked and repaired within 48 hours • **After Construction:** Any roadway damage that would not cause a substantial traffic hazard is repaired no more than 60 days after construction	• **Permits and Authorizations (Table C-1)** – Caltrans Encroachment/ Transportation Permits – Sonoma County Encroachment/ Transportation Permits • **Specific Reporting (Table 2.2-5)** • **General Reporting (Tables 2.2-6 and 2.2-7)**
MM Traffic-4: Emergency Access PG&E shall notify local emergency service providers (i.e., local fire districts, law enforcement offices, hospitals, and ambulance and paramedic services) no less than 1 week before construction activities and provide the locations of roadway segments where lane closures and detour routes may occur. The notice shall also identify the approximate timing and duration of lane closures and detour routes that may affect traffic and emergency access.	All project areas	• **Before Construction:** Notify emergency service providers of lane closures and detour routes no less than 1 week before construction • **During Construction:** N/A • **After Construction:** N/A	• **Notifications (Table C-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)**
MM Traffic-5: Public Transit PG&E shall notify Sonoma County Transit (SCT) no less than 30 days before construction in the Southern Segment and identify roadway segments where bus routes and bus stops are located that may be affected during construction. The notice shall identify the approximate timing and duration that each bus stop may be affected. If necessary, bus stops shall be temporarily relocated or buses shall be rerouted until construction affecting the bus stop is complete, as determined through coordination with SCT. PG&E shall ensure signs are posted at affected bus stop no less than 7 days before bus stop closures. The signs shall provide information on the closest alternate bus stop for the route and the scheduled duration of relocation.	Project areas that could affect SCT bus routes	• **Before Construction:** SCT is notified no less than 30 days before construction • **During Construction:** Signs are posted at affected bus stops no less than 7 days before closures • **After Construction:** N/A	• **Notifications (Table C-3)** • **General Reporting (Tables 2.2-6 and 2.2-7)**

Notes:

* Requirements marked with an asterisk are only applicable under specified conditions, as noted in the requirement source.

