



EAST COUNTY SUBSTATION PROJECT MINOR PROJECT REFINEMENT REQUEST FORM

Date Submitted:	07-05-13	Request #:	6
Date Approval Required:	07-19-13	Landowner:	[This information has been redacted due to its confidential nature]
APN:	[This information has been redacted due to its confidential nature]		
Refinement from (check all that apply):			
<input type="checkbox"/> Mitigation Measure	<input type="checkbox"/> APM	<input checked="" type="checkbox"/> Project Description	<input type="checkbox"/> Drawing
Identify source (mitigation measure, project description, etc.):			
<p>Page B-23, Page B-24, and Figures B-2, B-7, and B-8 in Section B. Project Description of the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the East County Substation Project (Project) describe and depict the alignment of the 138 kilovolt (kV) Overhead Transmission Line between Carrizo Gorge Road and Tule Jim Lane. The information in this Minor Project Refinement (MPR) request describes refinements to the portion of the 138 kV Overhead Transmission Line located between Carrizo Gorge Road and Tule Jim Lane, including the relocation and addition of steel poles, the addition of temporary workspaces for constructability of pole maintenance pads and roads, changes in grading of pole maintenance pads and roads for constructability and access, the addition of a new spur road, the relocation of two pulls sites, and the relocation and enlargement of one pull site. A description of the refinements is provided on pages 2 and 3 of this MPR request and a list of refinements and the reason for each is provided in Attachment A: Refinement Table.</p>			
Attachments (check all that apply):			
<input checked="" type="checkbox"/> Refinement Screening Form (provided as Attachment B: Minor Project Refinement Request Screening Form)	<input checked="" type="checkbox"/> Photos (provided as Attachment C: Photographs)	<input checked="" type="checkbox"/> Maps (provided as Attachment D: Impact Comparison Maps; Attachment E: Approved Project Versus Final Design Comparison Maps; Attachment F: Survey Maps)	<input checked="" type="checkbox"/> Other (Attachment G: EIR/EIS Study Area Table; Attachment A: Refinement Table)
<p>Under Order 3 of the Decision Granting SDG&E Permit to Construct the East County Substation Project (D.12-04-022), the CPUC may approve minor project refinements under certain circumstances. In accordance with Order 3 of the Decision, respond “yes” or “no” to the following questions (a) through (d).</p>			
<p>(a) Is the proposed refinement outside the geographic boundary of the EIR/EIS study area? No. The proposed 138 kV Overhead Transmission Line refinements are located within the geographic extent of the EIR/EIS study area, which is summarized in Attachment G: EIR/EIS Study Area Table. Biological, drainage, and cultural surveys of the approved 138 kV Overhead Transmission Line alignment were included in the Final EIR/EIS analysis. In addition, supplemental rare plant, jurisdictional drainage, and cultural surveys of some of the refinement areas were conducted in April 2013. Attachment F: Survey Maps depicts the boundaries of the areas that were previously surveyed for various resources in the Project vicinity, as well as the areas that were surveyed in April 2013.</p>			
<p>(b) Will the proposed refinement result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the EIR/EIS? No. Attachment B: Minor Project Refinement Request Screening Form provides a detailed assessment.</p>			
<p>(c) Does the proposed refinement conflict with any mitigation measure or applicable law or policy? No.</p>			

(d) Does the proposed refinement trigger an additional permit requirement? No. The construction of the 138 kV Overhead Transmission Line was contemplated in Section B. Project Description of the Final EIR/EIS; therefore, no additional permits will be required that were not already considered through the approval of the Project. A few special-status wildlife species—such as loggerhead shrike (*Lanius ludovicianus*) and Quino checkerspot butterfly (*Euphydryas editha quino*)—have the potential to occur within the refinement areas; however, all of the species with the potential to occur were formerly identified and analyzed in previous wildlife surveys conducted for the Project. Refinements to the Project within the Quino checkerspot butterfly occupied and critical habitat will result in approximately 2.01 acres of temporary impacts to Quino checkerspot butterfly occupied habitat and 1.57 acres of temporary impacts to Quino checkerspot butterfly critical habitat. However, permanent impacts to Quino checkerspot butterfly occupied habitat and critical habitat will decrease by approximately 1.59 acres and 1.13 acres, respectively, to 2.03 acres and 1.65 acres as a result of the refinements. The United States (U.S.) Fish and Wildlife Service (USFWS) Biological Opinion covers permanent impacts to approximately 3.62 acres of occupied habitat and approximately 2.78 acres of critical habitat; therefore, reinitiation of consultation may be required to address the increase in temporary impacts, despite the reduction in permanent impacts.

