APPLICATION

PURPOSE OF THIS FORM

Complete this form to apply for incidental take permit coverage under the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo HCP/NCCP) and submit electronically to your local planning office. The completion of this form satisfies the minimum requirements for permit coverage. The Yolo Habitat Conservancy ("Conservancy") encourages submittal of a preliminary application to your local planning office to ensure timely and accurate completion. Your local agency planning office also may request additional information to clarify or complete your application. Chapter 6 of the Permitting Guide provides instructions for form completion, available along with additional resourceson the Conservancy's web site under the "Permitting" tab. Please note if an application fee is required (see Screening Form, Box D), you should submit this fee to the Conservancy early in the application process. The Conservancy automatically adjusts mitigation fees by March 15th of each year to reflect current land prices and other expenses. If an applicant does not complete their application and issue payment prior to the fee update, the new fees will apply. The applicant may, however, pay mitigation fees early at the previous year's rate consistent with the Conservancy's Early Payment of Mitigation Fees Policy.

Regional-scale data related land cover, sensitive natural communities, and covered species habitats in Yolo is made available through the Yolo HCP/NCCP GeoMapper online mapping tool. The GeoMapper tool is accessible via the Resources tab of the Yolo Habitat Conservancy website below, although it is intended for informational purposes only, All HCP/NCCP permit applicants must have site-specific planning level surveys by a qualified biologist to determine actual land cover and sensitive natural communities and species habitats in and around a project site to determine the correct amount of land cover mitigation fees and project specific Avoidance and Minimization Measures (AMMs).

https://www.yolohabitatconservancy.org/resources

BOX A: Preliminary/Final Application	
Check one box.	
☐ Preliminary Application (signature not required)	☒ Final Application (complete form and signature required)

BOX B: APPLICATION DETAILS		
1 Project name	PG&E C-1637 L-400 AC Mitigation	
2 Submittal date	5/11/2022	
3 Application/project file number(s) (assigned by local agency)		
4 YHC internal tracking #		
5 Local agency with approval authority	☐ Yolo County ☐ City of Davis ☐ City of Woodland ☐ City of West Sacramento ☐ City of Winters ☐ Other _____	☒ Special Participating Entity (SPE) **Note**: Applicants not subject to approval from the County or cities, or for projects not specifically identified and not specifically excluded as a covered activity under the Plan, should check this box to request permit coverage as an SPE if desired. SPE permit coverage is not guaranteed, are processed by the Conservancy, and must be approved by the Conservancy Board.

BOX C: PROJECT CONTACT			
1 Property Owner			
1.a Property owner name	See Attachment 1		
1.b Mailing address			
1.c Phone (home/office)		1.d Phone (Cellular)	
1.e Email			
2 Project Agent/Applicant			
2.a Company/organization	Pacific Gas and Electric Co.		
2.b Name of primary contact	Laura Bond		
2.c Mailing address	4040 West Lane, Stockton, CA 95204		
2.d Phone (office)	916-617-0169	2.e Phone (Cellular)	916-617-0169
2.f Email	L1KR@pge.com		
Permissions			
3 Local agency and/or the Conservancy may contact the property owner directly	☐ Yes ☒ No		
4 Local agency and/or the Conservancy may contact the project agent/applicant directly	☒ Yes ☐ No		

BOX D: PROJECT INFORMATION	
1 Project address and location	Wildwood Road/Rd 84, 4.7 miles west of Dunnigan, CA
2 Assessor parcel number(s) APNs and acreage by parcel (not applicable for linear projects).	
3 Total acreage of parcel(s) (not applicable for linear projects spanning multiple parcels)	
4 Using the GeoMapper's Spatially Defined Planning Unit Map, find your proposed project site. Check the Planning Unit in which your project lies.	**Yolo County Planning Units** ☐ 1 – Little Blue Ridge ☐ 2 – North Blue Ridge ☐ 3 – South Blue Ridge ☒ 4 – Capay Hills ☐ 5 – Dunnigan Hills ☐ 6 – Upper Cache Creek ☐ 7 – Lower Cache Creek ☐ 8 – Upper Putah Creek ☐ 9 – Lower Putah Creek ☐ 10 – Hungry Hollow Basin ☐ 11 – Willow Slough Basin ☐ 12 – Colusa Basin ☐ 13 – Colusa Basin Plains ☐ 14 – North Yolo Basin ☐ 15 – South Yolo Basin ☐ 16 – Yolo Basin Plains ☐ 17 – North Yolo Bypass ☐ 18 – South Yolo Bypass **Cities** ☐ 19 – City of Woodland ☐ 20 – City of Davis ☐ 21 – City of West Sacramento ☐ 22 – City of Winters

BOX D: PROJECT INFORMATION

5	▣	Provide a project description. Please refer to the Permitting Guide for details to include in the project description. Label as **Attachment 1** or indicate in this box the page numbers of the planning level survey where this information can be found**.**
6	▣	Provide a legible vicinity map of the project site and surrounding area (PDF). Refer to the Permitting Guide for more information about details to include on the vicinity map. Label as **Attachment 2.** Rather than a separate PDF, applicant may include the site plan in the planning level survey report. If so, provide page number here**:** _____
7	▣	Provide a site plan that shows the proposed project site and surrounding area. (PDF and CAD or GIS-compatible). Refer to the Permitting Guide for more information about details to include in the site plan and details regarding the required CAD or GIS-compatible digital information to be attached. Label as **Attachment 3.** Rather than a separate PDF, applicant may include the site plan in the planning level survey report or other report. If so, attach report or excerpt and provide report name and page number here**:** _____

BOX E: NATURAL COMMUNITY AND LAND COVER IMPACTS AND MITIGATION FEES

Complete Items 1-26 below, referring to the Permitting Guide for calculation methods.

- Total fee amount for each land cover type will be auto-generated based on acreage amount (and for recurring temporary impacts, number of years out of the 50-year permit term the impact will occur).
- Temporary impact fee formula = land cover fee x area of temporary effect in acres x (F/50) where F = the number of years in which the activity will occur during the rest of the permit term (until 2069).
- Must include required land cover fee buffer area associated with the project. This is generally 10 feet for linear projects (e.g. roads, utility corridors, pipelines) and 50 feet for all other projects. See Chapter 3 of the Permitting Guide.
- Fees will be updated annually, typically in March.
- Wetland fees are in addition to land cover fees. For project proponents transplanting elderberry shrubs from a non-riparian habitat, a per acre maintenance fee of $19,104 is assessed. The maintenance fee is subject to the annual increase in fees pursuant to existing methodology.
- Submit a planning level survey, including a field-verified land cover map and the name and qualifications of the qualified biologist(s) responsible for preparation of the report. Label as **Attachment 4.** Mapped areas shown on the site plan (**Attachment 3** in Box D, Item 7) should be consistent with the acreages entered below. Include photographs of temporary impact areas. Label photos as **Attachment 5**.

Land Cover Types	Land Cover Permanently Impacted by Project (in acres)			Land Cover Temporarily Impacted by Project (in acres)	Years of Recurring Temporary Impact	Fees (Auto Generated)				
	Permanent Impact (acres)	Fee Buffer (acres)	TOTAL			Land Cover Fee (per acre)	Wetland Fee (per acre)	Permanent Impact, Land Cover Fee	Temporary Impact, Land Cover Fee	Wetland Fee
1 ☐ Developed (including ruderal with no covered species habitat)[a]			0.0			$0	$0	$ 0.00	$ 0.00	$ 0.00
2 ☐ Ruderal with covered species habitat [a]			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
3 ☐ Barren, No Covered Species Habitat			0.0			$0	$0	$ 0.00	$ 0.00	$ 0.00
4 ☐ Barren, With Covered Species Habitat			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
5 ☐ Vegetated Corridor with Covered Species Habitat			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
6 ■ Grassland (all types)	0.0	0.1	0.1	3.9	1	$15,571	$0	$ 965.40	$ 1,214.54	$ 0.00
7 ☐ Alkali Prairie			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
8 ☐ Fresh Emergent Wetland (all types)			0.00			$15,571	$80,864	$ 0.00	$ 0.00	$ 0.00

BOX E: NATURAL COMMUNITY AND LAND COVER IMPACTS AND MITIGATION FEES

9 ☐ Valley Foothill Riparian			0.00			$15,571	$66,560	$ 0.00	$ 0.00	$ 0.00
10 ☐ Lacustrine and Riverine			0.00			$15,571	$64,854	$ 0.00	$ 0.00	$ 0.00
11 ☐ Cultivated Land (all types)			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
12 ☐ Citrus/Subtropical			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
13 ■ Deciduous Fruits/Nuts	0.0	0.1	0.1	0.2	1	$15,571	$0	$ 965.40	$ 46.71	$ 0.00
14 ☐ Vineyards			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
15 ☐ Turf Farm			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
16 ☐ Flowers/Nursery/Tree Farms			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
17 ■ Semiag/Incidental to Agriculture			0.0	0.1	1	$15,571	$0	$ 0.00	$ 18.69	$ 0.00
18 ☐ Eucalyptus			0.0			$15,571	$0	$ 0.00	$ 0.00	$ 0.00
							TOTAL	1,930.80	1,279.94	0.00

19	**TOTAL LAND COVER IMPACTS AND MITIGATION FEES**	$ 3,210.74
20	**APPLICATION FEE** (The application fee is credited towards the cost of the mitigation fees if the application fee is paid prior to the submittal of the mitigation fee payment . Application fee as of January 1, 2020: $1,981)	$
21	**OTHER CREDITS** (Advanced fee payment or in lieu fee credit – must be verified by Conservancy). Add **Attachment 6**	$
22	**TOTAL LAND COVER IMPACTS AND MITIGATION FEES DUE** (Mitigation fees due are determined at the time of payment unless they were paid in accordance with the Yolo HCP/NCCP Early Payment of Mitigation Fees Policy. See www.yolohabitatconservancy.org for current fee schedule.)	$ 3,210.74

[a] Land cover fees may be applicable if covered species habitat is present.

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS

Based on a planning level survey conducted by a qualified biologist using the land cover definitions described in the Permitting Guide in Table 2-1, indicate which sensitive natural communities and covered species are relevant to your project. Indicate below whether suitable covered species habitats are present (Column A) and, where applicable, if there is a need to conduct a more focused survey(s) for covered species (Column B) to confirm presence. Complete species-specific planning level surveys as needed consistent with protocols referenced in Appendix A of the Permitting Guide. Alternatively, covered species presence can be assumed, which would requires adherence to applicable AMMs and implementation of avoidance measures or preconstruction surveys. Attach all species-specific planning level surveys as **Attachment 7**. Describe, map, and tabulate impacts the project will have on each natural community and each species for which habitat is present. Impact calculations must correspond to the permanent and temporary impact calculations in Box E. Label as **Attachment 8**. Alternatively, the impact assessment can be incorporated into the planning level survey. **Important**: Be aware of the timing requirements for conducting a species-specific planning level survey (Table 6-1 in the Permitting Guide) to avoid project delays.

	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Sensitive Natural Communities			
1 Alkali prairie and vernal pool complex	Are vernal pools or alkali seasonal wetlands present within 250 feet of project footprint? ☐ **Yes**. *Design project to avoid vernal pools or alkali seasonal wetlands by 250 feet or lesser buffer if approved by wildlife agencies (see Permitting Guide Table 2-1). Check Box G, AMMs 9 and 10. Go to Column C.* ■ **No**	N/A	Map attached? (Attachment 4) ■ **Yes** ☐ **No** If vernal pools or alkali seasonal wetlands are present on or near the site, provide map showing how project avoids these wetlands.
2 Valley foothill riparian	Is valley foothill riparian present within 100 feet of the project site boundary? ☐ **Yes**. *Design project to avoid valley foothill riparian by 100 feet or count all portions within 100 feet in the impact acreage (see Permitting Guide Table 2-1). Check Box G, AMMs 9 and 10. Go to Column C and provide map.* ■ **No**	N/A	Map attached? (Attachment 4) ■ **Yes** ☐ **No** Provide map showing the valley foothill riparian in relation to the project footprint.
3 Lacustrine and riverine	Are any streams, rivers, lakes, or ponds within 25 feet of project footprint inside urban planning units, or within 100 feet of project footprint outside urban planning units? ☐ **Yes**. *Design project to avoid these resources by 25 feet inside urban planning units or 100 feet outside urban planning units, or count all portions within these distances in the impact acreage, unless a variance is allowed. Check Box G, AMMs 9 and 10. Go to Column C and provide map.* ■ **No**	N/A	Map attached? (Attachment 4) ■ **Yes** ☐ **No** Provide map showing any streams, rivers, lakes, or ponds in relation to the project footprint.

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS			
	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Sensitive Natural Communities			
4 Fresh emergent wetlands	Are there any fresh emergent wetlands within 50 feet of project footprint outside urban planning units? ☐ **Yes**. *Design project to avoid these resources by 50 feet, or count all portions within 50 feet in the impact acreage. Check Box G, AMMs 9 and 10. Go to Column C and provide map).* ***Survey period: May 31–September 30*** ■ **No**	N/A	Map attached? (Attachment 4) ■ **Yes** ☐ **No** Provide map of fresh emergent wetlands in relation to the project footprint.
Plants			
5 Palmate-bracted bird's beak	Is suitable habitat present within 250 feet of the project site boundary? (see Permitting Guide Table 2-2) ☐ **Yes**. *Survey for palmate-bracted bird's beak consistent with Permitting Guide Appendix A. Check Box G, AMM 11. Go to Column B.* ***Survey period: May 31–September 30*** ■ **No**	Is palmate-bracted bird's beak present? ☐ **Yes**. *Design project to avoid occupied habitat as described in AMM 11. Go to Column C.* ■ **No.** *Go to Column C.*	Species-specific planning level survey report attached? (Attachment 7) ☐ **Yes** ☐ **No** *Include report of species-specific planning level survey and map of habitat and any plants found in relation to project footprint.*
Invertebrates			
6 Valley elderberry longhorn beetle	Is there presence of elderberry shrubs in the project site or within 100 feet outside of the project site boundary that could be impacted by the project? ☐ **Yes**. *Identify and map all elderberry shrubs in and within 100 feet of project footprint with stems greater than one inch in diameter at ground level. For mapped shrubs that cannot be avoided, quantify the number of stems greater than one inch in diameter at ground level, and identify any such stems with valley elderberry longhorn beetle exit holes. Check Box G, AMM 12. Go to Column C and provide survey report.* ***Survey period: Year-round*** ■ **No**	N/A	Species-specific planning level survey report attached? (Attachment 7) ☐ **Yes** ■ **No**

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS			
	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Amphibians			
7 California tiger salamander	Is there presence of California tiger salamander aquatic or upland habitat in the project footprint, or aquatic habitat within 500 feet of the project footprint? ☒ **Yes**. *Check box G, AMM 13. Is the habitat within designated critical habitat for California tiger salamander, as determined using the GeoMapper?* ☐ **Yes**. Design project to avoid designated critical habitat. ☒ **No.** *If aquatic habitat cannot be avoided by 500 feet, either conduct surveys as described in the Permitting Guide Appendix A, or assume species presence.* ***Survey period: After rainfall, November 1 to May 15.*** *Go to Column B.* ☐ **No**	Are California tiger salamanders present or assumed to be present in aquatic habitat? ☒ **Yes**. *If the species is present or assumed to be present, the Yolo HCP/NCCP will not allow any loss of occupied aquatic habitat until at least four new occupied breeding pools are discovered or established and protected in the Plan Area. Contact Yolo Habitat Conservancy. Go to Column C.* ☐ **No**	Species-specific planning level survey attached? (Attachment 7) ☐ **Yes** ☒ **No**
Reptiles			
8 Western Pond Turtle	Is western pond turtle habitat present in the project footprint? ☒ **Yes**. Check Box G, AMM 14. A qualified biologist is required to evaluate whether there is moderate to high likelihood of western pond turtle presence. *Go to Columns B and C.* ☐ **No**	Moderate to high likelihood of western pond turtle presence? ☐ **Yes:** Check Box F for western pond turtle preconstruction surveys. ☒ **No**	Habitat evaluation attached? (Attachment 7) ☐ **Yes** ☒ **No**
9 Giant Garter Snake	Is there any giant garter snake habitat (as defined in the Permitting Guide, Table 2-2) within the project footprint? ☐ **Yes**. *Design project to avoid or minimize impact on giant garter snake habitat to the extent practicable. If habitat cannot be avoided, see AMM 15. Check Box F for giant garter snake Preconstruction surveys, and check Box G, AMM 15.* ☒ **No**	N/A	N/A

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS			
	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
Birds			
10 Swainson's Hawk and White-tailed Kite	Are there suitable Swainson's hawk or white-tailed kite nest trees within 1,320 feet of the project footprint? ☒ **Yes**. *If nest trees cannot be avoided by 1,320 feet, check Box F for hawk and kite Preconstruction surveys, and Box G, AMM 16.* ☐ **No**	N/A	N/A
11 Western yellow-billed cuckoo	Is suitable habitat present within 500 feet of the project site boundary? ☐ **Yes**. *If there are breeding records for the western yellow-billed cuckoo within ¼ mile of the project site from the previous three years (as determined by GeoMapper), then assume species is present. If there are no breeding records with ¼ mile, then either assume species is present or survey consistent with Chapter 6 of the Permitting Guide. See columns B and C. Check Box F for western yellow-billed cuckoo Preconstruction surveys and Check Box G, AMM 17.* ***Survey period: June 1–August 30.*** ☒ **No**	Is western yellow-billed cuckoo present or assumed to be present? ☐ **Yes**. *If project cannot avoid occupied habitat by 500 feet, avoid take of nesting birds as described in AMM 17.* ☒ **No.**	Species Survey attached? (Attachment 7) ☐ **Yes** ☒ **No**
12 Western Burrowing Owl	Is western burrowing owl habitat present on the project site, or within 500 feet of the project site? ☒ **Yes**. *Conduct planning level surveys for occupied habitat as described in Permitting Guide Appendix A. Go to Columns B and C.* ***Survey period: February 1–August 31 during the breeding season; September 1–January 31 during nonbreeding season.*** ☐ **No**	Are burrowing owls present? ☐ **Yes**. *Check Box G, AMM18. If burrows cannot be avoided, consistent with Table 2-3 in the Permitting Guide, Check Box F for western burrowing owl preconstruction surveys.* ☒ **No**	Species-specific planning level survey attached? (Attachment 7) ☐ **Yes** ☒ **No**

BOX F: CONDITIONS OF APPROVAL: CONDUCT PLANNING LEVEL SURVEYS

	A. Project Site Conditions Requiring Planning Level Survey	B. Species-Specific Planning Level Survey Results	C. Documentation
13 Least Bell's Vireo	Is least Bell's vireo habitat present in and within 500 feet of project footprint? ☐ **Yes**. *Check Box G, AMM 19. Are there nesting records for the species within ¼ mile of the site from the previous three years (determined using the GeoMapper)?* ☐ **Yes**. *Assume species is present. See Column B.* ☐ **No.** *Conduct planning level surveys, as described in Permitting Guide Appendix A. See Columns B and C.* ***Survey period: April 1–July 15*** ■ **No**	Are least Bell's vireo nests present or assumed to be present? ☐ **Yes**. *Check Box F for least Bell's vireo preconstruction surveys. Avoid take of birds as described in AMM 19.* ■ **No.**	Species Survey attached? (Attachment 7) ☐ **Yes** ■ **No**
14 Bank Swallow	Is bank swallow nesting habitat present on the project site, or within 500 feet of the project site? ☐ **Yes**. *Check Box G, AMM 20. Conduct planning level surveys as described in Permitting Guide Appendix A. Go to Columns B and C.* ***Survey period: March 1–August 15*** ■ **No**	Are nesting bank swallows present? ☐ **Yes**. *Check Box F for bank swallow preconstruction surveys. Avoid take of birds as described in AMM 19.* ■ **No.**	Species-specific planning level survey attached? (Attachment 7) ☐ **Yes** ■ **No**
15 Tricolored Blackbird	Is tricolored blackbird nesting habitat present on the project site, or within 1,300 feet of the project site? ☐ **Yes**. *Conduct planning level surveys as described in Permitting Guide Appendix A. Check Box G, AMM 21. Go to Column C.* ***Survey period: March 1–July 30*** ■ **No**	N/A	Species-specific planning level survey attached? (**Attachment 7**) ☐ **Yes** ■ **No**

BOX G: CONDITIONS OF APPROVAL: CONDUCT PRE-CONSTRUCTION SURVEYS

Indicate which species in **Items 1-7** are relevant to your project. **Important**: Refer to Chapter 4 of the Permitting Guide for information about survey purpose, the land cover types and site conditions requiring preconstruction surveys, survey area size, and survey timing.

Birds			
1	■ Swainson's hawk	4	■ Western burrowing owl
2	■ White-tailed kite	5	☐ Least-Bell's vireo
3	☐ Western yellow-billed cuckoo		
Reptiles			
6	☐ Giant garter snake	7	■ Western pond turtle

BOX H: CONDITIONS OF APPROVAL: AVOIDANCE AND MINIMIZATION MEASURES (AMMs)

Check the avoidance and minimization measures below that apply to your project. Refer to the Permitting Guide for assistance. Describe how you will fulfill the requirements of each required condition. Plan your construction carefully around the translocation or other dates required by the AMMs. Label as **Attachment 9**.