APPENDIX C SUMMARY TRACKING TABLES

APPENDIX C

Table C-1 Permits and Authorizations Tracking

Permit/Authorization	Purpose and Authority	Requirement Sources	Timing and Submittal Requirements	Review/Coordination [a] Submitted	Review/Coordination [a] Approved	Status
Required Prior to All Construction Activities						
CPUC Permit to Construct (PTC)	CPUC authorization to construct the project *CPUC General Order (GO) 131-D, Section III.B*	MMCRP	PG&E obtained a PTC from CPUC (as issued through the CPUC Proceeding Decision).	**CPUC:** 12/3/15	**CPUC:** 12/14/17	**Complete** On 1/12/18, PG&E submitted an Application for Rehearing of Decision to address language in the CPUC's original decision regarding GO 95.
			*PG&E shall submit any requests for Minor Project Refinements (MPRs) or Petition for Modifications (PFMs), as needed, **prior to deviating from the CPUC-approved project**.	***CPUC:** TBD	***CPUC:** TBD	**TBD** Any MPRs or PFMs will be tracked separately.
State Water Resources Control Board (SWRCB) General Permit	Permit for storm water dischargers associated with construction and land disturbance activities of one acre or more *Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ* The General NPDES Permit requires preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) (refer to Table C-2)	MM Hydrology-1: SWPPP Development and Implementation MM Hydrology-2: SWPPP Monitoring Program	PG&E shall submit Permit Registration Documents (PRDs) (e.g., Notice of Intent [NOI], etc.) **once obtained from the SWRCB.**	**SWRCB:** Pending **CPUC:** Pending	**SWRCB:** Pending **CPUC:** Pending	**Pending**
			PG&E shall submit all Notice of Termination (NOT) forms to CPUC **once SWPPP requirements have been met and permit coverage has ended.**	**SWRCB:** Pending **CPUC:** Pending	**SWRCB:** Pending **CPUC:** Pending	**Pending**
Required Prior to Specific Construction Activities						
Federal Aviation Administration (FAA) Notice of Proposed Construction or Alteration	Regulations apply to poles and conductor over 200 feet in height above ground level or within certain proximities to local airports *Federal Aviation Regulations (FAR) and Code of Federal Regulations (CFR) Part 77*	Consistency with impact analysis in IS/MND	An initial Notice (Form 7460) and FAA determination were completed; however, a revised notice must be submitted **within 45 days of construction.** PG&E shall submit a final Notice to FAA and provide a copy of the Notice and FAA determination to CPUC once obtained.	**FAA:** Pending **CPUC:** Pending	**FAA:** Pending **CPUC:** Pending	**Pending**
FAA Congested Area Plan for External Helicopter Loads	Regulations for carrying external helicopter loads in congested areas (e.g., residential areas) *Title 14 Code of Federal Regulations (CFR) Part 133*	MM Traffic-2: Overhead Construction Safety	PG&E shall submit the Plan for FAA approval **prior to conducting helicopter activity in congested areas**, and submit a copy of the approved plan to CPUC.	**FAA:** Pending **CPUC:** Pending	**FAA:** Pending **CPUC:** N/A	**Pending**
California Department of Transportation (Caltrans) Standard Encroachment Permit	Use of California state highways for purposes other than normal transportation, including construction activities completed within the Caltrans right-of-way (ROW) *Section 660 of the California Streets and Highways Code*	MM Traffic-1: Construction Traffic Management MM Traffic-3: Roadway Damage	PG&E shall acquire the permit and provide a copy to CPUC **prior to work within the US 101 ROW.**	**Caltrans:** Pending **CPUC:** Pending	**Caltrans:** Pending **CPUC:** N/A Pending	**Pending**
Caltrans Transportation Permit	Movement of oversized or excessive load vehicles on the state transportation network *California Vehicle Code*	MM Traffic-1: Construction Traffic Management MM Traffic-3: Roadway Damage	PG&E shall acquire the permit and provide a copy to CPUC **prior to transportation of oversized equipment on the state transportation network.**	**Caltrans:** Pending **CPUC:** Pending	**Caltrans:** Pending **CPUC:** N/A	**Pending**

APPENDIX C

Permit/Authorization	Purpose and Authority	Requirement Sources	Timing and Submittal Requirements	Review/Coordination [a]		Status
				Submitted	Approved	
Sonoma County Building Permit	Constructing structures associated with the Fitch Mountain Substation *Sonoma County Code of Ordinances, Chapter 7 Building Regulations, Section 7-5*	MMCRP	PG&E shall acquire the permit and provide copy to CPUC **prior to constructing the Fitch Mountain Substation.**	**County:** Pending **CPUC:** Pending	**County:** Pending **CPUC:** N/A	**Pending**
Sonoma County Encroachment Permit	Construction activities within Sonoma County roadways not covered by existing franchise agreements *Sonoma County Code of Ordinances, Chapter 7 Building Regulations, Article III*	MM Traffic-1: Construction Traffic Management MM Traffic-3: Roadway Damage	PG&E shall acquire the permit and provide a copy to CPUC **prior to work within County roadways.**	**County:** Pending **CPUC:** Pending	**County:** Pending **CPUC:** N/A	**Pending**
Sonoma County Transportation Permit	Movement of oversized or excessive load vehicles on the County transportation network *Sonoma County Code of Ordinances, Chapter 15 Highways, Roads and Bridges, Article II*	MM Traffic-1: Construction Traffic Management MM Traffic-3: Roadway Damage	PG&E shall acquire the permit and provide a copy to CPUC **prior to transportation of oversized equipment on the County transportation network.**	**County:** Pending **CPUC:** Pending	**County:** Pending **CPUC:** N/A	**Pending**
Required Following Specific Discoveries/Determinations						
***United States (U.S.) Army Corps of Engineers (USACE) Section 404 Nationwide Permit**	Work in waters of the U.S., including wetlands *Section 404 of the Clean Water Act*	MM Biology-11: Wetland Mitigation MM Hydrology-4: Watercourse Avoidance and Crossing Plan	*PG&E shall acquire a permit and provide a copy to CPUC **prior to impacting waters of the U.S., including wetlands.**	***USACE:** TBD ***CPUC:** TBD	***USACE:** TBD ***CPUC:** N/A	**TBD**
***U.S. Fish and Wildlife Service (USFWS) Section 10 Incidental Take Permit**	Regulates impacts on federally-listed, threatened, or endangered plants and animals, and the habitats upon which they depend. *Section 10 of the Endangered Species Act*	AMP BIO-7: California Tiger Salamander MM Biology-2: Special-status Plants MM Biology-3: California Red-legged Frog	*PG&E shall acquire permits and provide copies to CPUC **prior to any incidental take of federally-listed species or federally-protected habitat**.	***USACE:** TBD ***CPUC:** TBD	***USFWS:** TBD ***CPUC:** N/A	**TBD**
***RWQCB Section 401 Water Quality Certification**	Consistency with state water quality standards, prior to issuance of a USACE Section 404 Permit. *Section 401of the Clean Water Act*	MM Biology-11: Wetland Mitigation MM Hydrology-4: Watercourse Avoidance and Crossing Plan	*PG&E shall obtain a 401 Permit prior to obtaining a Section 404 Permit from USACE, and provide a copy of the permits to CPUC **prior to impacting waters of the U.S.**	***RWQCB:** TBD ***CPUC:** TBD	***RWQCB:** TBD ***CPUC:** N/A	**TBD**
***California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration Agreement**	Regulates activities that affect waters of the state, including the bed or bank of such features *Fish and Game Code Section 1602*	MM Hydrology-4: Watercourse Avoidance and Crossing Plan	*PG&E shall acquire any permit and provide a copy to CPUC **prior to impacting waters of the state.**	***CDFW:** TBD ***CPUC:** TBD	***CDFW:** TBD ***CPUC:** N/A	**TBD**
***CDFW Section 2081(b) Incidental Take Permits or Consistency Determination**	Impacts on state-listed, threatened, or endangered species, and the habitats upon which they depend *Fish and Game Code Section 2081(b)*	AMP BIO-7: California Tiger Salamander APM BIO-8: American Badger APM BIO-9: Western Pond Turtle MM Biology-2: Special-status Plants MM Biology-4: Foothill Yellow-legged Frog	*PG&E shall acquire any permits and provide copies to CPUC **prior to any incidental take of state-listed species or state-protected habitat.**	***CDFW:** TBD ***CPUC:** TBD	***CDFW:** TBD ***CPUC:** N/A	**TBD**

Permit/Authorization	Purpose and Authority	Requirement Sources	Timing and Submittal Requirements	Review/Coordination [a] Submitted	Approved	Status
***Sonoma County culvert design approval**	Requirements regarding the design of culverts that could impede flood water *Sonoma County Flood Control Design Criteria*	MM Hydrology-5: Culvert Design	PG&E shall acquire the permit and provide a copy to CPUC **prior to modifying or installing culverts.**	***County:** Pending ***CPUC:** Pending	***County:** Pending ***CPUC:** N/A	**TBD**

Notes:

[a] All project permits, and authorizations provided by other agencies, must be submitted to CPUC. CPUC reserves the right to review and comment on the accuracy and adequacy of project permits and authorizations, if necessary.

* Requirements marked with an asterisk are only applicable under specified conditions.