1	☒	AMM1: *Establish Resource Protection Buffers*
2	☐	AMM 2: *Design Developments to Minimize Indirect Effects at Urban-Habitat Interfaces (this AMM does not apply to new development where it is immediately adjacent to existing developed lands*)
3	☒	AMM 3: *Confine and Delineate Work Area*
4	☒	AMM 4: *Cover Trenches and Holes during Construction and Maintenance*
5	☒	AMM 5: *Control Fugitive Dust*
6	☒	AMM 6: *Conduct Worker Training*
7	☒	AMM 7: *Control Nighttime Lighting of Project Construction Sites*
8	☒	AMM 8: *Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas*
9	☒	AMM 9: *Establish Resource Protection Buffers around Sensitive Natural Communities*
10	☐	AMM 10: *Avoid and Minimize Effects on Wetlands and Waters*
11	☐	AMM 11: *Minimize Take and Adverse Effects on Palmate-Bracted Bird's Beak*
12	☐	AMM 12: *Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle*
13	☒	AMM 13: *Minimize Take and Adverse Effects on Habitat of California Tiger Salamander*
14	☒	AMM 14: Minimize Take and Adverse Effects on Habitat of Western Pond Turtle
15	☐	AMM 15: *Minimize Take and Adverse Effects on Habitat of Giant Garter Snake*
16	☒	AMM 16: *Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite*
17	☐	AMM 17: *Minimize Take and Adverse Effects on Habitat of Western Yellow-Billed Cuckoo*
18	☒	AMM 18: *Minimize Take and Adverse Effects on Western Burrowing Owl*
19	☐	AMM 19: *Minimize Take and Adverse Effects on Least Bell's Vireo*
20	☐	AMM 20: *Minimize Take and Adverse Effects on Habitat of Bank Swallow*
21	☐	AMM 21: *Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird*

BOX I: ATTACHMENT CHECKLIST

Indicate which attachments are provided below. **Note**: Attachments must meet the requirements described in Permitting Guide. If these requirements are not met, your application may be delayed.

All Projects

- ☒ **Attachment 1**. Project Description (Box C). Attach separately or indicate report page #s here:
- ☒ **Attachment 2**. Vicinity map PDF (Box C). Attach separately or indicate report page # here:
- ☒ **Attachment 3**. Site Plan (Box C). Attach separately or indicate report page # here:
  Also include CAD or GIS compatible data.

Projects with Impacts

- ☒ **Attachment 4**. Planning level survey (Box D)
- ☒ **Attachment 5**. Photos of temporary impact areas. Attach separately or indicate report page #s here:
- ☐ **Attachment 6**. Documentation if land is offered in lieu of fees (Box D, Item 30)
- ☐ **Attachment 7**. Species-specific planning level survey(s) (Box E). Attach separately or indicate report page #s here:
- ☒ **Attachment 8**. Unavoidable impacts on covered species. Attach separately or indicate report page #s here:

BOX I: ATTACHMENT CHECKLIST

☒ **Attachment 9**. Description of compliance with avoidance and minimization measures (Box G). Attach separately or indicate report page #s here:

BOX J: SIGNATURES

☒ **By checking the box and signing below I certify all information in the application is true and correct to the best of my knowledge. I also certify I understand the requirements of the AMMs, including dates for elderberry translocation or other dates that may affect construction timing.**

1	Property owner name and contact information	Name			
		Phone		Email	
2	Property owner signature			Date	
3	Project agent/applicant name and contact information	Name	Laura Bond		
		Phone	916-617-0169	Email	L1KR@pge.com
4	Project agent/applicant signature	Laura Bond Digitally signed by Laura Bond Date: 2022.07.08 14:38:13 -07'00'		Date	7/8/2022

FORM SUBMITTAL INSTRUCTIONS

Submit this form electronically to the applicable contact below. If the project applicant is seeking HCP/NCCP permit coverage as an SPE, submit the form to the Yolo Habitat Conservancy. The signed Final Application and payment of all other Plan fees is required following project approval and prior to formal Yolo HCP/NCCP approval.

LOCAL AGENCY PLANNINGOFFICE CONTACT INFORMATION

Yolo County	**City of West Sacramento**	**City of Davis**	**City of Woodland**	**City of Winters**
Stephanie Cormier Planning Division Department of Community Services 292 West Beamer Street, Woodland (530) 666-8041	David Tilley Community Development Department 1110 West Capitol Ave., 2nd Floor, West Sacramento (916) 617-4645	Sherri Metzker Community Development & Sustainability 23 Russell Blvd., Suite 2, Davis (530) 757-5610 ext. 7239	Cindy Norris Planning Division 300 First Street, Woodland (530) 661-5911	Kirk Skierski Community Development Department 318 First Street, Winters (530) 794-6714

YOLO HABITAT CONSERVANCY CONTACT INFORMATION

Address: PO Box 2202, Woodland, CA 95776 Phone: 530-666-8150 Email: info@yolohabitatconservancy.org

FOR STAFF USE ONLY			
Project planner name		Phone number	
Email		Date	
Covered activity type			
HCP/NCCP Application	☐ Complete ☐ Not complete	☐ Special Participating Entity	

Attachment 1 – Project Description

PG&E plans to install approximately 5,100 feet of horizontal mitigation wire and five SSD cabinets west of the town of Dunnigan in Yolo County. The project, referred to as C-1637, includes an impact area of 4.96 acres and includes access routes and temporary workspaces north of PG&E's existing Buckeye Station. The C-1637 includes five work locations spanning four private parcels in Yolo County. The mitigation wire will be installed between Gas Lines 400 and 401, within PG&E's existing easement. To minimize orchard crop loss and impacts, roughly 1,275 feet of wire will be installed via horizontal directional drilling (HDD). The remaining wire will be installed via open trench, with an approximate workspace of 79,494 square feet. Each of the five SSD cabinets will require two 4' x 4' bell holes and a 1' by 30' trench connecting them. A bulldozer-mounted plow will be used to install the mitigation wire, placing it near the same depth of the gas lines which ranges from 3 to 6 feet. In areas where a plow is not feasible, a backhoe will be used to excavate the trenches. A backhoe will be used to dig the HDD splice/termination locations and the trenches to the SSD locations. Staging and workspace areas will be located within the orchard at the northern end of the project and along the wire installation.

Property Ownership:

APN 062-050-004

- Owner – N/A
- Site Address – 2580 County Road 84, Arbuckle, CA

APN 062-080-009

- Owner – T&P Farms
- Site Address – County Road 84, Arbuckle, CA

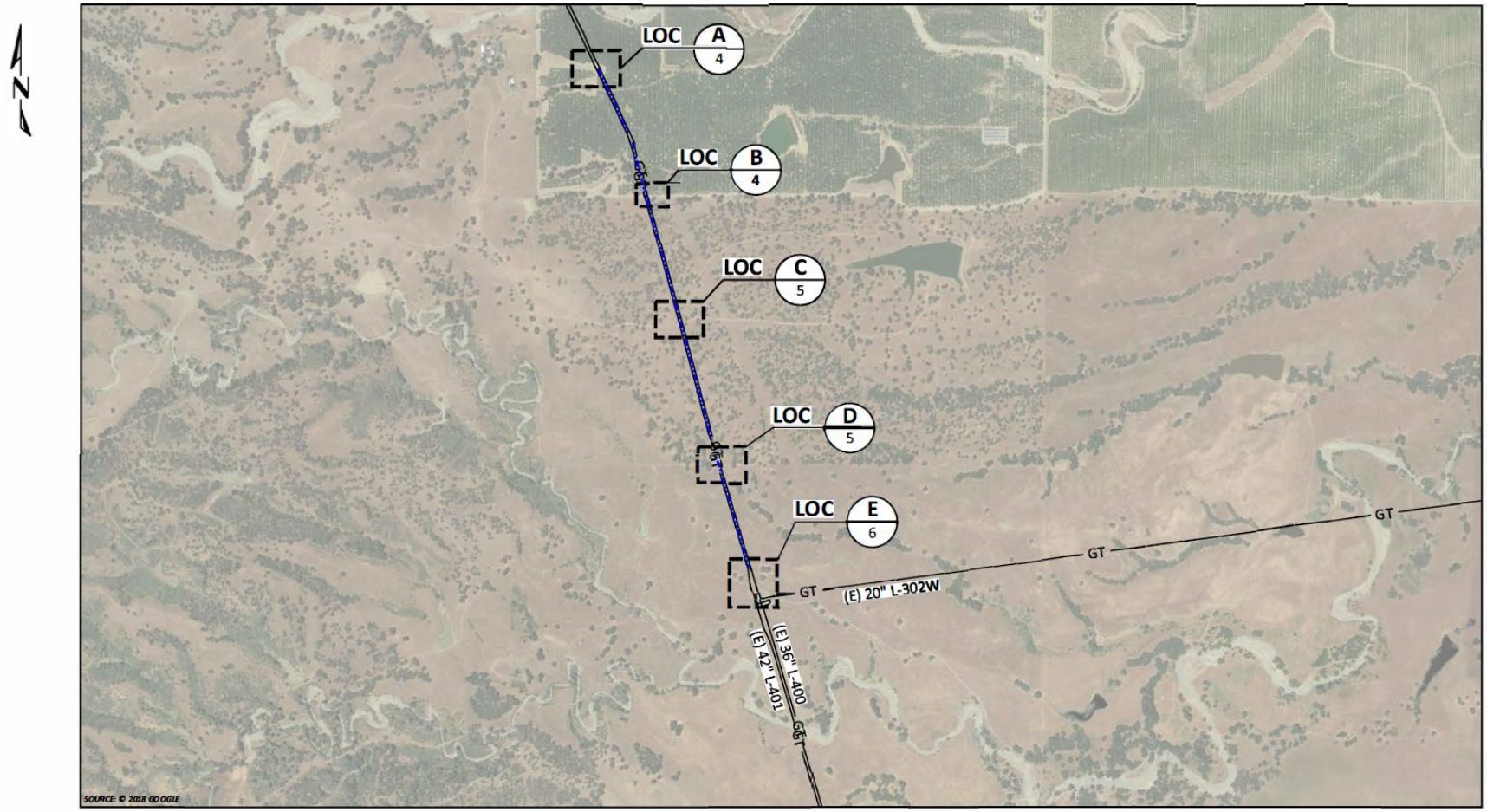
APN 062-080-010

- Owner –T&P Farms
- Site Address – Road 84, Arbuckle, CA

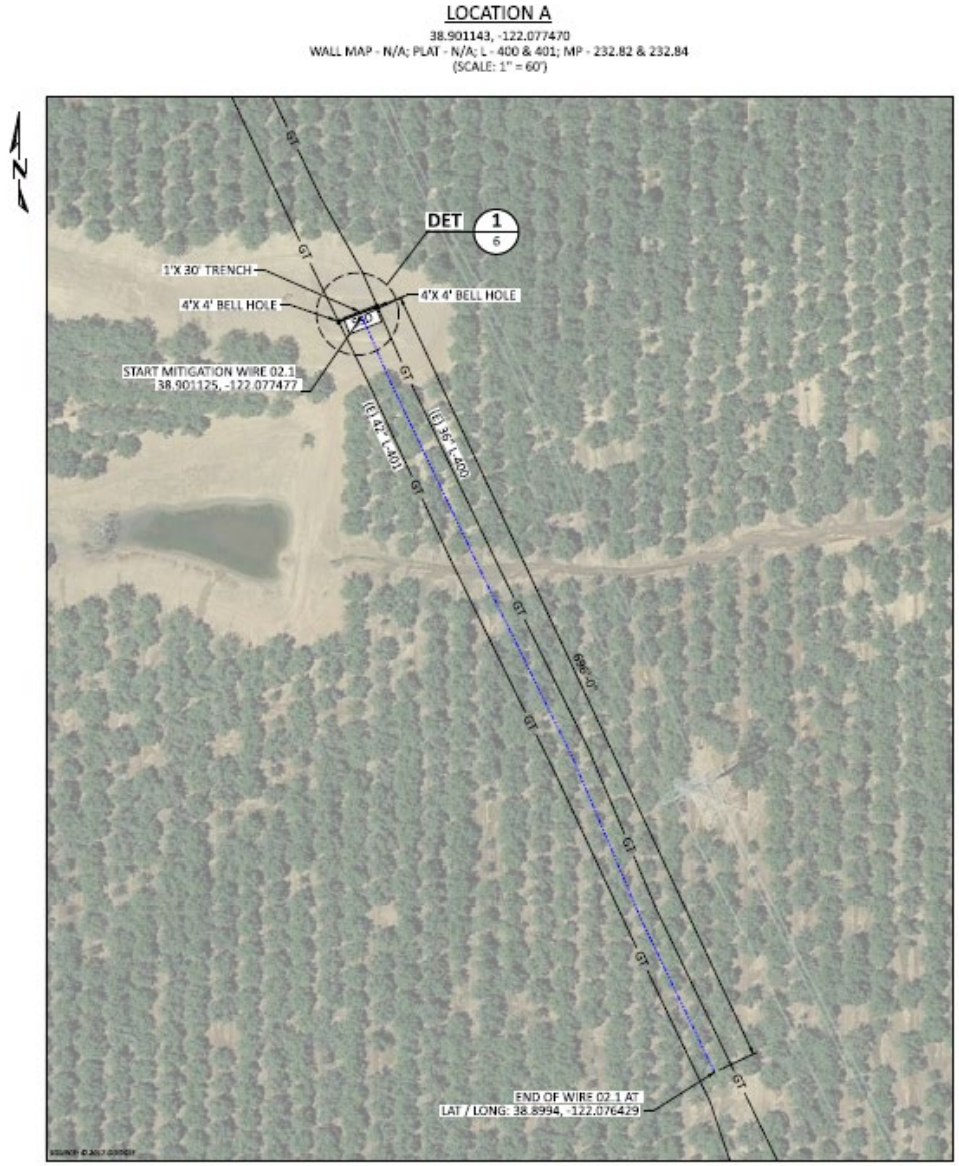
APN 062-080-003

- Owner –Durst Home Ranch, LLC
- Site Address – 23710 County Road 13, Capay, CA

Attachment 2 – Vicinity Map



Attachment 3 – Site Plan

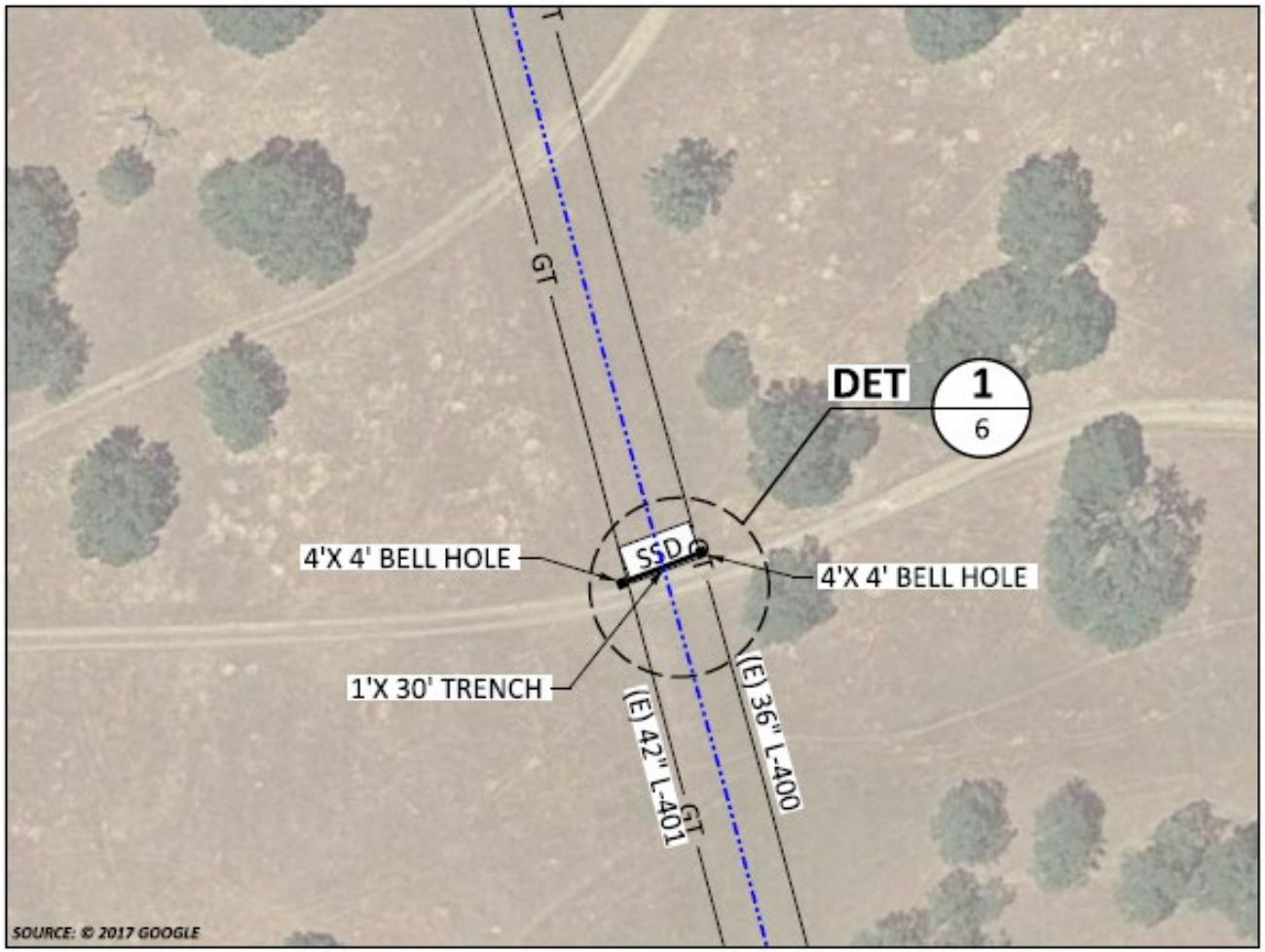


LOCATION B

38.897621, -122.075773
WALL MAP - N/A; PLAT - N/A; L - 400 & 401; MP - 233.10 & 233.10
(SCALE: 1" = 60')

LOCATION C

38.894174, -122.074569
WALL MAP - N/A; PLAT - N/A; L - 400 & L-401; MP - 233.35 & 233.34
(SCALE: 1" = 60')



LOCATION D

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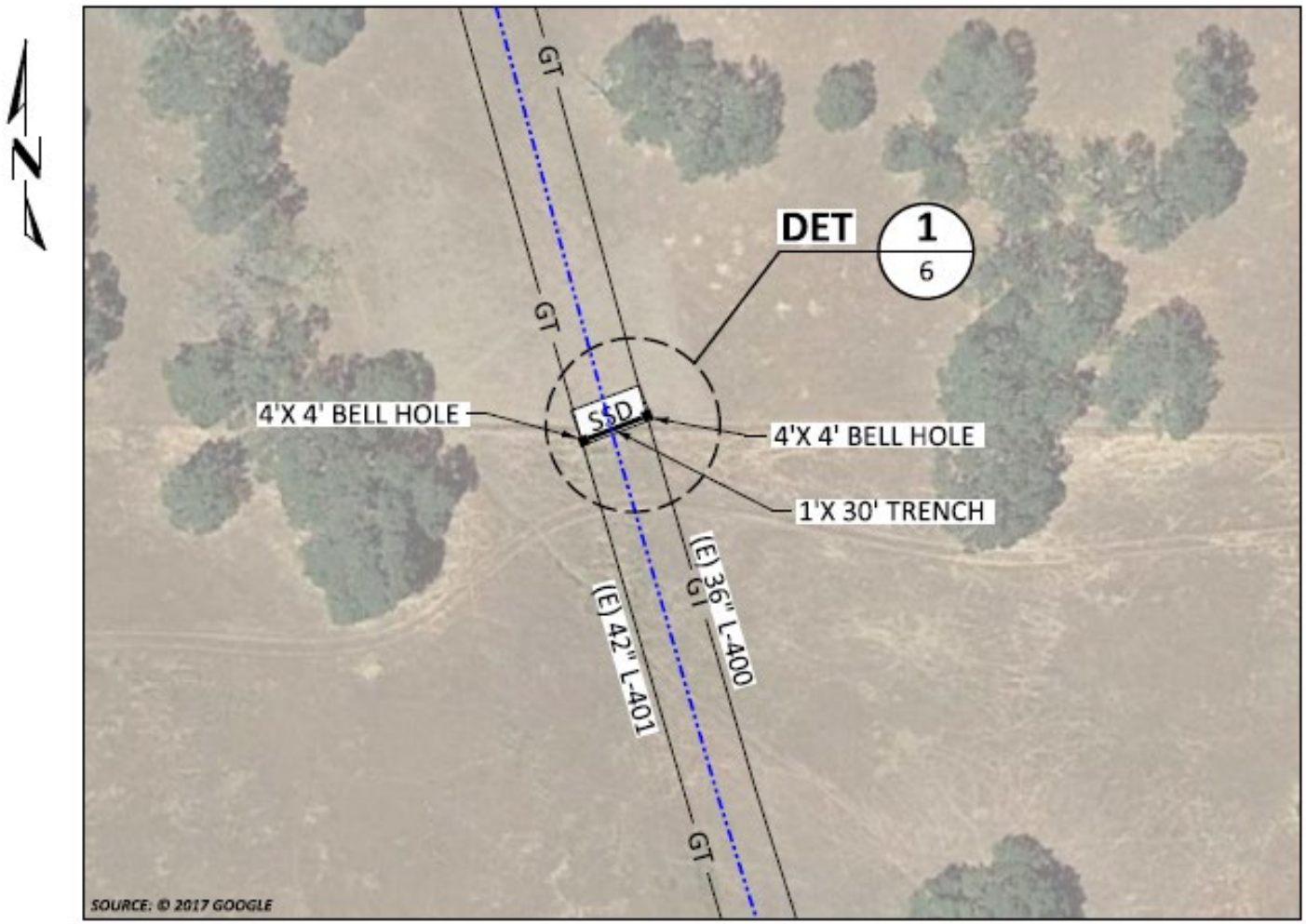