Table C-2 Plans Tracking

Plan	Requirement Sources	Timing and Submittal Requirements	Review/Coordination [a] Submitted	Approved	Status
Required Prior to All Construction Activities					
Environmental Training Program (ETP) Materials	APM BIO-1a: Environmental Awareness Training MM Biology-10: Sudden Oak Death Procedures MM Cultural-2: Cultural Resource Training MM Hazards-1: Hazardous Materials Procedures and Worker Training MM Hazards-2: Construction Fire Prevention Plan APM PAL-2: Worker Environmental Awareness Training	PG&E shall submit all ETP materials to CPUC for review and approval **no less than 30 days before construction**.	**CPUC:** Pending	**CPUC:** Pending	**Pending**
Revegetation, Restoration, and Monitoring Plan	MM Biology-7: Revegetation, Restoration, and Monitoring Plan	PG&E shall submit the plan to the CPUC for review and approval **no less than 60 days before construction**.	**CPUC:** Pending	**CPUC:** Pending	**Pending**
Stormwater Pollution Prevention Plan (SWPPP)	MM Hazards-1: Hazardous Materials Procedures and Worker Training MM Hydrology-1: SWPPP Development and Implementation MM Hydrology-2: SWPPP Monitoring Program	A Qualified SWPPP Developer (QSD) shall prepare a SWPPP for the project in accordance with the SWRCB General Permit (refer to Table C-1). PG&E shall submit the SWPPP to the CPUC for review and comment **no less than 30 days prior to construction**.	**CPUC:** Pending	**CPUC:** Pending	**Pending**
Required Prior to Specific Construction Activities					
Construction Fire Prevention Plan	MM Hazards-2: Construction Fire Prevention Plan	PG&E shall submit the plan to CPUC for review and approval **at least 30 days prior to construction within the Northern Segment**.	**CPUC:** Pending	**CPUC:** Pending	**Pending**
Watercourse Avoidance and Crossing Plan	MM Hydrology-4: Watercourse Avoidance and Crossing Plan	PG&E shall prepare a Seasonal Watercourse Avoidance and Crossing Plan and submit the plan to the CPUC **no less than 60 days prior to use or construction of surface water crossings or work within 50 feet of surface water resources**.	**CPUC:** Pending	**CPUC:** Pending	**Pending**

Plan	Requirement Sources	Timing and Submittal Requirements	Review/Coordination [a] Submitted	Review/Coordination [a] Approved	Status
Required Following Specific Discoveries/Determinations					
***Special-status Plant Salvage and Replanting Plan**	MM Biology-2: Special-status Plants	*If impacts on the special-status plant species cannot be avoided and if impacts would be substantial, as determined by the CPUC, PG&E shall prepare and implement a Special-status Plant Salvage and Replanting Plan. PG&E shall submit the plan to the CPUC for review and approval **no less than 30 days prior to impacting or collecting special-status plants**. If CPUC determines that the Salvage and Replanting Plan is not likely to be, then either (1) impacts on the special-status plants in questions must be avoided, or (2) a financial contribution will be made to an organization that restores/protects special-status plant populations in the project region.	***CPUC:** TBD	***CPUC:** TBD	**TBD**
***Wetland Creation/Enhancement Plan**	MM Biology-11: Wetland Mitigation	*If wetlands wetland creation/enhancement is necessary, PG&E shall prepare and submit a plan to the CPUC, USACE and RWQCB for review and approval **prior to impacting any wetlands.**	***USACE:** TBD ***RWQCB:** TBD ***CPUC:** TBD	***USACE:** TBD ***RWQCB:** TBD ***CPUC:** TBD	**TBD**
***Research and Data Recovery Plan**	MM Cultural-4: Data Recovery	*If CRHR-eligible, unique archaeological, or tribal cultural resource data recovery occurs, PG&E shall prepare a Research and Data Recovery Plan for each individual site where data recovery is necessary. The plans shall be submitted to the CPUC for approval **prior to conducting data recovery procedures for each site.**	***CPUC:** TBD	***CPUC:** TBD	**TBD**

Notes:

[a] All project Plans required by other agencies must be submitted to CPUC. CPUC reserves the right to review and comment on the accuracy and adequacy of all project Plans, if necessary.

* Requirements marked with an asterisk are only applicable under specified conditions.