LOCATION E

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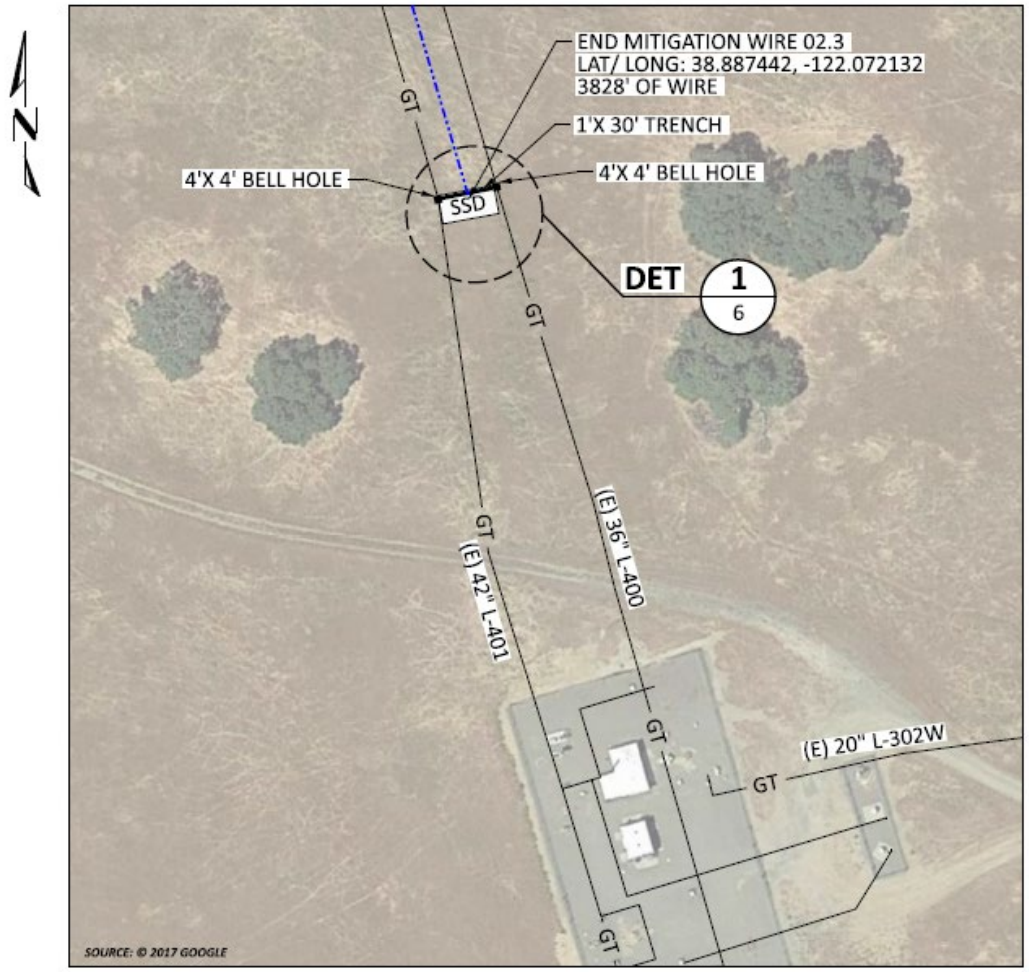


Attachment 4 – Planning Survey Report

Swaim Biological Incorporated
4435 First Street
Livermore, CA 94551

To: Marjorie Eisert
Jacobs Engineering Group Inc.

From: Eric Britt
Swaim Biological Incorporated

Date: April 12, 2022 (revised May 2, 2022)

Re: C-1637 Yolo County – Planning Level Assessment

PG&E plans to install approximately 5,100 feet of horizontal mitigation wire and five SSD cabinets west of the town of Dunnigan in Yolo County. The project, referred to as C-1637, includes an impact area of 4.15 acres and includes access routes and temporary workspaces north of PG&E's existing Buckeye Station. PG&E is seeking take coverage for the project under the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) and the Yolo Habitat Conservancy (Conservancy) considers this a public utility infrastructure operations and maintenance project, which is an HCP/NCCP covered activity.

This memorandum presents the results of a planning level assessment of the C-1637 workspace. A summary of the existing land cover within a 500-foot and ¼-mile buffer of the proposed project area and known species data from the California Natural Diversity Database (CNDDB) within 5-miles of the project area are presented in Figures 1-15. Representative site photographs are presented in Attachment 1.

Project Description

This linear project includes five work locations spanning four private parcels in Yolo County. The mitigation wire will be installed between Gas Lines 400 and 401, within PG&E's existing easement. To minimize orchard crop loss and impacts, roughly 1,275 feet of wire will be installed via horizontal directional drilling (HDD). The remaining wire will be installed via open trench. Each of the five SSD cabinets will require two 4' x 4' bell holes and a 1' by 30' trench connecting them. A bulldozer-mounted plow will be used to install the mitigation wire, placing it near the same depth of the gas lines which ranges from 3 to 6 feet. In areas where a plow is not feasible, a backhoe will be used to excavate the trenches. A backhoe will be used to dig the HDD splice/termination locations and the trenches to the SSD locations.

Staging and workspace areas will be located within the orchard at the northern end of the project and along the wire installation. In areas where PG&E's workspaces extend beyond the existing PG&E easement, a Temporary Construction Easement (TCE) will be acquired. All workspaces and staging areas will be located on private property. To access the project area, existing dirt road will be used.

Access to the project area will be from Road 84 (Wildwood Rd.) from the northeast, and from an approximately 2.8-mile existing graveled ranch road accessed from Road 8 from the south.

Methods

A desktop level assessment of the project area, including a review of modeled habitat and database query, was performed prior to the field survey. A review of the project area using the HCP/NCCP online GeoMapper tool (Yolo Habitat Conservancy 2022) identified modeled habitat for six species covered under the HCP/NCCP within the project footprint and a search of the California Natural Diversity Database (CNDDB 2022) identified records of some of the species in the project vicinity. Covered Species that were identified as having the potential to be affected by the project included the California tiger salamander (*Ambystoma californiense*; CTS, upland habitat), tricolored blackbird (*Agelaius tricolor*; TRBL foraging habitat), Swainson's hawk (*Buteo swainsoni*; SWHA, natural foraging habitat), white-tailed kite (*Elanus leucurus,* WTKI, primary foraging and nesting habitat), burrowing owl (*Athene cunicularia*; BUOW, primary habitat), and western pond turtle (*Actinemys marmorata*; WPT, nesting and overwintering habitat).

The planning survey was conducted by Conservancy-approved biologist Eric Britt and by biologist Ryan Byrnes on March 17, 2022. The biologists walked the entirety of the project footprint and adjacent habitat within a 500-foot buffer to evaluate the suitability of habitat for CTS, BUOW, and other special status wildlife species. Transects were walked in accordance with California Department of Fish and Wildlife (CDFW) guidelines for Phase II BUOW burrow surveys. Burrows suitable for use by BUOW were recorded by a hand-held GPS. The area was surveyed on foot or scanned with binoculars within a 0.25-mile buffer for potential foraging and nesting habitat suitable for use by SWHA and WTKI. Representative photos were taken during the survey and are provided in Attachment 1. Special-status species habitat and impact areas are shown in Tables 1 and 2.

Results

C-1637 Temporary Workspace

The temporary workspace is dominated by an almond orchard in its northern third, oak savanna in its middle third and annual grassland in its southern third. The areas dominated by annual grassland and oak savanna were separated by a barbed-wire fence and both areas were heavily grazed by cattle. The property on the south side (annual grassland) was un-grazed and was dominated by annual grasses.

The workspace is located approximately two miles west of U.S. Fish and Wildlife Service designated critical habitat for CTS, Unit 1, Dunnigan Creek (USFWS 2005) and eight records of CTS occur within 5.0 miles of the site (CNDDB 2022), with all but one record presumed extant. There are no records of CTS within 1.3 miles of the project site, which is the maximum distance CTS have been observed from a breeding site (Orloff 2007; CDFW

2010). An assessment conducted in 2018 for PG&E of the area surrounding Buckeye Station and eight other work areas identified approximately 30 ponds within 1.24 miles of the project and concluded that most of them were suitable for CTS breeding (Stantec 2018). The assessment concluded that there was potential for CTS to occur within the project area due to the presence of small mammal burrows, potential breeding sites, and known database records of CTS in the surrounding area.

During the field survey, no suitable aquatic breeding habitat for CTS was observed within 500 feet of the project area, however potentially suitable aquatic breeding habitat is present within 1.3 miles. Suitable aquatic habitat observed during the survey included an agricultural stock pond located within the almond orchard just south of the northern terminus of the project alignment, and a second stock pond approximately 0.21 mile west of the project area also may be suitable to support CTS. An examination of past aerial imagery indicated that it retained water until early to mid-summer during most years (Google Earth 2022). A small dried seasonal depression was observed approximately 400 ft. west of the project alignment within the oak savanna area that could be suitable to support CTS breeding during some years. Suitable upland habitat and a high density of small mammal burrows were found within 500 feet of the alignment south of the agricultural area.

No ground squirrel activity was observed in the almond orchard surrounding the northern third of the project area and burrows suitable for use by BUOW were limited. Only two burrows suitable for use by BUOW were found within the survey area. One was located in the oak savanna area approximately 390 feet to the west of the project alignment, and the other was within the staging area at the north end of the project within the almond orchard. No evidence of use by BUOW (feathers, pellets, whitewash, etc.) was observed during the field survey.

One stick nest suitable for use by raptors was observed in a steel electrical tower located within the almond orchard (Figure 1). The nest was located approximately 78 feet east of the gas line and 200 feet north of an HDD work and staging area. This nest was composed partly of human-made items and is unlikely to be used by SWHA. A raven was observed on the tower at the time of the survey. The nearest SWHA nest record is located approximately 2.5 miles to the southeast (CNDDB 2022). All five nesting records within five miles of the project area are associated with row crop or orchards immediately adjacent to the nest site (CNDDB 2022).

Habitat suitable for nesting by TRBL was absent from the project footprint and from a buffer of at least 1,300 feet. The HCP/NCCP defines tricolored blackbird nesting habitat as containing one of five vegetation types which include Alkali Bulrush, Bulrush – Cattail Wetland Alliance, Bulrush – Cattail Fresh Water Marsh NFD Super Alliance, Blackberry NFD Super Alliance, or Undifferentiated Riparian Bramble and Other (ICF 2018-Appendix A). These vegetation types were absent from the 0.25-mile buffer around the project area (Figure 1). The CNDDB contained one nesting record of TRBL within eight miles of the project which consisted of a nesting colony located about three miles to the northeast (CNDDB 2022). There is some potential for TRBL to forage in the project area

and vicinity, and the project will impact modeled TRBL foraging habitat. However, no nesting habitat will be impacted, and nesting by TRBL within 1,300 feet of the project is not expected.

The HCP/NCCP land cover types found at this location consist of Grassland – California Annual Grassland Alliance, Valley Oak Woodland – Valley Oak Alliance, Fresh Emergent Wetland – Undetermined Alliance/Managed, Other Agriculture – Deciduous Fruit/Nuts, Dry Creek, Scrub and Barren and Developed – Barren-Anthropogenic. Construction activities will temporarily affect 1.18 acres of Grassland, 2.76 acres of Blue Oak Woodland, 0.06 acres of Semiagricultural, and 0.15 acres of Other Agriculture.

C-1637 Access Road

Access to the C-1637 workspace will make use of existing roads used for agricultural use. No impacts to habitat for Covered Species are anticipated to facilitate project access.

Table 1. Special-Status Species Modeled Habitat Found Within Project Area.

Species (Buffer)	Habitat Type	Total Area within Buffer (Acres)	Total Area of Impacts (Acres)
CTS (500 feet)	Aquatic	0.00	0.00
	Upland	111.90	3.94
SWHA (1/4 mile)	Foraging and nesting	190.59	1.18
TRBL (1,300 feet)	Foraging	190.59	1.18
BUOW (500 feet)	Foraging and nesting	2.45	0.20
WPT (500 feet)	Nesting and overwintering	68.30	2.05

Table 2. Project Impacts by Land Cover Types.

Land Cover Types	Area Within Workspace (Acres)	Area within 500 ft. (Acres)	Area within 0.25 miles (Acres)	Total Area of Impacts (Acres)
Annual Grassland	1.18	38.38	187.00	1.18
Barren	0.00	1.47	17.06	0.00
Blue Oak Woodland	2.76	70.20	158.60	2.76
Fresh Emergent Wetland	0.00	0.00	0.07	0.00
Lacustrine and Riverine	0.00	0.00	0.66	0.00
Other Agriculture	0.15	38.56	97.57	0.15
Semiagricultural	0.06	1.01	5.95	0.06
Valley Foothill Riparian	0.00	0.00	1.89	0.00

Conclusion

A desktop level review identified the potential for six HCP/NCCP Covered Species to occur in the C-1637 project area. These included the CTS, TRBL, SWHA, WTKI, BUOW and WPT, and based on the planning level survey, there is some potential for all of these species to occur in the project area. Although TRBL could occur in the project area as foragers, nesting by TRBL within 1,300 feet of the project area is not expected. Implementing the avoidance and minimization measures (AMMs) listed below including conducting preconstruction nesting bird surveys, will help to further reduce or eliminate the risk of impacts to this and other species. Due to the presence of friable soils and sun exposure, there is potential for the WPT to use the project area for nesting, however the distance of the project alignment of at least 0.2 mile from suitable aquatic habitat is expected to reduce the potential for WPT to nest in the project footprint. The implementation of AMM 14 will further help to minimize the potential for impacts to the WPT and its nests.

Approximately 1.18 acres of Grassland, 2.76 acres of Blue Oak Woodland, 0.06 acre of Semiagricultural, and 0.15 acres of Other Agricultural land will be temporarily impacted as a result of project implementation. The land cover types that will be affected by the project area shown below in Figures 1 and 2.

Literature Cited

CDFW. 2010. California Department of Fish and Wildlife, State of California. A Status Review of the California Tiger Salamander (*Ambystoma californiense*). Report to the Fish and Game Commission.

California Natural Diversity Database. 2022. [CNDDB] GIS dataset for March 2022.

Google Earth. 20222 Historical Imagery data layer. [Online] Available at: http://www.google.com/earth/index.html [Accessed March 22, 2022].

ICF. 2018. Yolo Habitat Conservation Plan/Natural Community Conservation Plan, Volume 1. Final. Prepared for Yolo Habitat Conservancy.

Orloff, S. 2007. Migratory movements of California tiger salamander in upland habitat – a five-year study (Pittsburg, California). Ibis Environmental, Inc., prepared for Bailey Estates LLC. Dated May.

Stantec. 2018. California Tiger Salamander Site Assessment for the I-236B Buckeye Station Expansion Project. Technical memorandum to Rick Williams, Pacific Gas and Electric Company.

U.S. Fish and Wildlife Service. 2005. [USFWS]. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the California Tiger Salamander, Central Population; Final Rule. 49380-49458.

Yolo Habitat Conservancy. 2022. GeoMapper online web application. Query for PG&E's C-1637 project area. Available online at: https://yolo.maps.arcgis.com/apps/webappviewer/index.html. Accessed March 18, 2022.

The following Yolo HCP/NCCP AMMs are proposed for minimizing impacts to these species:

AMM1, Establish Buffers

AMM3, Confine and Delineate Work Area

AMM4, Cover Trenches and Holes During Construction and Maintenance

AMM5, Control Fugitive Dust

AMM6, Conduct Worker Training

AMM7, Control Night-Time Lighting of Project Construction Sites

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

AMM9, Establish Buffers Around Sensitive Natural Communities

AMM13, Minimize Take and Adverse Effects on Habitat of California Tiger Salamander

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

AMM16, Swainson's hawk and white-tailed kite (This AMM does not apply if the construction period is between September 1 and March 14)

AMM18, Minimize Take and Adverse Effects on Western Burrowing Owl

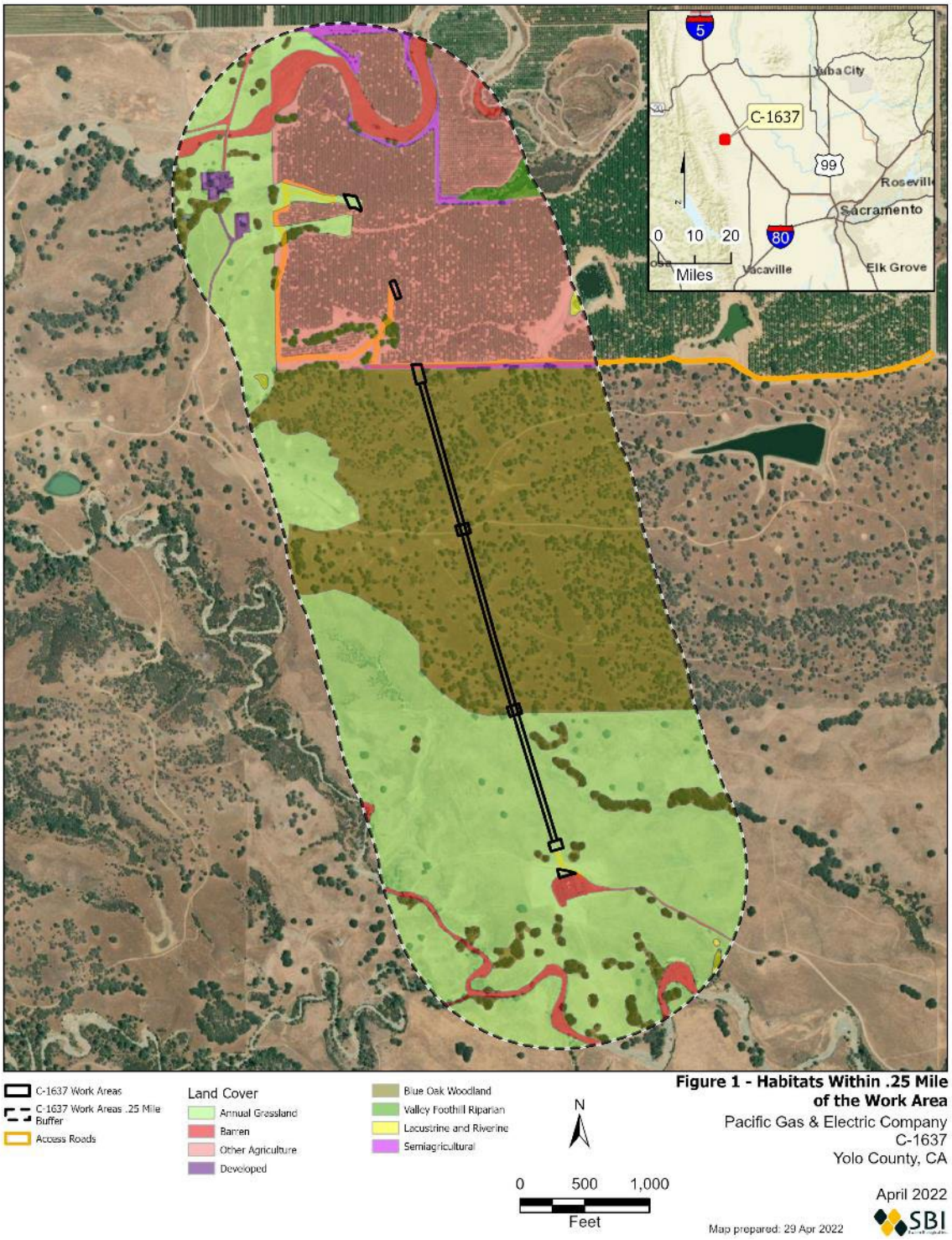


Figure 1. Land cover types within 0.25-mile of project footprint.

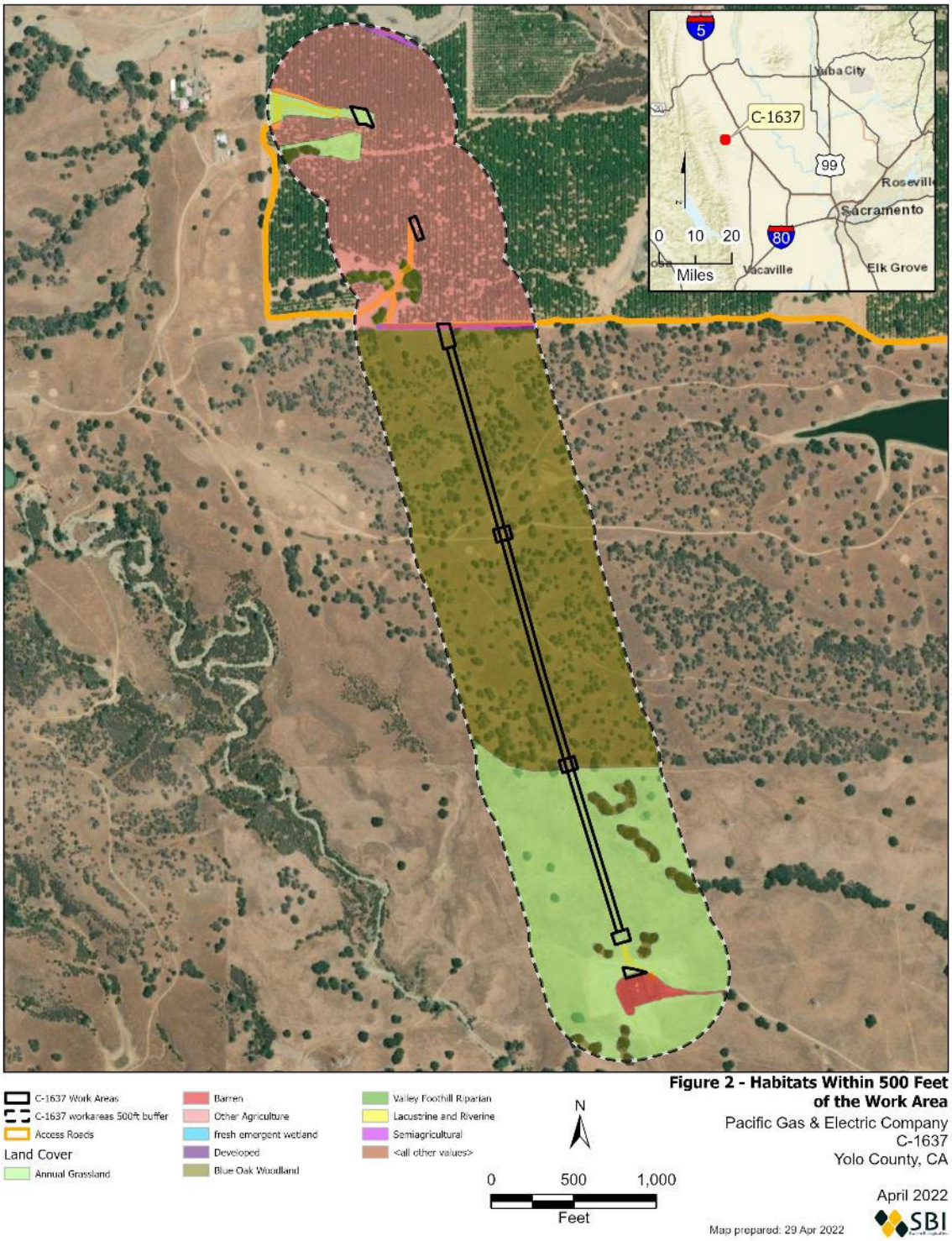


Figure 2. Land cover types within 500-feet of project footprint.

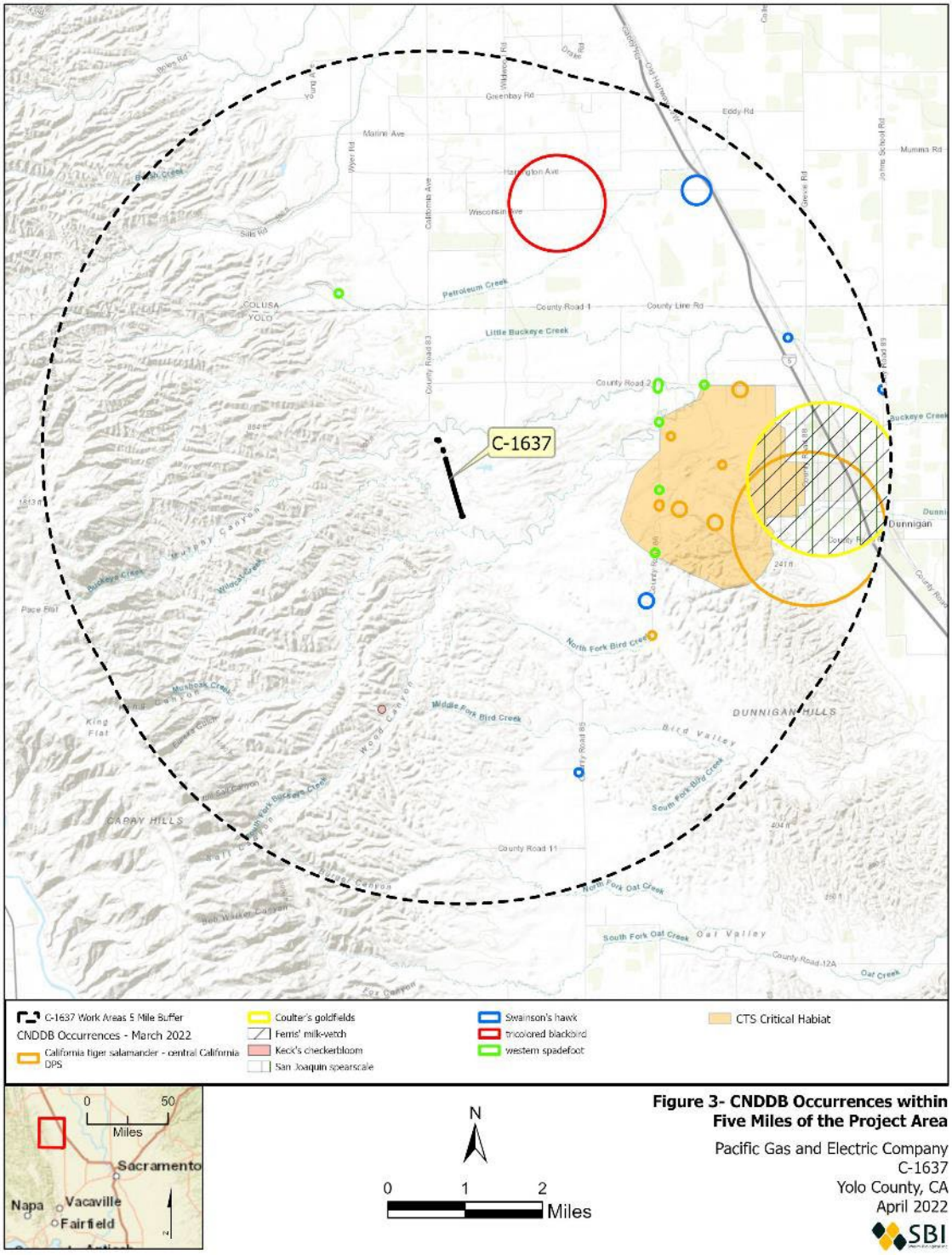


Figure 3. CNDDB Occurrences within 5-miles of project footprint.

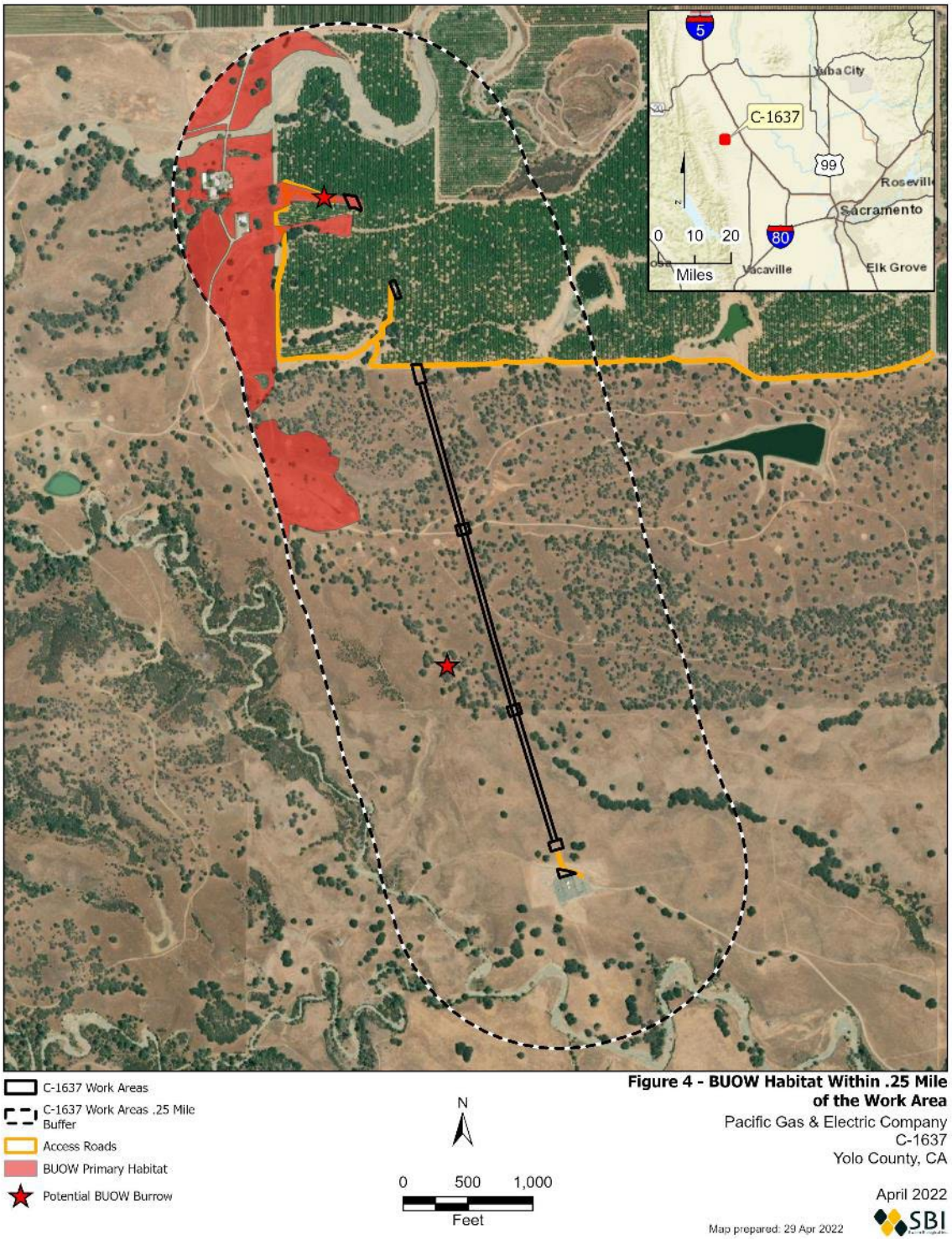


Figure 4. Modeled burrowing owl habitat within 0.25 mile of project footprint.

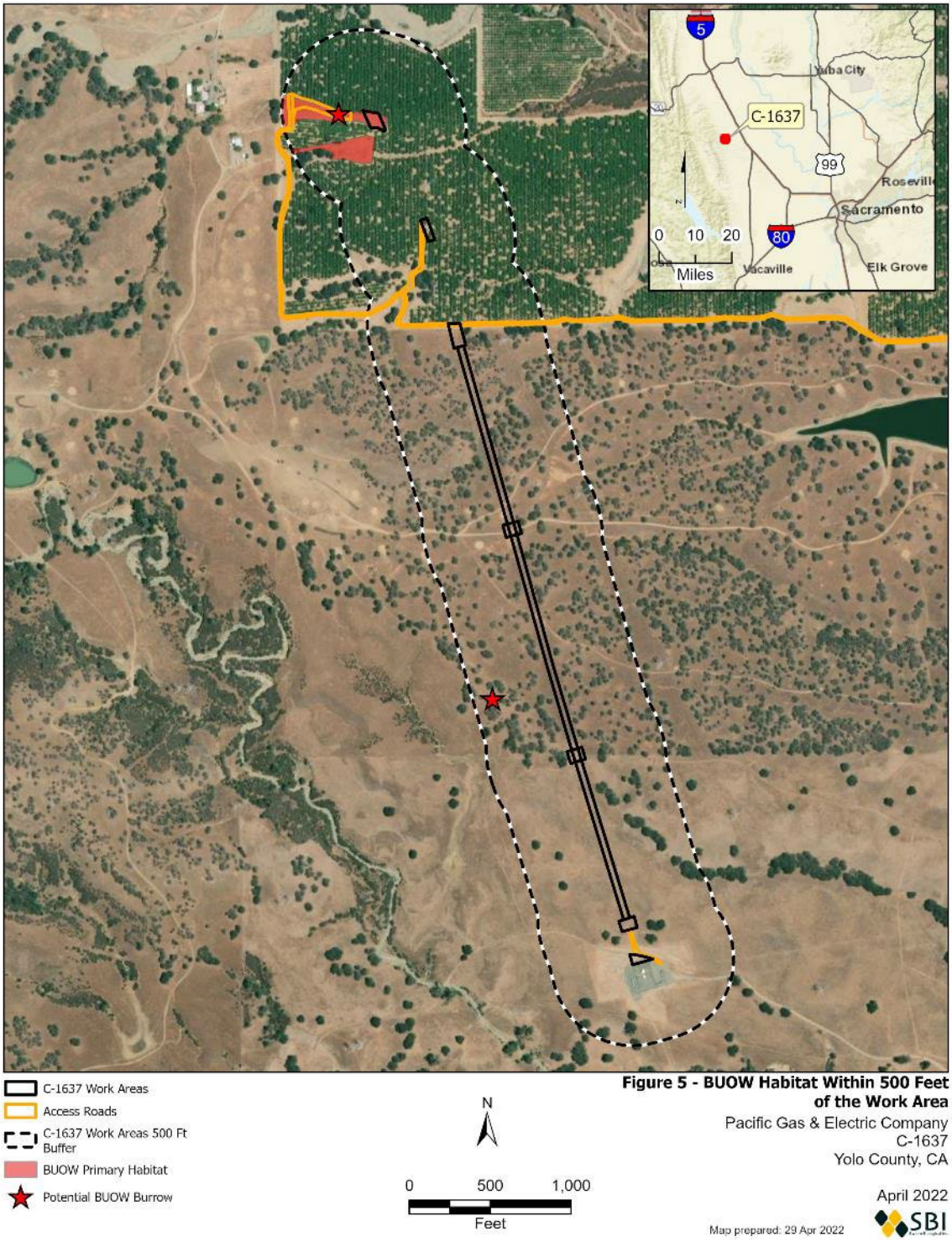


Figure 5. Modeled burrowing owl habitat within 500 feet of project footprint.

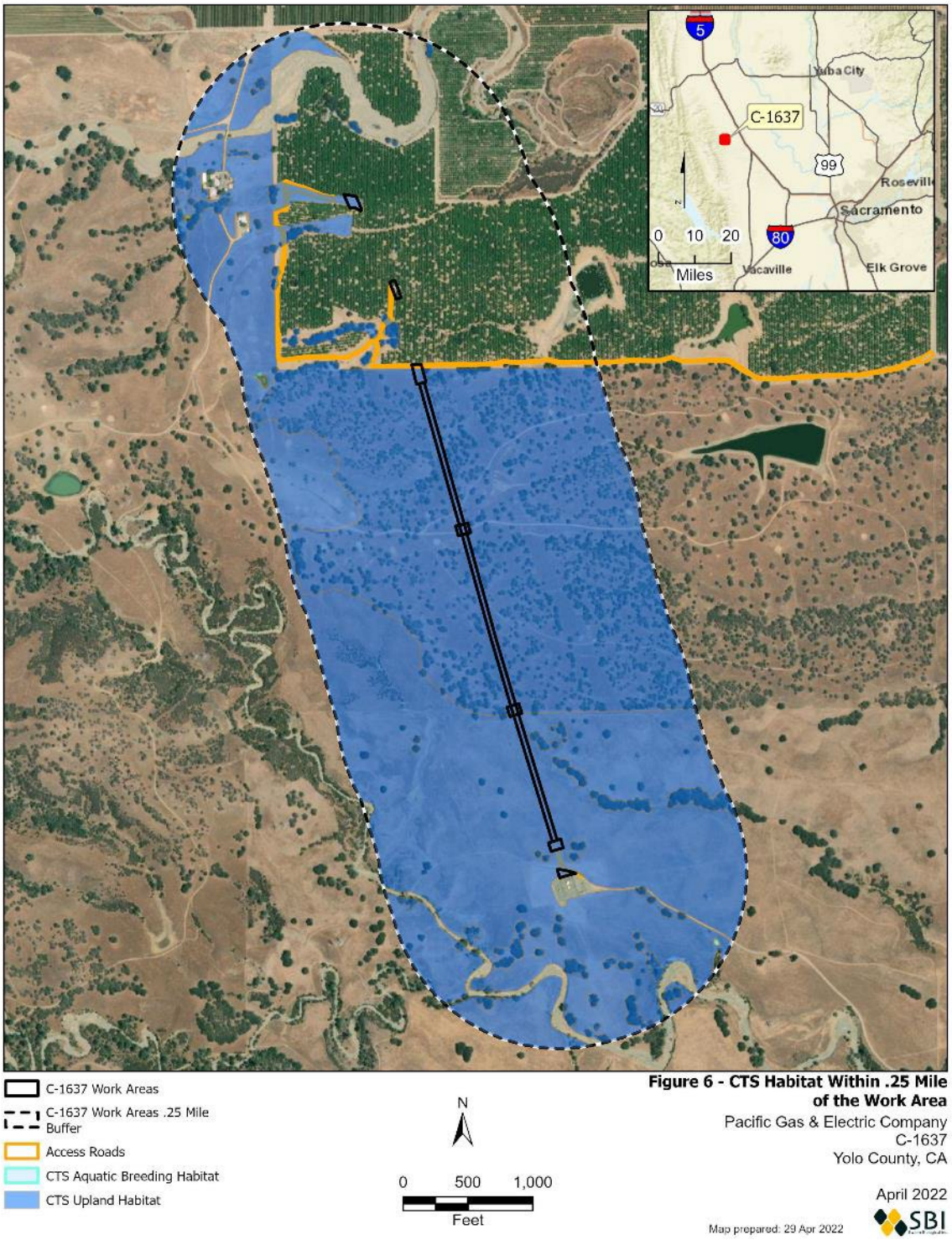


Figure 6. Modeled California tiger salamander habitat within 0.25 mile of project footprint.

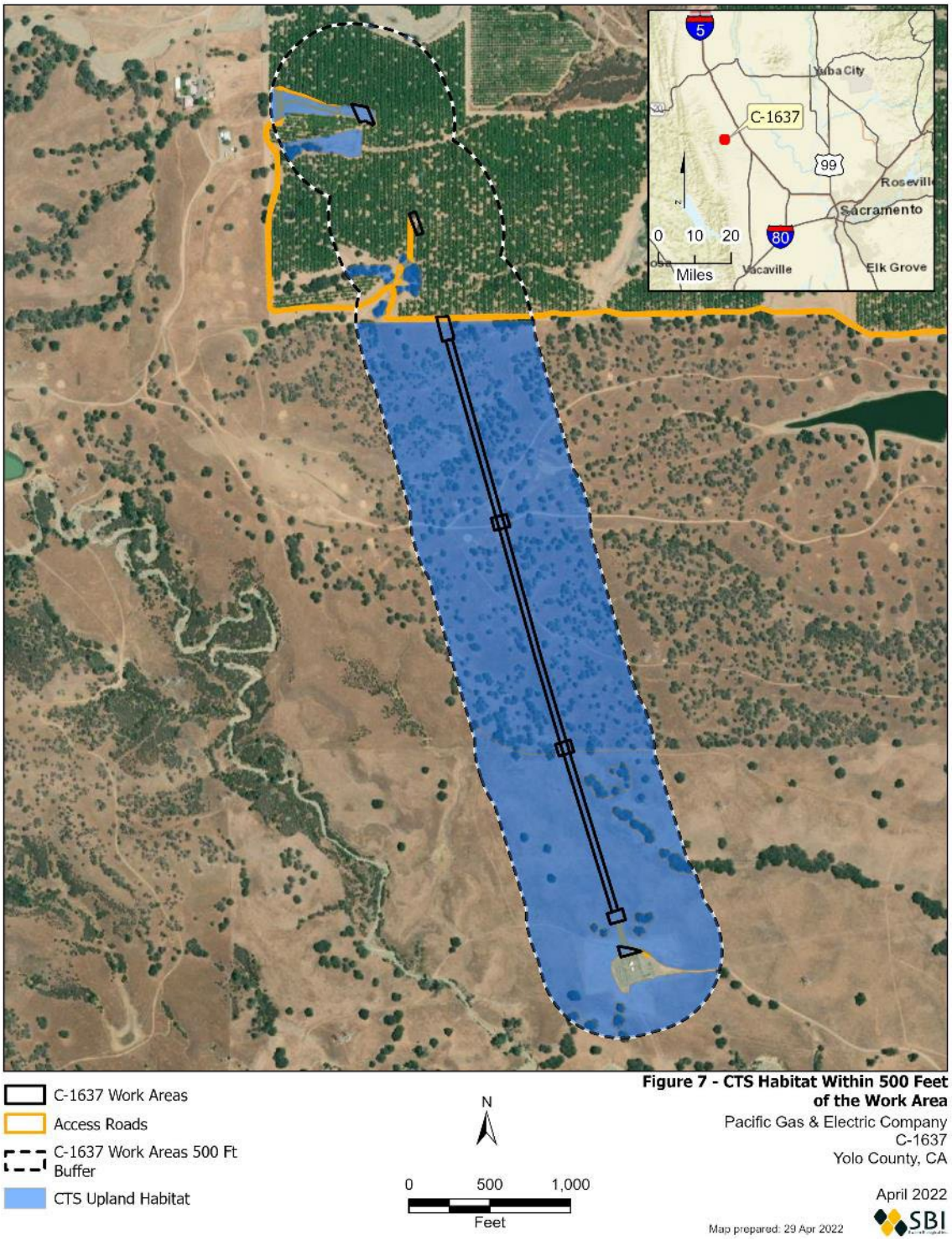


Figure 7. Modeled California tiger salamander habitat within 500 feet of project footprint.