Table C-3 Notifications Tracking

Notification	Entities to Notify	Requirement Sources	Timing and Submittal Requirements	Review/Coordination [a] Submitted	Review/Coordination [a] Approved	Status
Required Prior to All Construction Activities						
Post signs with dust complaint information	Public	APM AIR-1: Fugitive Dust Emissions	PG&E shall install a publicly visible sign at work areas where grading/blading and helicopter activities occur near public and residential areas **prior to grading/blading and helicopter activities.**	**CPUC:** Pending	**CPUC:** N/A	**Pending**
Required Prior to Specific Construction Activities						
General construction noise disturbance	All noise-sensitive receptors within 500 feet of work areas	MM Noise-1: General Construction Noise	Noise-sensitive receptors within 500 feet of work areas shall be provided written notice **at least 7 days prior to beginning construction**.	**CPUC:** Pending	**CPUC:** N/A	**Pending**
Helicopter noise disturbance	School administrators for Mark West Elementary School and San Miguel Elementary School	MM Noise-2: Schools	**Prior to helicopter activities within 500 feet of schools**, PG&E shall coordinate with school administrators to determine the schedule for noise-sensitive periods that must be avoided during helicopter operation within 500 feet.	**CPUC:** Pending	**CPUC:** N/A	**Pending**
Helicopter noise disturbance	All noise-sensitive receptors within 500 feet of any location where helicopter activity will occur	MM Noise-3: Helicopter Activities	Noise-sensitive receptors within 500 feet from any location where helicopter activities may occur, including flight paths if applicable, shall be provided written notice **at least 30 days prior to beginning helicopter activities.**	**CPUC:** Pending	**CPUC:** N/A	**Pending**

Notification	Entities to Notify	Requirement Sources	Timing and Submittal Requirements	Review/Coordination [a] Submitted	Approved	Status
Construction activities within parks	Sonoma County park officials and park users for Maddux Ranch Regional Park, Shiloh Ranch Regional Park, and Foothill Regional Park	APM REC-1: Coordination with Park Management and Signage MM Recreation-2: Trail Detours and Notifications	PG&E shall post signs at park and trail entrances **at least 1 week in advance of parks or trail closures**. PG&E shall coordinate with county officials regarding park and trail closures and detours **at least 90 prior to such closures**.	**County:** Pending **CPUC:** Pending	**County:** Pending **CPUC:** N/A	**Pending**
Emergency access disruption	Local emergency service providers (i.e., local fire districts, law enforcement offices, hospitals, and ambulance and paramedic services)	MM Traffic-4: Emergency Access	PG&E shall notify local emergency service providers **no less than 1 week before construction activities**	**Emergency Services:** Pending **CPUC:** Pending	**Emergency Services:** N/A **CPUC:** N/A	**Pending**
Affected public transit routes and stops	Sonoma County Transit (SCT)	MM Traffic-5: Public Transit	PG&E shall notify SCT **no less than 30 days before construction in the Southern Segment** and identify roadway segments where bus routes and bus stops are located that may be affected during construction.	**SCT:** Pending **CPUC:** Pending	**SCT:** N/A **CPUC:** N/A	**Pending**
Required Following Specific Discoveries/Determinations						
*Qualifying tree removal	Sonoma County and private landowners where qualifying trees are removed	APM BIO-10: Tree Removal and Mitigation	*For removal of qualifying large valley oaks greater than 20 inches dbh or small valley oaks with a cumulative dbh greater than 60 inches that occur within the Sonoma County Valley Oak Combining District, PG&E will coordinate with landowners to either replace or pay an in-lieu fee to the County valley oak planting program. Any protected trees that are otherwise removed will be documented and replaced at a 1:1 ratio or other measure derived through coordination with Sonoma County or the Town of Windsor that provides an equal level of compensation. Such coordination will occur **immediately following tree removal**.	***County:** Pending ***Landowners:** Pending ***CPUC:** Pending	***County:** N/A ***Landowners:** N/A ***CPUC:** N/A	**TBD**
*Federal or state-listed plants or wildlife	CPUC	AMP BIO-7: California Tiger Salamander APM BIO-8: American Badger APM BIO-9: Western Pond Turtle MM Biology-2: Special-status Plants MM Biology-3: California Red-legged Frog MM Biology-4: Foothill Yellow-legged Frog MM Biology-5: Special-status and Protected Migratory Birds	*PG&E shall notify CPUC by email **within 24 hours of any discovery** of a federal or state-listed plant or wildlife species. PG&E shall then consult with USFWS and/or CDFW to determine if permit authorizations are required, as described in Table C-1.	***CPUC:** TBD	***CPUC:** N/A	**TBD**
*Previously undiscovered cultural resources	CPUC; Native American tribes, if evidence of a tribal cultural resource; Caltrans, if found within the state ROW	MM Cultural-1: Archaeological Monitoring and Cultural Resource Discoveries	*If a previously undiscovered cultural resource is discovered, a CPUC-approved cultural resources specialist/archaeologist shall evaluate the resource. If the resource meets significance criteria, PG&E shall consult with the CPUC regarding how to proceed **prior to resuming work within 100 feet**. *If the cultural resources specialist/archaeologist determines that the resource could be a tribal cultural resource, Native American tribes that are traditionally and culturally affiliated with the geographic area shall be notified **within 48 hours of the discovery**. *If the resource is located within Caltrans right-of-way, PG&E shall **immediately** notify the Caltrans Office of Cultural Resources Studies, District 4, of the discovery.	***CPUC:** TBD ***Tribes:** TBD ***Caltrans:** TBD	***CPUC:** TBD ***Tribes:** TBD ***Caltrans:** TBD	**TBD**