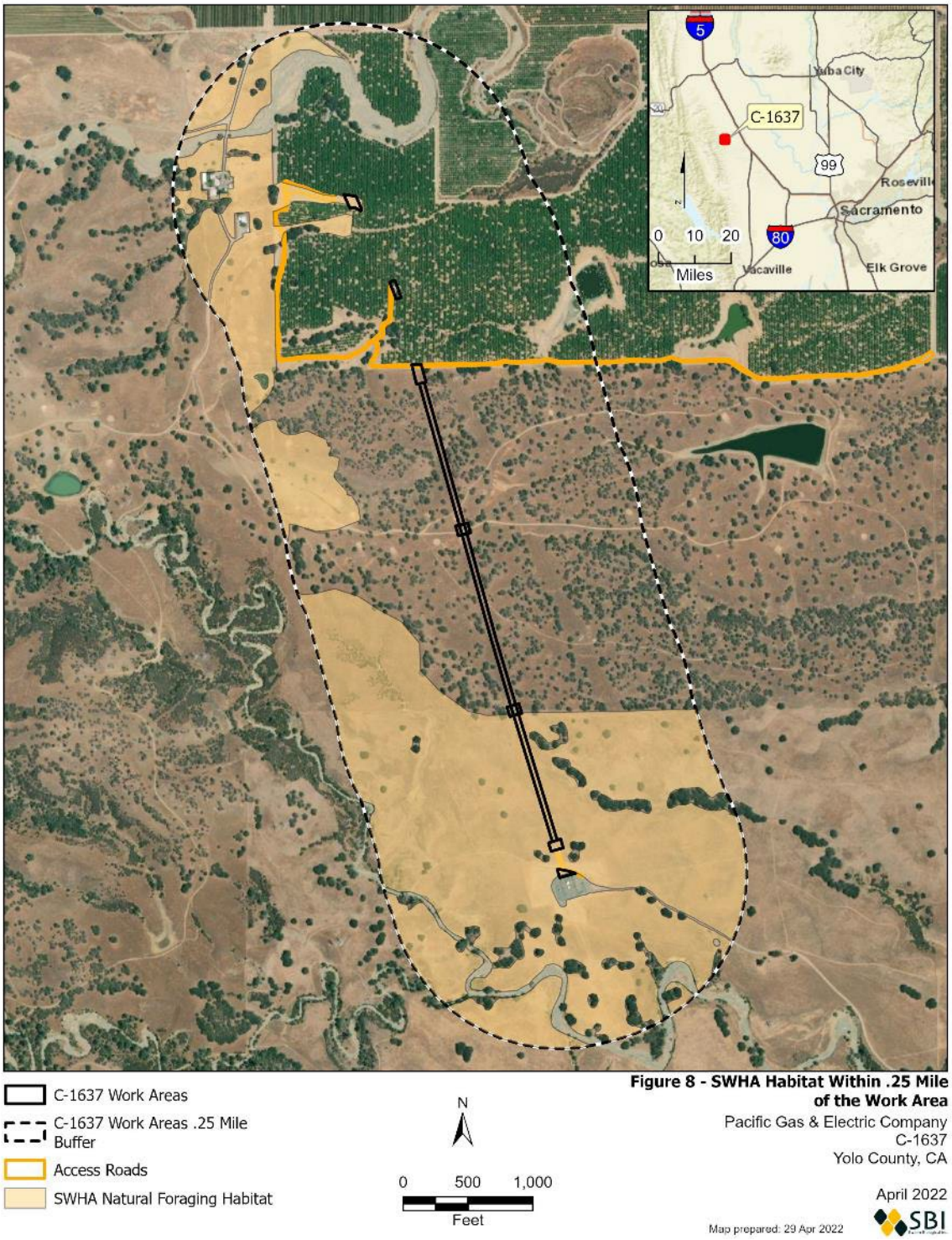


Figure 8. Modeled Swainson's hawk habitat within 0.25 mile of project footprint.

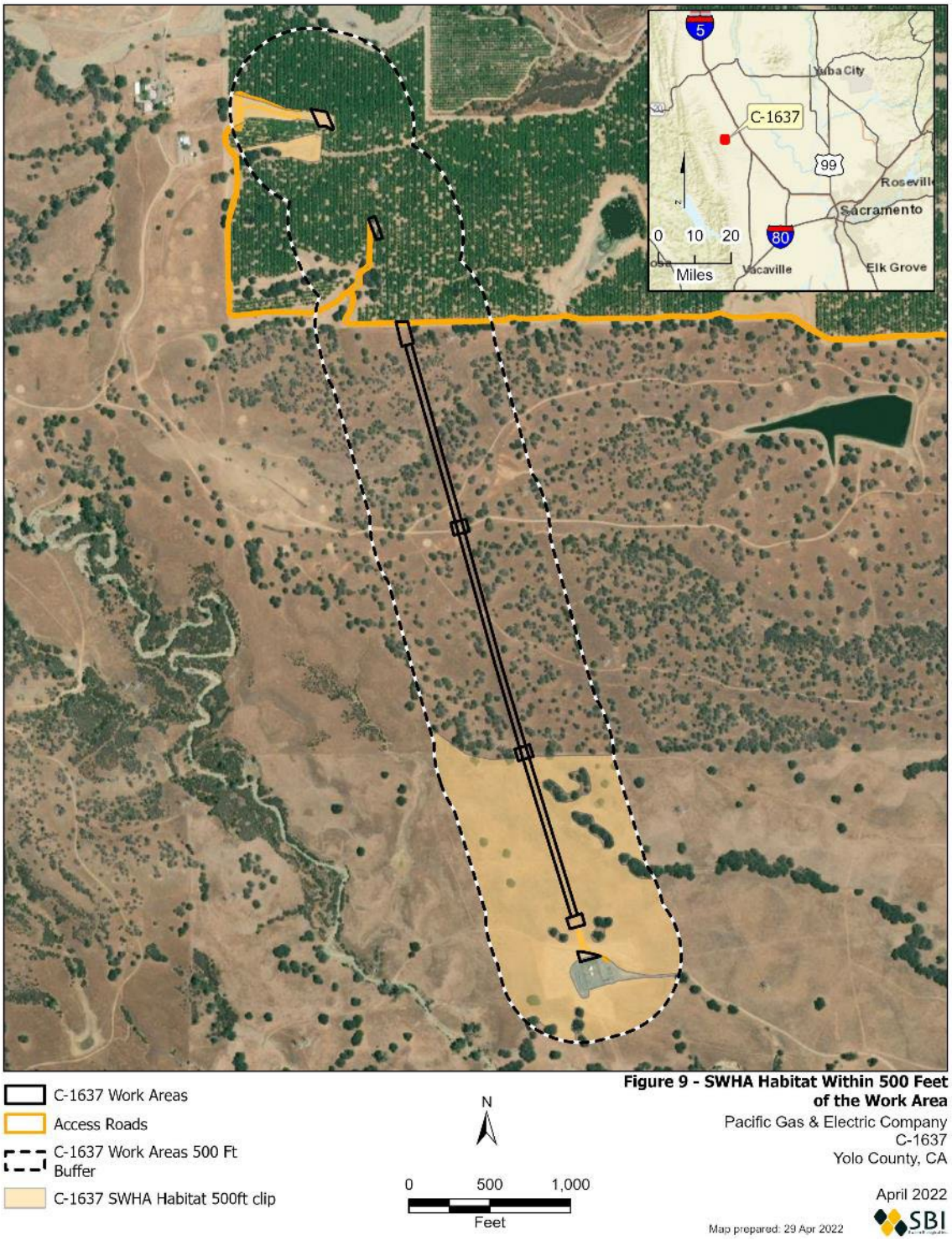


Figure 9. Modeled Swainson's hawk habitat within 500 feet of project footprint.

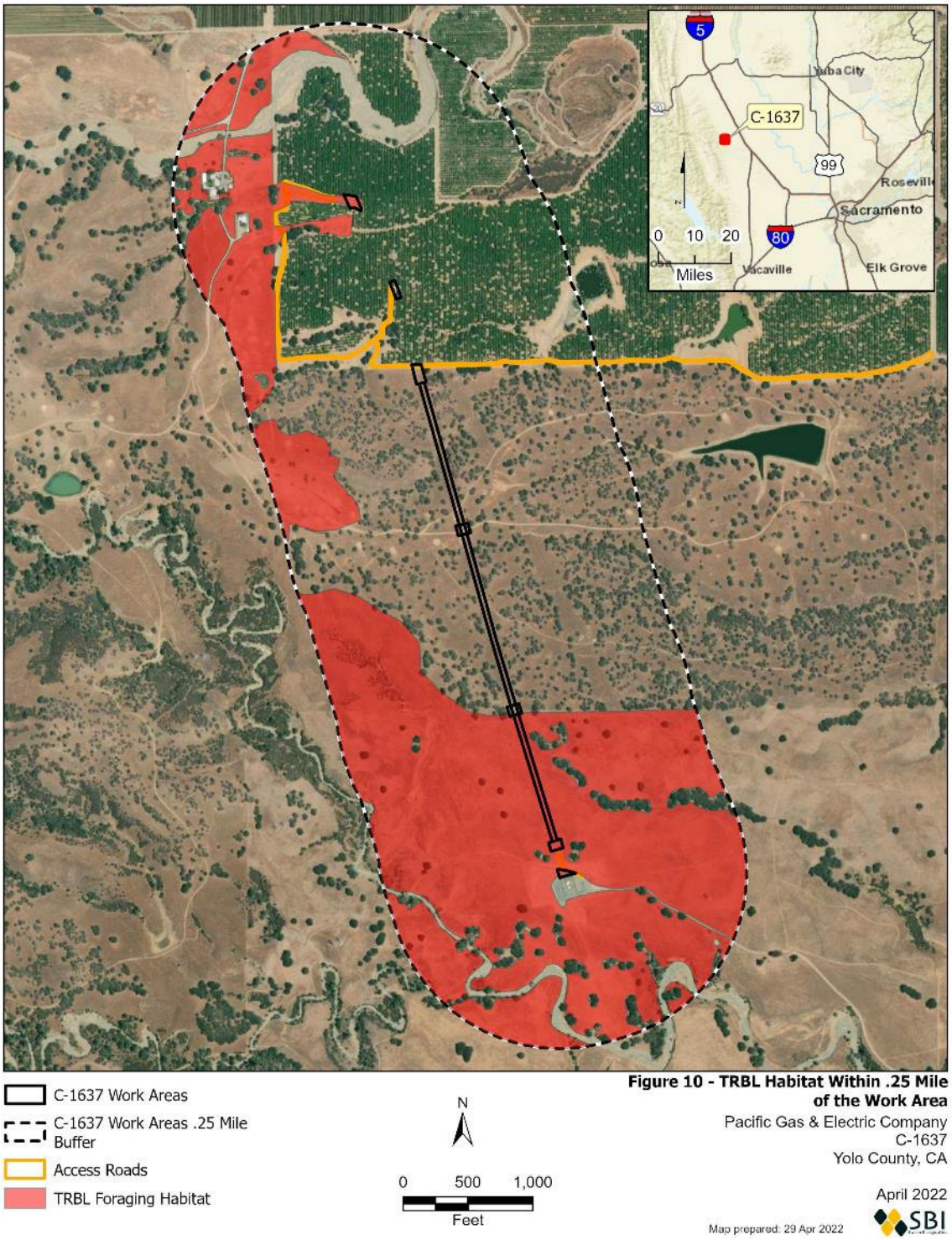


Figure 10. Modeled tricolored blackbird habitat within 0.25 mile of project footprint.

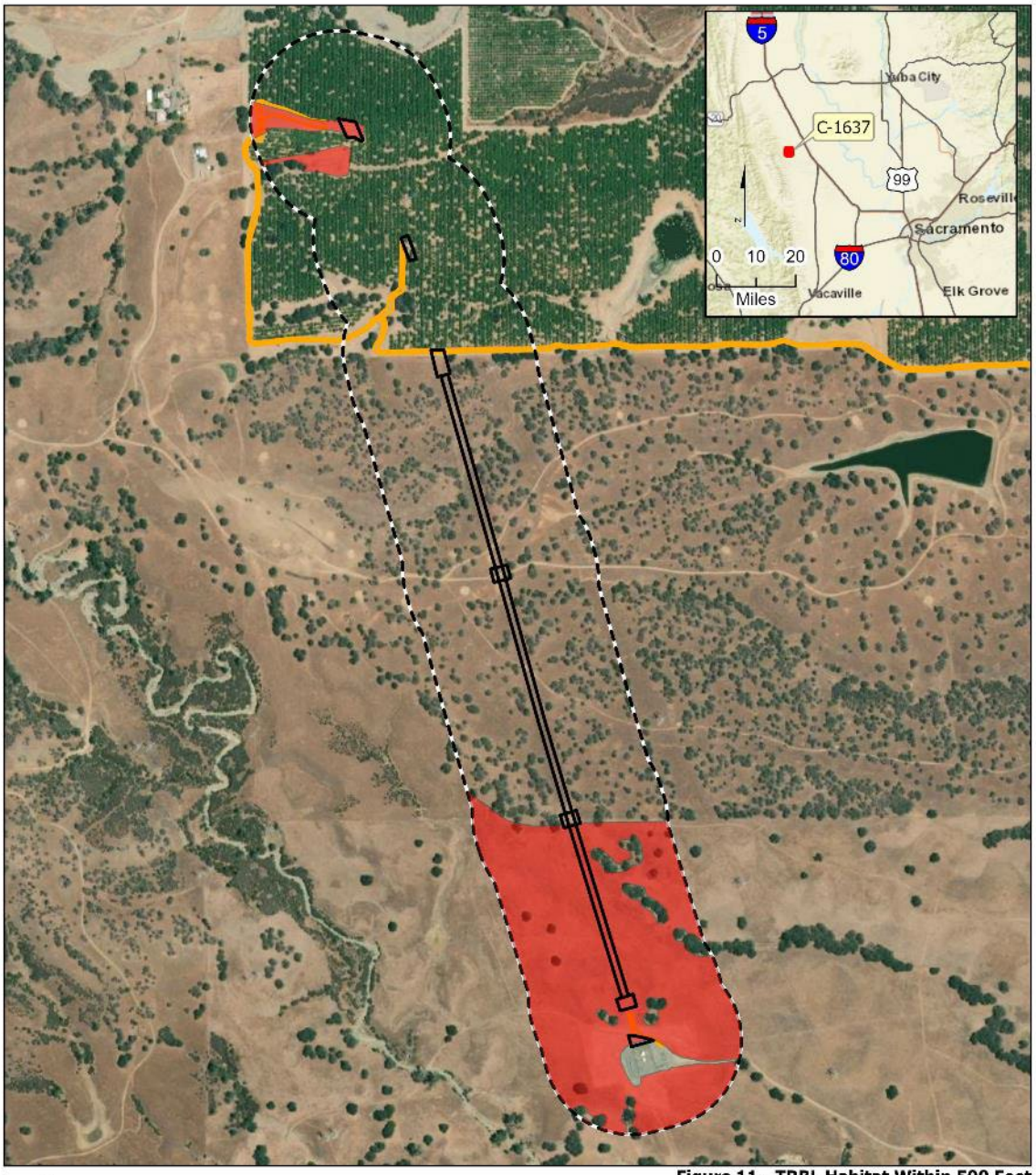


Figure 11. Modeled tricolored blackbird habitat within 500 feet of project footprint.

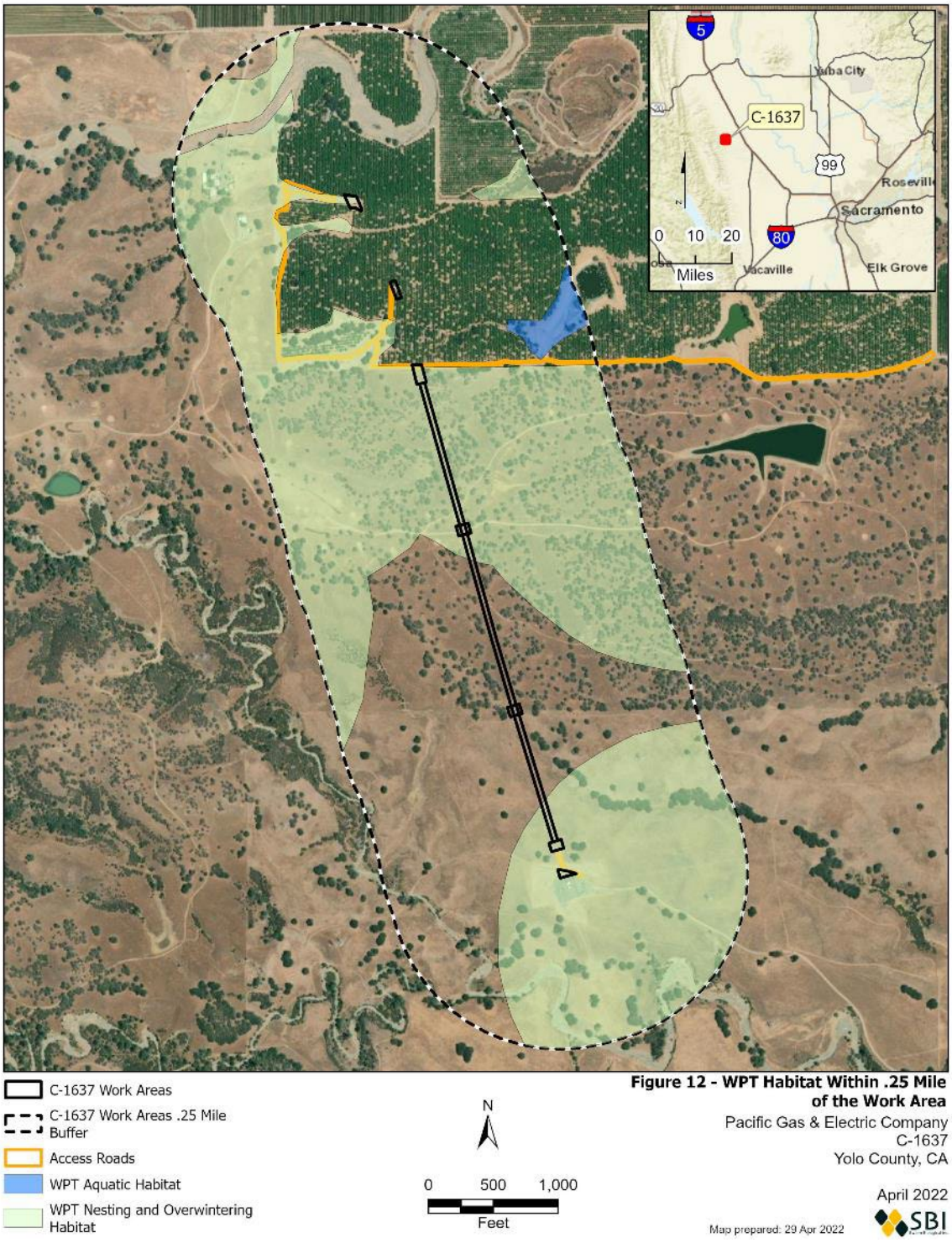


Figure 12. Modeled western pond turtle habitat within 0.25 mile of project footprint.

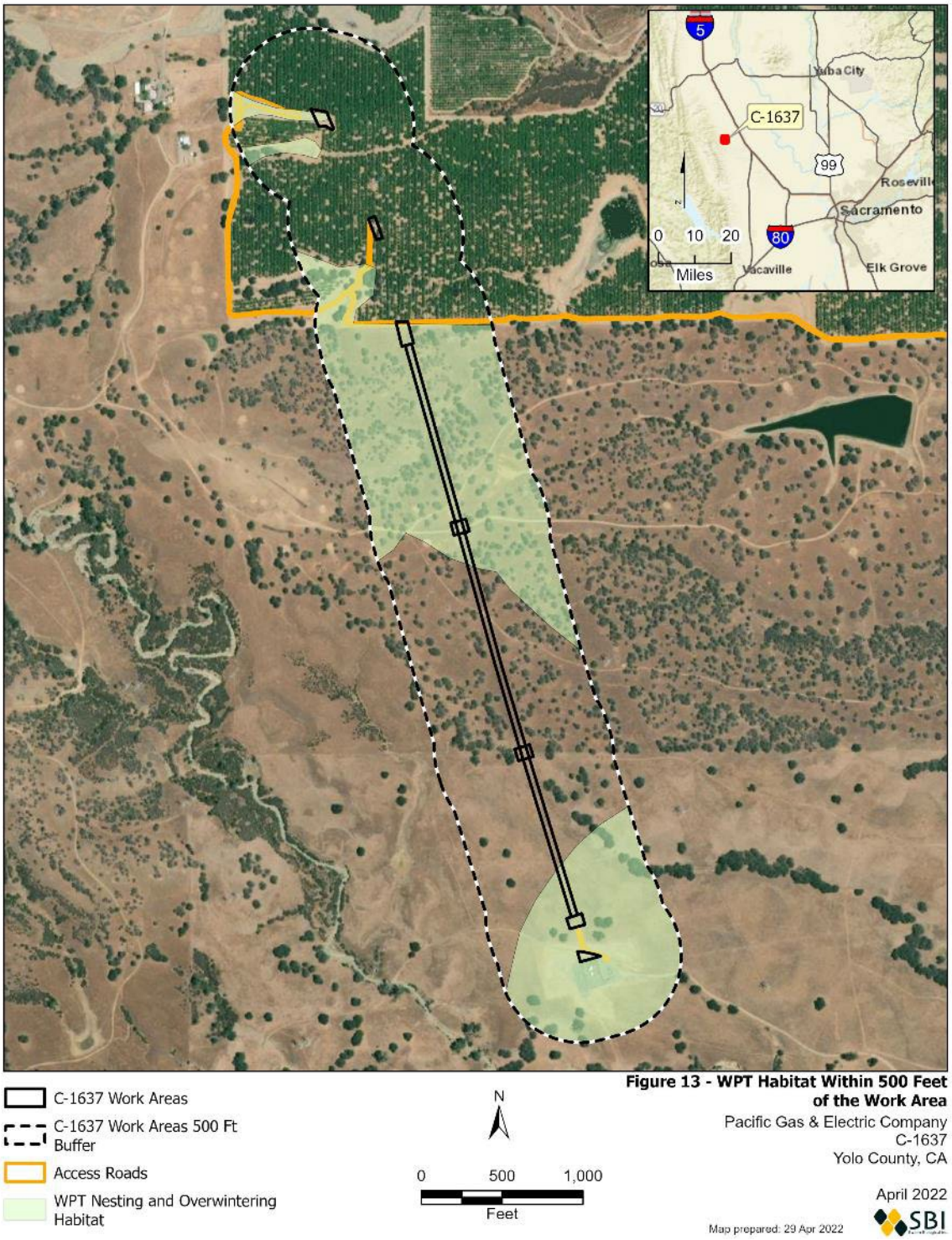


Figure 12. Modeled western pond turtle habitat within 500 feet of project footprint.

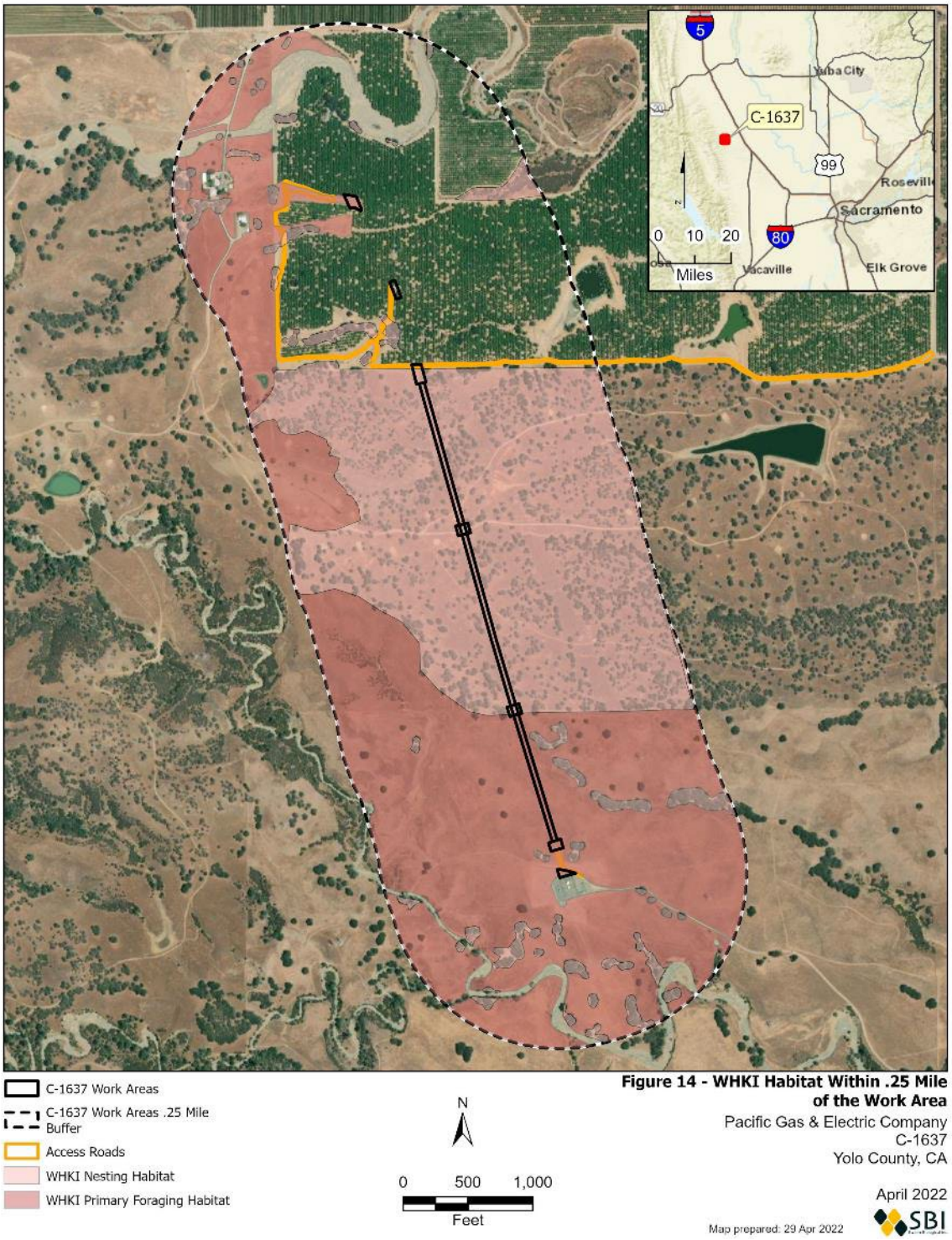


Figure 14. Modeled white-tailed kite habitat within0.25-mile of project footprint.

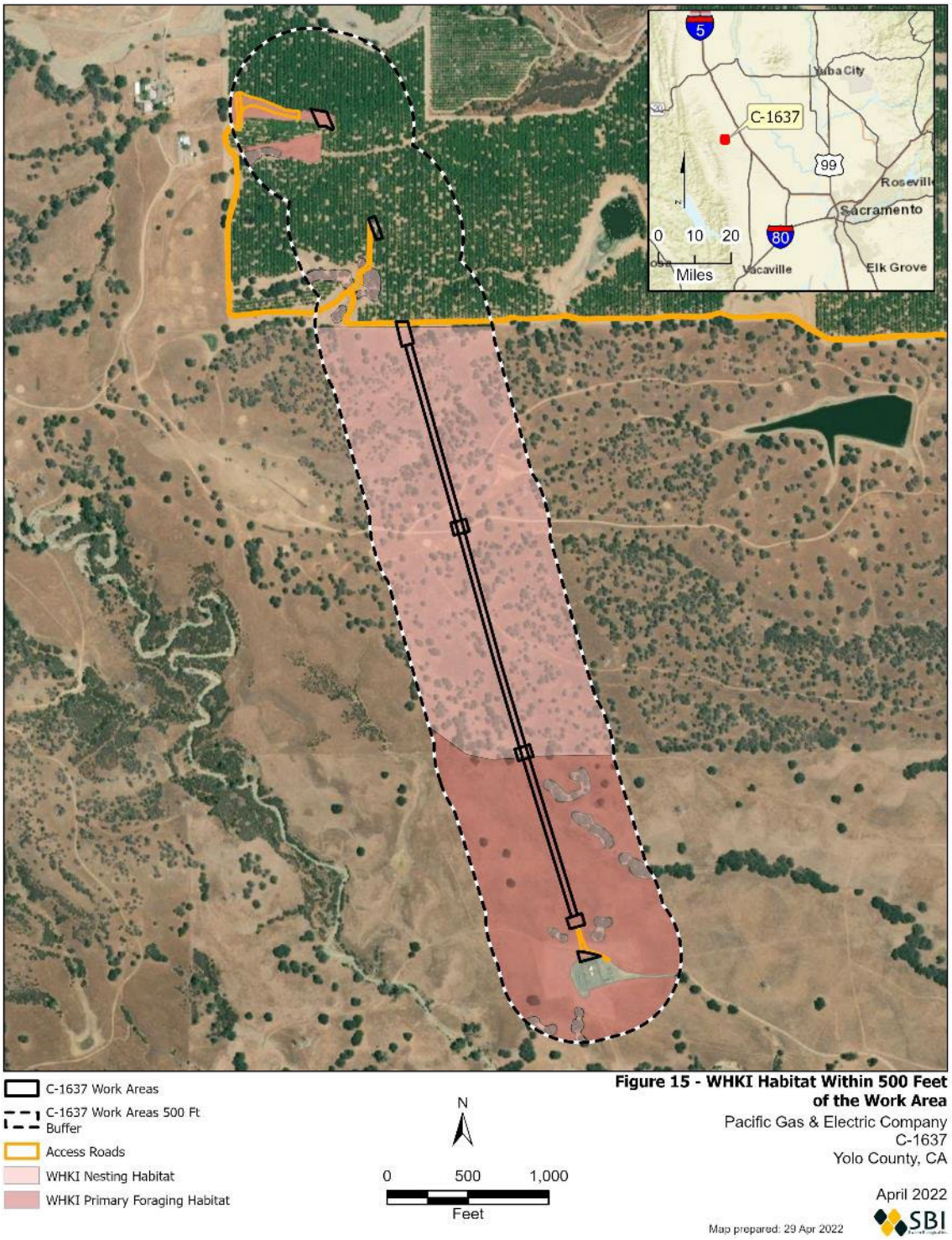


Figure 15. Modeled white-tailed kite habitat within 500 feet of project footprint.

Attachment 1 – Representative Site Photos

Photo 1: Wire 02.1 Start location in almond orchard. Taken facing east.

Photo 2: Embankment near Wire 02.1 Start work area where potential BUOW burrow was observed during survey. Taken facing southeast.

Photo 3: Fresh emergent wetland stock pond within almond orchard agricultural area, adjacent to project area. Taken facing south.

Photo 4: Inactive stick nest located in electrical tower near Wire 02.1 work area, presumed raven nest. Taken facing north.

Photo 5: Burrow cluster adjacent to barbed wire fence line separating oak savanna and annual grassland. Taken facing west.

Photo 6: Burrow located within oak savanna within 10 feet of project footprint. Taken facing west.

Photo 7: Center of project alignment at northern end of Oak Savanna. Taken facing north.

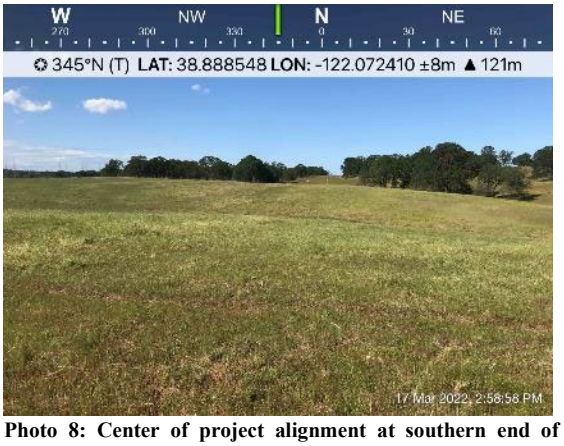


Photo 8: Center of project alignment at southern end of annual grassland. Taken facing north.

Attachment 5 – Photographs of Temporary Impact Areas

Please see Attachment 4 (Planning Level Survey Report) for photographs of the project locations and temporary impact areas.

Attachment 6 – Documentation if Land is Offered in Lieu of Fees

Not applicable to this application.

Attachment 7 – Covered Species Planning Survey Reports

Species-specific surveys were not conducted, so presence is assumed for California tiger salamander, Swainson's hawk, white-tailed kite, burrowing owl, and Western pond turtle. The planning level survey encompassed the entirety of the project footprint and adjacent habitat within a 500-foot buffer to evaluate the suitability of habitat for California tiger salamander and burrowing owl. Transects were walked in accordance with California Department of Fish and Wildlife (CDFW) guidelines for Phase II burrowing owl surveys. The area was surveyed on foot or scanned with binoculars within a 0.25-mile buffer for potential foraging and nesting habitat suitable for use by Swainson's hawk and white-tailed kite.

Preconstruction surveys to determine presence/absence will be conducted and buffers and timing restrictions will apply to the project per the applicable Yolo HCP/NCCP AMMs.

Attachment 8 – Unavoidable Impacts on Covered Species

Please see Attachment 4 (Planning Level and Survey Report) for maps and summary of impacts to HCP/NCCP land cover habitats.

Attachment 9 –Description of Compliance with Avoidance and Minimization Measures

PG&E will incorporate avoidance and minimization measures and compensatory mitigation measures to avoid, minimize, and mitigate impacts to covered species in the Project area. PG&E's overarching strategy is to avoid and minimize impacts to covered species and their suitable habitat to the maximum extent possible by following Yolo County HCP/NCCP avoidance and minimization measures (AMMs), construction site best management practices (BMPs), and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

The following AMMs will apply to the C-1637 project:

AMM1 - Establish Buffers. PG&E will design projects to avoid and minimize direct and indirect effects of permanent development on the sensitive natural communities and covered species habitat by providing buffers, as stipulated in the relevant sensitive natural community AMMs and covered species AMMs.

AMM3 - Confine and Delineate Work Area. Where natural communities and covered species habitat are present, workers will confine land clearing to the minimum area necessary to facilitate construction activities. Workers will restrict movement of heavy equipment to and from the project site to established roadways to minimize natural community and covered species habitat disturbance. PG&E will clearly identify boundaries of work areas using temporary fencing or equivalent and will identify areas designated as environmentally sensitive. All construction vehicles, other equipment, and personnel will avoid these designated areas.

AMM4 – Cover Trenches and Holes during Construction and Maintenance. To prevent injury and mortality of giant garter snake, western pond turtle, and California tiger salamander, workers will cover open trenches and holes associated with implementation of covered activities that affect habitat for these species or design the trenches and holes with escape ramps that can be used during non-working hours. The construction contractor will inspect open trenches and holes prior to filling and contact a qualified biologist to remove or release any trapped wildlife found in the trenches or holes.

AMM5 - Control Fugitive Dust. Workers will minimize the spread of dust from work sites to natural communities or covered species habitats on adjacent lands.

AMM6 - Conduct Worker Training. All construction personnel will participate in a worker environmental training program approved/authorized by the Conservancy and administered by a qualified biologist. The training will provide education regarding sensitive natural communities and covered species and their habitats, the need to avoid adverse effects, state and federal protection, and the legal implications of violating the FESA and NCCPA Permits. A pre-recorded video presentation by a qualified biologist shown to construction personnel may fulfill the training requirement.

AMM7 - Control Nighttime Lighting of Project Construction Sites. Workers will direct all lights for nighttime lighting of project construction sites into the project construction area and minimize the lighting of natural habitat areas adjacent to the project construction area.

AMM8 - Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas. PG&E should locate construction staging and other temporary work areas for covered activities in areas that will ultimately be a part of the permanent project development footprint. If construction staging and other temporary work areas must be located outside of permanent project footprints, they will be located either in areas that do not support habitat for covered species or are easily restored to prior or

improved ecological functions (e.g., grassland and agricultural land). Construction staging and other temporary work areas located outside of project footprints will be sited in areas that avoid adverse effects on the following:

- Serpentine, valley oak woodland, alkali prairie, vernal pool complex, valley foothill riparian, and fresh emergent wetland land cover types.
- Occupied western burrowing owl burrows.
- Nest sites for covered bird species and all raptors, including noncovered raptors, during the breeding season.

PG&E will follow specific AMMs for sensitive natural communities and covered species in temporary staging and work areas. For establishment of temporary work areas outside of the project footprint, PG&E will conduct surveys to determine if any of the biological resources listed above are present.

Within one year following removal of land cover, PG&E will restore temporary work and staging areas to a condition equal to or greater than the covered species habitat function of the affected habitat. Restoration of vegetation in temporary work and staging areas will use clean, native seed mixes approved by the Conservancy that are free of noxious plant species seeds.

AMM9 - Establish Buffers around Sensitive Natural Communities. The buffers for each sensitive natural community are as follows:

- Valley foothill riparian: One hundred feet from canopy drip-line. If avoidance is infeasible, a lesser resource protection buffer or encroachment into the sensitive natural community may be allowed if approved by the Conservancy and the wildlife agencies, based on the criteria listed in AMM1. Transportation or utility crossings may encroach into this sensitive natural community provided effects are minimized and all other applicable AMMs are followed.
- Fresh emergent wetland: Fifty feet from the edge of the natural community.

AMM1 provides additional details for resource protection buffers around natural communities. Additional resource protection buffers may be necessary for covered species, as described in species-specific AMMs.

AMM13- Minimize Take and Adverse Effects on Habitat of California Tiger Salamander. PG&E will retain a qualified biologist to identify any suitable aquatic and upland habitats for California salamander present in and within 500 feet of the project footprint during planning-level surveys. The qualified biologist will also assess whether critical habitat could be affected by the covered activity.

Except for habitat management and enhancement, all covered activities will provide a 500-foot setback from aquatic California tiger salamander habitat. If a covered activity is outside the Dunnigan Creek Unit of California tiger salamander critical habitat and, as designed, will not avoid aquatic habitat by at least 500 feet, the project proponent will either conduct visual and dip-net surveys, consistent with CDFW protocol, during the period for November 1 to May 15 (California Department of Fish and Game 2003) or assume presence. If the species is present or assumed to be present, the covered activity will not remove aquatic habitat until at least four new occupied breeding pools are discovered or established in the Plan Area and protected in the Plan Area. After the four new occupied breeding pools are protected, and with concurrence of USFWS and CDFW, up to three breeding pools may be affected. The breeding habitat may not be removed if USFWS and CDFW determine that the covered activity would remove a significant occurrence of this species that could be necessary for maintaining the genetic diversity or regional distribution of the species. This AMM applies to California tiger salamander aquatic habitat and surrounding uplands, as defined by reference to the setbacks described above; it does not apply to

cultivated agricultural lands (i.e., agricultural lands other than grazing lands) or other low-value upland habitat for California tiger salamander.

AMM14- Minimize Take and Adverse Effects on Habitat of Western Pond Turtle. There are no specific design requirements for western pond turtle habitat, however, PG&E must follow design requirements that require a 100-foot (minimum) permanent buffer zone from the canopy drip-line (the farthest edge on the ground where water will drip from the tree canopy, based on the outer boundary of the tree canopy). If modeled upland habitat will be impacted, a qualified biologist must be present and will assess the likelihood of western pond turtle nests occurring in the disturbance area (based on sun exposure, soil conditions, and other species habitat requirements).

If a qualified biologist determines that there is a moderate to high likelihood of western pond turtle nests within the disturbance area, the qualified biologist will monitor all initial ground disturbing activity for nests that may be unearthed during the disturbance and will move out of harm's way any turtles or hatchlings found.

AMM16 - Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite. PG&E will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, PG&E will retain a qualified biologist to conduct preconstruction surveys for active nests consistent, with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 15 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with PG&E, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior.

For covered activities that involve pruning or removal of a potential Swainson's hawk or white-tailed kite nest tree, the PG&E will conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

AMM18 - Minimize Take and Adverse Effects on Western Burrowing Owl. PG&E will retain a qualified biologist to conduct planning-level surveys and identify western burrowing owl habitat (as defined in Appendix A, Covered Species Accounts) within or adjacent to (i.e., within 500 feet of) a covered activity. If habitat for this species is present, additional surveys for the species by a qualified biologist are required, consistent with CDFW guidelines (2012).

If burrowing owls are identified during the planning-level survey, PG&E will minimize activities that will affect occupied habitat as follows. Occupied habitat is considered fully avoided if the project footprint

does not impinge on a nondisturbance buffer around the suitable burrow. For occupied burrowing owl nest burrows, this nondisturbance buffer could range from 150 to 1,500 feet (Table 1, Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls), depending on the time of year and the level of disturbance, based on current guidelines (California Department of Fish and Game 2012). The Yolo HCP/NCCP generally defines low, medium, and high levels of disturbances of burrowing owls as follows.