Notification	Entities to Notify	Requirement Sources	Timing and Submittal Requirements	Review/Coordination [a] Submitted	Approved	Status
*Paleontological resources	CPUC	MM Paleontology-2: Previously Undiscovered Paleontological Resources	*In the event that a previously undiscovered paleontological resource is uncovered during project implementation, all ground-disturbing work within 50 feet of the discovery shall be halted and the paleontological resource specialist shall be immediately notified. If the resource is determined to be a unique paleontological resource, work shall remain halted, and the qualified paleontologist shall consult with PG&E staff, CPUC staff, and the landowner regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA.	***CPUC:** TBD	***CPUC:** TBD	**TBD**

Notes:

[a] Notifications and documentation required by other agencies must also be submitted to CPUC. CPUC reserves the right to review and comment on the accuracy and adequacy of notification materials, if necessary.

* Requirements marked with an asterisk are only applicable under specified conditions.

APPENDIX D PROJECT PERSONNEL AND CONTACT INFORMATION *(CONFIDENTIAL)*

APPENDIX E FORMS

INCIDENT REPORT

Project Name: _____ Contractor: _____

Date: _____ Parcel Number: _____

Landowner: _____

General Location(s)(e.g.,Francis Creek): _____

Specific Location(s)(e.g., POLE #, PS, LZ, Access Rd): _____

Identified By: _____

Verbal Notification? yes ☐ no ☐ Notification Date:_____Individual Notified:_____

Compliance Level? 1 ☐ 2 ☐ 3 ☐ 4 ☐

Noncompliance Source: (check as many as apply)

mitigation measure ☐ plan/procedure ☐ specification ☐ regulatory requirement ☐
drawing ☐ permit condition ☐ other ☐

Specify Source (e.g., Mitigation Measure BIO-6): _____

Did the noncompliance result in resource damage? yes ☐ no ☐

DESCRIPTION: (*Include a detailed description, including information on any resources damaged. Attach additional sheets if necessary.)*

CORRECTIVE ACTION REQUIRED: yes ☐ no ☐ DEADLINE FOR CORRECTIVE ACTION: _____

(*Attach additional sheets if necessary.)*

SIGNATURES:

PG&E Environmental Compliance Lead:

Name: _____ Signature: _____ Date: _____

PG&E Construction Lead:

Name: _____ Signature: _____ Date: _____

Contractor Superintendent:

Name: _____ Signature: _____ Date: _____

MINOR PROJECT REFINEMENT REQUEST FORM

Part A: Request Description

MPR Request

Request Number:	[Number]
Date Requested:	[Date submitted to CPUC]
Proposed Duration/ Timing of Use:	[Start date] to [End date] [Days of the week]; [Times of the day]
Location:	[Description] [Approximate dimensions and acreage]
Attached Map?	☐ Yes ☐ No

Proposed Action(s)

[List and describe each proposed action]

Purpose(s)

[Explain why the proposed action(s) are necessary]

Part B: Existing Conditions

Existing Land Uses:	[Description] [Any mitigation considerations]
Surrounding Land Uses:	[Description] [Any mitigation considerations]
Sensitive Receptors within 500 feet:	[Description] [Any mitigation considerations]
Environmental Recourses within 500 feet:	[Description] [Any mitigation considerations]
Has landowner approval been granted?	☐ Yes ☐ No ☐ N/A [Description]
Landowner:	[Name and address]

Surveys

List any new survey reports under Part D and attach a copy.

Biological Resources. Were all sites associated with the proposed action(s) surveyed for biological resources with the potential to occur in the area? If so, were survey results positive or negative? Were surveys completed during the appropriate timing and season to detect resources?

[Description]

Cultural Resources. Were all sites associated with the proposed action(s) surveyed for cultural resources (records search and pedestrian survey)? If so, were survey results positive or negative?

[Description]

Jurisdictional Waters. Were all sites associated with the proposed action(s) surveyed for hydrologic resources? If so, were survey results positive or negative?

[Description]

Part C: Permits, Agency Approvals, and Environmental Protection Measures

List any new permits or agency approvals under Part D and attach a copy.

Have all required permits, permit amendments/authorizations, or agency approvals been issued by resource agencies with applicable jurisdiction? Describe if necessary.

[Description]

Would the proposed action(s) conflict with permit conditions or agency approvals? Describe if necessary.

[Description]

Would the proposed action(s) conflict with project applicant proposed measures or mitigation measures listed in Final Initial Study/Mitigated Negative Declaration (IS/MND)? Describe if necessary.

[Description]

Part D: Attached Materials

List any attached materials (e.g. surveys, maps, photos, memos, agency authorizations, etc.) below. Materials should be attached to the end of this form.

[List attached materials]

TEMPORARY EXTRA WORKSPACE REQUEST FORM

Request Description

Request Number:	[Number]
Date Requested:	[Date submitted to CPUC]
Proposed Duration/ Timing of Use:	[Start date] to [End date] [Days of the week]; [Times of the day]
Location:	[Description] [Approximate dimensions and acreage]
Attached Map?	☐ Yes ☐ No

Proposed Uses

[Description]

Existing Conditions

Existing Land Uses:	[Description] [Any mitigation considerations]
Surrounding Land Uses:	[Description] [Any mitigation considerations]
Sensitive Receptors within 500 feet:	[Description] [Any mitigation considerations]
Environmental Recourses within 500 feet:	[Description] [Any mitigation considerations]
Has landowner approval been granted?	☐ Yes ☐ No ☐ N/A [Description]
Landowner:	[Name and address]

Condition after Use

[Description]
[Any mitigation considerations]

Checklist

1. Have applicable landowners approved the location, proposed use, and duration?	☐ Yes	☐ No
2. Is the TEWS located in a previously disturbed area?	☐ Yes	☐ No
3. Are there sensitive resources or land uses within or in proximity to the TEWS?	☐ Yes	☐ No
4. Would use of the TEWS result in any significant environmental impacts?	☐ Yes	☐ No

Note: Answering "No" to questions 1 or 2, or "Yes" to questions 3 or 4 may be cause for denial.

Review and Approval

Standard Conditions of Approval

- *The CPUC shall review and approve or deny TEWS requests within four business days of receiving a completed form.*

- *CPUC approval is valid once a signature is provided on a hardcopy or a confirmation email has been provided with the attached TEWS.*
- *Use of an approved TEWS is limited to 60 days or less.*
- *No hazardous materials may be stored at the site.*
- *Use of an approved TEWS must comply with all mitigation measures, plan procedures, and local ordinances that are applicable to the project and TEWS activities.*
- *Use of an approved TEWS shall not exceed the limitations described in the TEWS request form. Amended requests must be submitted to CPUC for review and approval.*
- *The CPUC shall be informed of any complaints regarding an approved TEWS within 24 hours.*
- *An approved TEWS may be revoked at any time of the conditions of approval are not followed.*

Site-specific Conditions of Approval

[Description]

Names and Dates of Approval

PG&E Compliance Team

MMCRP Role	Name	Date of Approval
[Enter construction lead]	[Enter]	[Enter]
[Enter compliance lead]	[Enter]	[Enter]

CPUC Monitoring Team

MMCRP Role	Name	Date of Approval
[Enter monitoring lead]	[Enter]	
Signature or Date of Confirmation Email:	[Enter]	[Enter]