- Low: Typically 71-80 dB, generally characterized by the presence of passenger vehicles, small gas-powered engines (e.g., lawn mowers, small chain saws, portable generators), and high-tension power lines. Includes electric hand tools (except circular saws, impact wrenches and similar). Management and enhancement activities would typically fall under this category. Human activity in the immediate vicinity of burrowing owls would also constitute a low level of disturbance, regardless of the noise levels.
- Moderate: Typically 81-90 dB, and would include medium- and large-sized construction equipment, such as backhoes, front end loaders, large pumps and generators, road graders, dozers, dump trucks, drill rigs, and other moderate to large diesel engines. Also includes power saws, large chainsaws, pneumatic drills and impact wrenches, and large gasoline-powered tools. Construction activities would normally fall under this category.
- High: Typically 91-100 dB, and is generally characterized by impacting devices, jackhammers, compression ("jake") brakes on large trucks, and trains. This category includes both vibratory and impact pile drivers (smaller steel or wood piles) such as used to install piles and guard rails, and large pneumatic tools such as chipping machines. It may also include large diesel and gasoline engines, especially if in concert with other impacting devices. Felling of large trees (defined as dominant or subdominant trees in mature forests), truck horns, yarding tower whistles, and muffled or underground explosives are also included. Very few covered activities are expected to fall under this category, but some construction activities may result in this level of disturbance.

Table 1. Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls

	Level of Disturbance (feet) from Occupied Burrows		
Time of Year	**Low**	**Medium**	**High**
April 1 – August 15	600	1,500	1,500
August 16 – October 15	600	600	1,500
October 16 – March 31	150	300	1,500

If the project does not fully avoid direct and indirect effects on nesting sites (i.e., if the project cannot adhere to the buffers described above), PG&E will retain a qualified biologist to conduct preconstruction surveys and document the presence or absence of western burrowing owls that could be affected by the covered activity. Prior to any ground disturbance related to covered activities, the qualified biologist will conduct the preconstruction surveys within three days prior to ground disturbance in areas identified in the planning-level surveys as having suitable burrowing owl burrows, consistent with CDFW preconstruction survey guidelines. The qualified biologist will conduct the preconstruction surveys three days prior to ground disturbance. Time lapses between ground disturbing activities will trigger subsequent surveys prior to ground disturbance.

If the biologist finds the site to be occupied (occupancy of burrowing owl habitat during preconstruction surveys is confirmed at a site when at least one burrowing owl or sign [fresh whitewash, fresh pellets,

feathers, or nest ornamentation] is observed at or near a burrow entrance) by western burrowing owls during the breeding season (February 1 to August 31), PG&E will avoid all nest sites, based on the buffer distances described above, during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups that forage on or near the site following fledging). Construction may occur inside of the disturbance buffer during the breeding season if the nest is not disturbed and PG&E develops an AMM plan that is approved by the Conservancy, CDFW, and USFWS prior to project construction, based on the following criteria:

- The Conservancy, CDFW, and USFWS approves the AMM plan provided by PG&E.
- A qualified biologist monitors the owls for at least three days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).
- The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.
- If the qualified biologist identifies a change in owl nesting and foraging behavior as a result of construction activities, the qualified biologist will have the authority to stop all construction related activities within the non-disturbance buffers described above. The qualified biologist will report this information to the Conservancy, CDFW, and USFWS within 24 hours, and the Conservancy will require that these activities immediately cease within the non-disturbance buffer. Construction cannot resume within the buffer until the adults and juveniles from the occupied burrows have moved out of the project site, and the Conservancy, CDFW, and USFWS agree.
- If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, PG&E may remove the nondisturbance buffer, only with concurrence from CDFW and USFWS. If the burrow cannot be avoided by construction activity, the biologist will excavate and collapse the burrow in accordance with CDFW's 2012 guidelines to prevent reoccupation after receiving approval from the wildlife agencies.

If evidence of western burrowing owl is detected outside the breeding season (December 1 to January 31), PG&E will establish a non-disturbance buffer around occupied burrows, consistent with Table 8-1, as determined by a qualified biologist. Construction activities within the disturbance buffer are allowed if the following criteria are met to prevent owls from abandoning important overwintering sites:

- A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).
- The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.
- If there is any change in owl roosting and foraging behavior as a result of construction activities, these activities will cease within the buffer.
- If the owls are gone for at least one week, PG&E may request approval from the Conservancy, CDFW, and USFWS for a qualified biologist to excavate and collapse usable burrows to prevent owls from reoccupying the site if the burrow cannot be avoided by construction activities. The qualified biologist will install one-way doors for a 48-hour period prior to collapsing any potentially occupied burrows. After all usable burrows are excavated, the buffer will be removed, and construction may continue.

Monitoring must continue as described above for the nonbreeding season as long as the burrow remains active.

A qualified biologist will monitor the site, consistent with the requirements described above, to ensure that buffers are enforced, and owls are not disturbed. Passive relocation (i.e., exclusion) of owls has been used in the past in the Plan Area to remove and exclude owls from active burrows during the nonbreeding season (Trulio 1995). Exclusion and burrow closure will not be conducted during the breeding season for any occupied burrow. If the Conservancy determines that passive relocation is necessary, PG&E will develop a burrowing owl exclusion plan in consultation with CDFW biologists. The methods will be designed as described in the species monitoring guidelines (California Department of Fish and Game 2012) and consistent with the most up-to-date checklist of passive relocation techniques. This may include the installation of one-way doors in burrow entrances by a qualified biologist during the nonbreeding season. These doors will be in place for 48 hours and monitored twice daily to ensure that the owls have left the burrow, after which time the biologist will collapse the burrow to prevent reoccupation. Burrows will be excavated using hand tools. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure, such as piping, into the burrow to prevent collapsing until the entire burrow can be excavated and it can be determined that no owls are trapped inside the burrow. The Conservancy may allow other methods of passive or active relocation, based on best available science, if approved by the wildlife agencies. Artificial burrows will be constructed prior to exclusion and will be created less than 300 feet from the existing burrows on lands that are protected as part of the reserve system.

Attachment 1 – Project Description

PG&E plans to install approximately 5,100 feet of horizontal mitigation wire and five SSD cabinets west of the town of Dunnigan in Yolo County. The project, referred to as C-1637, includes an impact area of 4.96 acres and includes access routes and temporary workspaces north of PG&E's existing Buckeye Station. The C-1637 includes five work locations spanning four private parcels in Yolo County. The mitigation wire will be installed between Gas Lines 400 and 401, within PG&E's existing easement. To minimize orchard crop loss and impacts, roughly 1,275 feet of wire will be installed via horizontal directional drilling (HDD). The remaining wire will be installed via open trench, with an approximate workspace of 79,494 square feet. Each of the five SSD cabinets will require two 4' x 4' bell holes and a 1' by 30' trench connecting them. Prior to construction, the project workspaces and access will be mowed and/or vegetation trimmed to facilitate the work. A bulldozer-mounted plow will be used to install the mitigation wire, placing it near the same depth of the gas lines which ranges from 3 to 6 feet. In areas where a plow is not feasible, a backhoe will be used to excavate the trenches. A backhoe will be used to dig the HDD splice/termination locations and the trenches to the SSD locations. Staging and workspace areas will be located within the orchard at the northern end of the project and along the wire installation.

Property Ownership:

APN 062-050-004

- Owner – N/A
- Site Address – 2580 County Road 84, Arbuckle, CA

APN 062-080-008

- Owner – T&P Farms
- Site Address – County Road 84, Arbuckle, CA

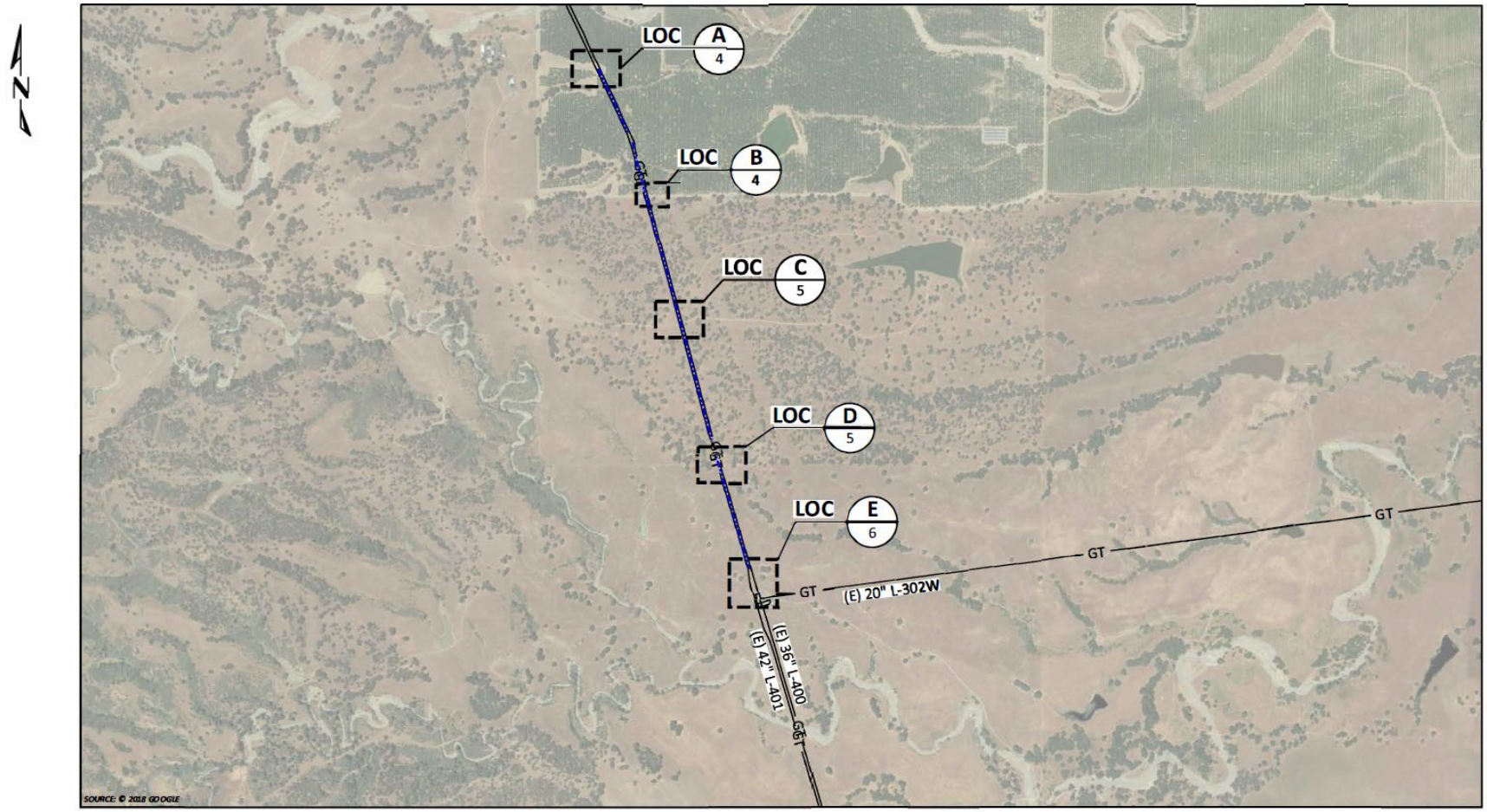
APN 062-080-010

- Owner –T&P Farms
- Site Address – Road 84, Arbuckle, CA

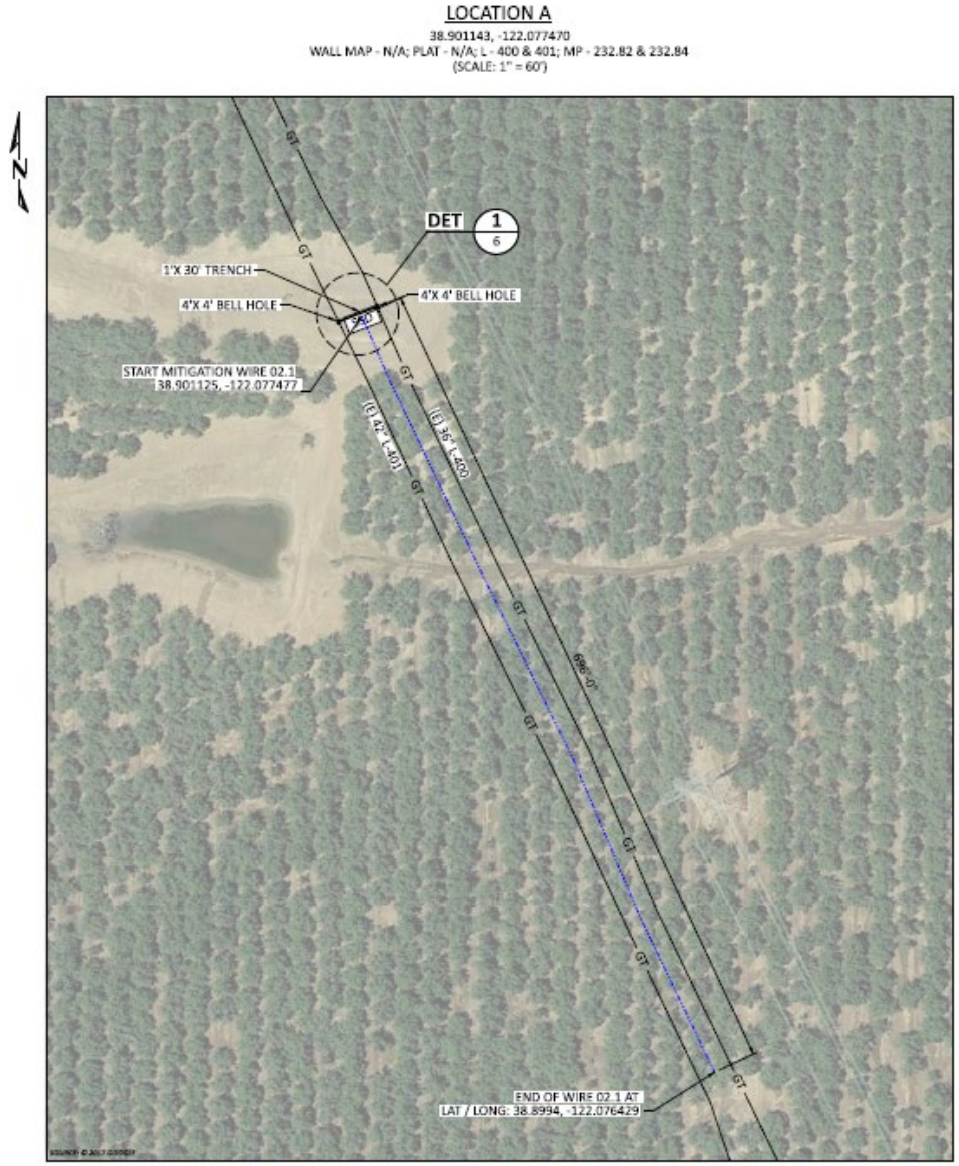
APN 062-080-003

- Owner –Durst Home Ranch, LLC
- Site Address – 23710 County Road 13, Capay, CA

Attachment 2 – Vicinity Map



Attachment 3 – Site Plan

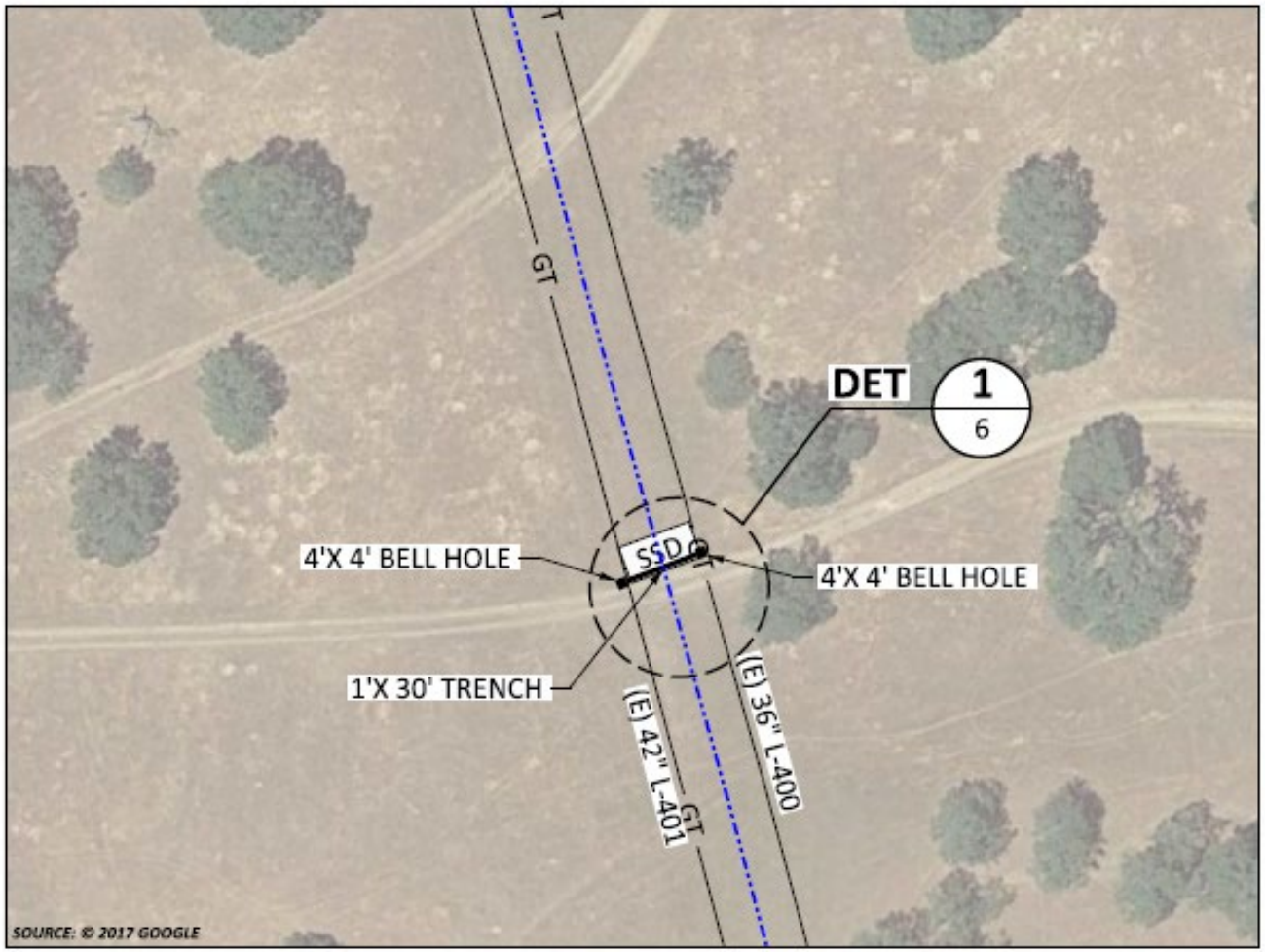


LOCATION B

38.897621, -122.075773
WALL MAP - N/A; PLAT - N/A; L - 400 & 401; MP - 233.10 & 233.10
(SCALE: 1" = 60')

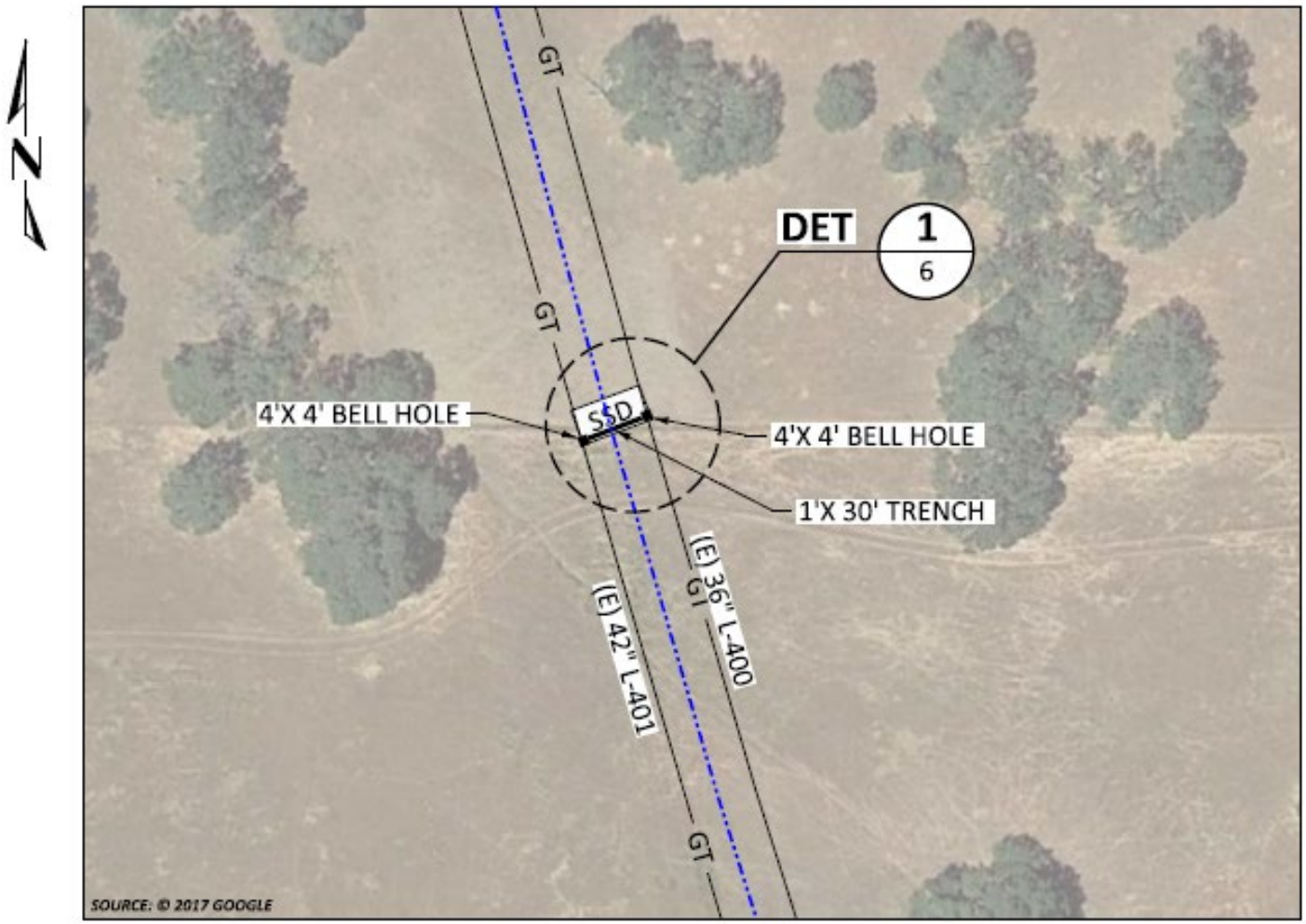
LOCATION C

38.894174, -122.074569
WALL MAP - N/A; PLAT - N/A; L - 400 & L-401; MP - 233.35 & 233.34
(SCALE: 1" = 60')



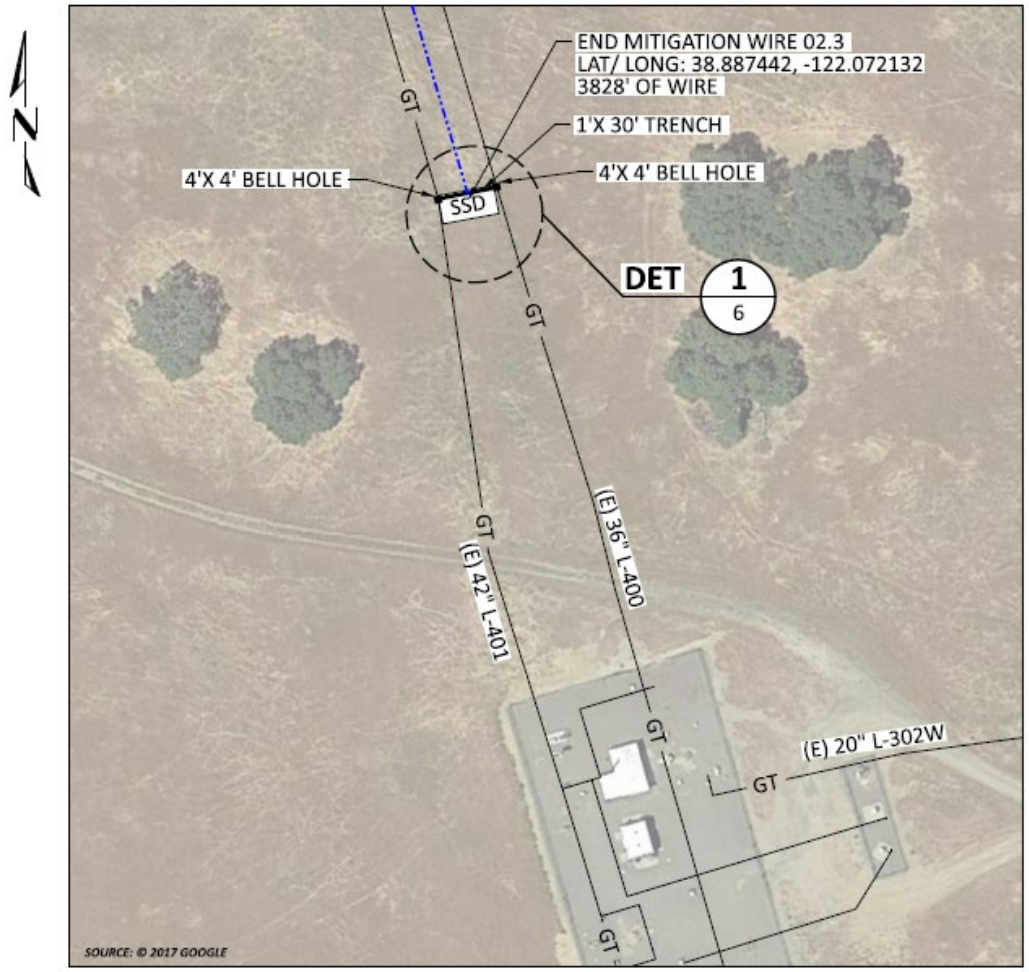
LOCATION D

38.890334, -122.073227
WALL MAP - N/A; PLAT - N/A; L - 400 & L-401; MP - 233.63 & 233.59
(SCALE: 1" = 60')



LOCATION E

38.887445, -122.072131
WALL MAP - N/A; PLAT - N/A; L - 400 & L-401; MP - 233.84 & 233.80
(SCALE: 1" = 60')



Attachment 4 – Planning Survey Report

Attachment 5 – Photographs of Temporary Impact Areas

Please see Attachment 4 (Planning Level Survey Report) for photographs of the project locations and temporary impact areas.

Attachment 6 – Documentation if Land is Offered in Lieu of Fees

Not applicable to this application.

Attachment 7 – Covered Species Planning Survey Reports

Species-specific surveys were not conducted, so presence is assumed for California tiger salamander, Swainson's hawk, white-tailed kite, burrowing owl, and Western pond turtle. The planning level survey encompassed the entirety of the project footprint and adjacent habitat within a 500-foot buffer to evaluate the suitability of habitat for California tiger salamander and burrowing owl. Transects were walked in accordance with California Department of Fish and Wildlife (CDFW) guidelines for Phase II burrowing owl surveys. The area was surveyed on foot or scanned with binoculars within a 0.25-mile buffer for potential foraging and nesting habitat suitable for use by Swainson's hawk and white-tailed kite.

Preconstruction surveys to determine presence/absence will be conducted and buffers and timing restrictions will apply to the project per the applicable Yolo HCP/NCCP AMMs.

Attachment 8 – Unavoidable Impacts on Covered Species

Please see Attachment 4 (Planning Level and Survey Report) for maps and summary of impacts to HCP/NCCP land cover habitats.

Attachment 9 –Description of Compliance with Avoidance and Minimization Measures

PG&E will incorporate avoidance and minimization measures and compensatory mitigation measures to avoid, minimize, and mitigate impacts to covered species in the Project area. PG&E's overarching strategy is to avoid and minimize impacts to covered species and their suitable habitat to the maximum extent possible by following Yolo County HCP/NCCP avoidance and minimization measures (AMMs), construction site best management practices (BMPs), and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

The following AMMs will apply to the C-1637 project:

AMM1 - Establish Buffers. PG&E will design projects to avoid and minimize direct and indirect effects of permanent development on the sensitive natural communities and covered species habitat by providing buffers, as stipulated in the relevant sensitive natural community AMMs and covered species AMMs.

AMM3 - Confine and Delineate Work Area. Where natural communities and covered species habitat are present, workers will confine land clearing to the minimum area necessary to facilitate construction activities. Workers will restrict movement of heavy equipment to and from the project site to established roadways to minimize natural community and covered species habitat disturbance. PG&E will clearly identify boundaries of work areas using temporary fencing or equivalent and will identify areas designated as environmentally sensitive. All construction vehicles, other equipment, and personnel will avoid these designated areas.

AMM4 – Cover Trenches and Holes during Construction and Maintenance. To prevent injury and mortality of giant garter snake, western pond turtle, and California tiger salamander, workers will cover open trenches and holes associated with implementation of covered activities that affect habitat for these species or design the trenches and holes with escape ramps that can be used during non-working hours. The construction contractor will inspect open trenches and holes prior to filling and contact a qualified biologist to remove or release any trapped wildlife found in the trenches or holes.

AMM5 - Control Fugitive Dust. Workers will minimize the spread of dust from work sites to natural communities or covered species habitats on adjacent lands.

AMM6 - Conduct Worker Training. All construction personnel will participate in a worker environmental training program approved/authorized by the Conservancy and administered by a qualified biologist. The training will provide education regarding sensitive natural communities and covered species and their habitats, the need to avoid adverse effects, state and federal protection, and the legal implications of violating the FESA and NCCPA Permits. A pre-recorded video presentation by a qualified biologist shown to construction personnel may fulfill the training requirement.

AMM7 - Control Nighttime Lighting of Project Construction Sites. Workers will direct all lights for nighttime lighting of project construction sites into the project construction area and minimize the lighting of natural habitat areas adjacent to the project construction area.

AMM8 - Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas. PG&E should locate construction staging and other temporary work areas for covered activities in areas that will ultimately be a part of the permanent project development footprint. If construction staging and other temporary work areas must be located outside of permanent project footprints, they will be located either in areas that do not support habitat for covered species or are easily restored to prior or

improved ecological functions (e.g., grassland and agricultural land). Construction staging and other temporary work areas located outside of project footprints will be sited in areas that avoid adverse effects on the following:

- Serpentine, valley oak woodland, alkali prairie, vernal pool complex, valley foothill riparian, and fresh emergent wetland land cover types.
- Occupied western burrowing owl burrows.
- Nest sites for covered bird species and all raptors, including noncovered raptors, during the breeding season.

PG&E will follow specific AMMs for sensitive natural communities and covered species in temporary staging and work areas. For establishment of temporary work areas outside of the project footprint, PG&E will conduct surveys to determine if any of the biological resources listed above are present.

Within one year following removal of land cover, PG&E will restore temporary work and staging areas to a condition equal to or greater than the covered species habitat function of the affected habitat. Restoration of vegetation in temporary work and staging areas will use clean, native seed mixes approved by the Conservancy that are free of noxious plant species seeds.

AMM9 - Establish Buffers around Sensitive Natural Communities. The buffers for each sensitive natural community are as follows:

- Valley foothill riparian: One hundred feet from canopy drip-line. If avoidance is infeasible, a lesser resource protection buffer or encroachment into the sensitive natural community may be allowed if approved by the Conservancy and the wildlife agencies, based on the criteria listed in AMM1. Transportation or utility crossings may encroach into this sensitive natural community provided effects are minimized and all other applicable AMMs are followed.
- Fresh emergent wetland: Fifty feet from the edge of the natural community.

AMM1 provides additional details for resource protection buffers around natural communities. Additional resource protection buffers may be necessary for covered species, as described in species-specific AMMs.

AMM13- Minimize Take and Adverse Effects on Habitat of California Tiger Salamander. PG&E will retain a qualified biologist to identify any suitable aquatic and upland habitats for California salamander present in and within 500 feet of the project footprint during planning-level surveys. The qualified biologist will also assess whether critical habitat could be affected by the covered activity.

Except for habitat management and enhancement, all covered activities will provide a 500-foot setback from aquatic California tiger salamander habitat. If a covered activity is outside the Dunnigan Creek Unit of California tiger salamander critical habitat and, as designed, will not avoid aquatic habitat by at least 500 feet, the project proponent will either conduct visual and dip-net surveys, consistent with CDFW protocol, during the period for November 1 to May 15 (California Department of Fish and Game 2003) or assume presence. If the species is present or assumed to be present, the covered activity will not remove aquatic habitat until at least four new occupied breeding pools are discovered or established in the Plan Area and protected in the Plan Area. After the four new occupied breeding pools are protected, and with concurrence of USFWS and CDFW, up to three breeding pools may be affected. The breeding habitat may not be removed if USFWS and CDFW determine that the covered activity would remove a significant occurrence of this species that could be necessary for maintaining the genetic diversity or regional distribution of the species. This AMM applies to California tiger salamander aquatic habitat and surrounding uplands, as defined by reference to the setbacks described above; it does not apply to

cultivated agricultural lands (i.e., agricultural lands other than grazing lands) or other low-value upland habitat for California tiger salamander.

AMM14- Minimize Take and Adverse Effects on Habitat of Western Pond Turtle. There are no specific design requirements for western pond turtle habitat, however, PG&E must follow design requirements that require a 100-foot (minimum) permanent buffer zone from the canopy drip-line (the farthest edge on the ground where water will drip from the tree canopy, based on the outer boundary of the tree canopy). If modeled upland habitat will be impacted, a qualified biologist must be present and will assess the likelihood of western pond turtle nests occurring in the disturbance area (based on sun exposure, soil conditions, and other species habitat requirements).

If a qualified biologist determines that there is a moderate to high likelihood of western pond turtle nests within the disturbance area, the qualified biologist will monitor all initial ground disturbing activity for nests that may be unearthed during the disturbance and will move out of harm's way any turtles or hatchlings found.

AMM16 - Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite. PG&E will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, PG&E will retain a qualified biologist to conduct preconstruction surveys for active nests consistent, with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 15 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with PG&E, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior.

For covered activities that involve pruning or removal of a potential Swainson's hawk or white-tailed kite nest tree, the PG&E will conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

AMM18 - Minimize Take and Adverse Effects on Western Burrowing Owl. PG&E will retain a qualified biologist to conduct planning-level surveys and identify western burrowing owl habitat (as defined in Appendix A, Covered Species Accounts) within or adjacent to (i.e., within 500 feet of) a covered activity. If habitat for this species is present, additional surveys for the species by a qualified biologist are required, consistent with CDFW guidelines (2012).

If burrowing owls are identified during the planning-level survey, PG&E will minimize activities that will affect occupied habitat as follows. Occupied habitat is considered fully avoided if the project footprint

does not impinge on a nondisturbance buffer around the suitable burrow. For occupied burrowing owl nest burrows, this nondisturbance buffer could range from 150 to 1,500 feet (Table 1, Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls), depending on the time of year and the level of disturbance, based on current guidelines (California Department of Fish and Game 2012). The Yolo HCP/NCCP generally defines low, medium, and high levels of disturbances of burrowing owls as follows.

- Low: Typically 71-80 dB, generally characterized by the presence of passenger vehicles, small gas-powered engines (e.g., lawn mowers, small chain saws, portable generators), and high-tension power lines. Includes electric hand tools (except circular saws, impact wrenches and similar). Management and enhancement activities would typically fall under this category. Human activity in the immediate vicinity of burrowing owls would also constitute a low level of disturbance, regardless of the noise levels.
- Moderate: Typically 81-90 dB, and would include medium- and large-sized construction equipment, such as backhoes, front end loaders, large pumps and generators, road graders, dozers, dump trucks, drill rigs, and other moderate to large diesel engines. Also includes power saws, large chainsaws, pneumatic drills and impact wrenches, and large gasoline-powered tools. Construction activities would normally fall under this category.
- High: Typically 91-100 dB, and is generally characterized by impacting devices, jackhammers, compression ("jake") brakes on large trucks, and trains. This category includes both vibratory and impact pile drivers (smaller steel or wood piles) such as used to install piles and guard rails, and large pneumatic tools such as chipping machines. It may also include large diesel and gasoline engines, especially if in concert with other impacting devices. Felling of large trees (defined as dominant or subdominant trees in mature forests), truck horns, yarding tower whistles, and muffled or underground explosives are also included. Very few covered activities are expected to fall under this category, but some construction activities may result in this level of disturbance.

Table 1. Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls

	Level of Disturbance (feet) from Occupied Burrows		
Time of Year	**Low**	**Medium**	**High**
April 1 – August 15	600	1,500	1,500
August 16 – October 15	600	600	1,500
October 16 – March 31	150	300	1,500

If the project does not fully avoid direct and indirect effects on nesting sites (i.e., if the project cannot adhere to the buffers described above), PG&E will retain a qualified biologist to conduct preconstruction surveys and document the presence or absence of western burrowing owls that could be affected by the covered activity. Prior to any ground disturbance related to covered activities, the qualified biologist will conduct the preconstruction surveys within three days prior to ground disturbance in areas identified in the planning-level surveys as having suitable burrowing owl burrows, consistent with CDFW preconstruction survey guidelines. The qualified biologist will conduct the preconstruction surveys three days prior to ground disturbance. Time lapses between ground disturbing activities will trigger subsequent surveys prior to ground disturbance.

If the biologist finds the site to be occupied (occupancy of burrowing owl habitat during preconstruction surveys is confirmed at a site when at least one burrowing owl or sign [fresh whitewash, fresh pellets,

feathers, or nest ornamentation] is observed at or near a burrow entrance) by western burrowing owls during the breeding season (February 1 to August 31), PG&E will avoid all nest sites, based on the buffer distances described above, during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups that forage on or near the site following fledging). Construction may occur inside of the disturbance buffer during the breeding season if the nest is not disturbed and PG&E develops an AMM plan that is approved by the Conservancy, CDFW, and USFWS prior to project construction, based on the following criteria:

- The Conservancy, CDFW, and USFWS approves the AMM plan provided by PG&E.
- A qualified biologist monitors the owls for at least three days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).
- The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.
- If the qualified biologist identifies a change in owl nesting and foraging behavior as a result of construction activities, the qualified biologist will have the authority to stop all construction related activities within the non-disturbance buffers described above. The qualified biologist will report this information to the Conservancy, CDFW, and USFWS within 24 hours, and the Conservancy will require that these activities immediately cease within the non-disturbance buffer. Construction cannot resume within the buffer until the adults and juveniles from the occupied burrows have moved out of the project site, and the Conservancy, CDFW, and USFWS agree.
- If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, PG&E may remove the nondisturbance buffer, only with concurrence from CDFW and USFWS. If the burrow cannot be avoided by construction activity, the biologist will excavate and collapse the burrow in accordance with CDFW's 2012 guidelines to prevent reoccupation after receiving approval from the wildlife agencies.

If evidence of western burrowing owl is detected outside the breeding season (December 1 to January 31), PG&E will establish a non-disturbance buffer around occupied burrows, consistent with Table 8-1, as determined by a qualified biologist. Construction activities within the disturbance buffer are allowed if the following criteria are met to prevent owls from abandoning important overwintering sites:

- A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).
- The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.
- If there is any change in owl roosting and foraging behavior as a result of construction activities, these activities will cease within the buffer.
- If the owls are gone for at least one week, PG&E may request approval from the Conservancy, CDFW, and USFWS for a qualified biologist to excavate and collapse usable burrows to prevent owls from reoccupying the site if the burrow cannot be avoided by construction activities. The qualified biologist will install one-way doors for a 48-hour period prior to collapsing any potentially occupied burrows. After all usable burrows are excavated, the buffer will be removed, and construction may continue.

Monitoring must continue as described above for the nonbreeding season as long as the burrow remains active.

A qualified biologist will monitor the site, consistent with the requirements described above, to ensure that buffers are enforced, and owls are not disturbed. Passive relocation (i.e., exclusion) of owls has been used in the past in the Plan Area to remove and exclude owls from active burrows during the nonbreeding season (Trulio 1995). Exclusion and burrow closure will not be conducted during the breeding season for any occupied burrow. If the Conservancy determines that passive relocation is necessary, PG&E will develop a burrowing owl exclusion plan in consultation with CDFW biologists. The methods will be designed as described in the species monitoring guidelines (California Department of Fish and Game 2012) and consistent with the most up-to-date checklist of passive relocation techniques. This may include the installation of one-way doors in burrow entrances by a qualified biologist during the nonbreeding season. These doors will be in place for 48 hours and monitored twice daily to ensure that the owls have left the burrow, after which time the biologist will collapse the burrow to prevent reoccupation. Burrows will be excavated using hand tools. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure, such as piping, into the burrow to prevent collapsing until the entire burrow can be excavated and it can be determined that no owls are trapped inside the burrow. The Conservancy may allow other methods of passive or active relocation, based on best available science, if approved by the wildlife agencies. Artificial burrows will be constructed prior to exclusion and will be created less than 300 feet from the existing burrows on lands that are protected as part of the reserve system.

PG&E C-1637 Mitigation Fees (Temporary and Permanent)

Land Cover Fee (Permanent)

Land Cover Type*	Permanent Impact	10ft Buffer	Fee
Grassland (all types)	0.001	0.061	$965.40
Deciduous Fruits/Nuts	0.001	0.061	$965.40
Total Land Cover Fee	**0.001**	**0.061**	**$1,930.80**

Land Cover Fee (Temporary)

Land Cover Type	Temporary Impact	Fee
Grassland (all types)	3.9	$1,214.54
Deciduous Fruits/Nuts	0.15	$46.71
Semiag/Incidental to Agriculture	0.06	$18.69
Total Land Cover Fee	**4.11**	**$1,279.94**

$3,210.74

SPE Fee (Based on September 16, 2019 SPE Policy)

Category	Portion of Standard Fee	Multiplier	Sub-Totals
First $10,000	$10,000.00	100%	$10,000
10,001-50,000	$40,000.00	50%	
Amount over $50,000	$13,806.84	10%	
Total SPE Fee			**$10,000**

Permit Application Fee	$1,981.00
Grand Total	**$13,210.74**

*Removal of 1 blue oak tree and multiple orchard trees calculated as permanent habitat removal for Grassland and Deciduous Fruits/Nuts Land cover. Calculation based on 5 cabinet installs of 3'x3' as well as the 10 foot land cover buffer.