A reduction of approximately 0.21 acre of permanent impacts and an increase of approximately 0.17 acre of temporary impacts to California Department of Fish and Wildlife- (CDFW-) jurisdictional drainages will occur as a result of the refinements. A reduction of approximately 0.03 acre of permanent impacts and an increase of approximately 0.03 acre of temporary impacts to U.S. Army Corps of Engineers- (USACE-) jurisdictional drainages will occur as a result of the refinements. An additional approximately 113 rare plant individuals will be impacted as well; however, the proposed refinements will avoid impacts to 41 rare plant individuals. As a result, the net change in impacts to rare plants will be the loss of 72 additional plants. San Diego Gas & Electric Company (SDG&E) will coordinate with the CDFW, USACE, and Colorado River Basin Regional Water Quality Control Board (RWQCB) to inform them of the changes that will occur to jurisdictional resources. SDG&E will then amend or modify permits, as necessary, following the completion of the final design for the rest of the Project components.

A reduction of approximately 0.11 acre of potential impacts to cultural resource areas will occur as a result of the refinements. ASM Affiliates, Inc. will provide a separate MPR addendum letter for the Section 106 cultural resource assessment to the Bureau of Land Management (BLM) and will consult with the BLM regarding this potential reduction of impacts to cultural resources.

Describe refinement being requested (attach drawings and photos as needed):

The 138 kV Overhead Transmission Line alignment was described on pages B-23 and B-24 in Section B. Project Description and depicted on Figures B-2, B-7, and B-8 in Section B. Project Description of the Project's Final EIR/EIS. As part of the final engineering design for the 138 kV Overhead Transmission Line, SDG&E proposes to adjust the location of approximately three steel poles (steel pole [SP]-42, SP-50, and SP-60), adjust the location of two riser poles (SP-91A and SP-91B), add two steel poles (SP-60A and SP-90), and replace two steel poles (SP-63 and SP-64) with three-pole structures, as shown in Attachment D: Impact Comparison Maps. In addition, four poles—SP-42, SP-43, SP-46, and SP-52—will each increase in height by between five and 20 feet. Throughout the overhead transmission line section, temporary workspace has also been added around the pole maintenance pads and roads for constructability. SDG&E also proposes minor adjustments to roads and pads due to terrain and to address drainage, the addition of one spur road, and the relocation of three pull sites. Temporary workspace for additional guard structures required to protect roads and existing utilities during the installation of the transmission line has also been added. The refinements to pads and roads will reduce the permanently graded area by approximately 0.4 acre. A list of refinements by location and the reason for each is included as Attachment A: Refinement Table. Attachment D: Impact Comparison Maps depicts the differences in permanent and temporary impacts due the final design of the 138 kV Overhead Transmission alignment described in this MPR request. Attachment E: Approved Project Versus Final Design Comparison Maps depicts the preliminary 138 kV Overhead Transmission alignment as shown in the Final EIR/EIS in comparison with the final design of the 138 kV Overhead Transmission alignment described in this MPR request. The activities associated with the construction and utilization of the refinement areas will occur in the same manner as described in the Final EIR/EIS for construction, operation, and maintenance of the Project.

Provide need for refinement (attach drawings and photos as needed):

The minor refinements described in this MPR request are a result of the final transmission line design that was

developed based on the preliminary alignment presented in the Final EIR/EIS. SDG&E submitted the Proponent's Environmental Assessment (PEA) and the application for a Permit to Construct once the preliminary design contained sufficient detail as advised by the Working Draft PEA Checklist for Transmission Line and Substation Projects (California Public Utilities Commission, San Francisco Energy Division Director's Office, October 2008) document. SDG&E continued to refine the engineering design to incorporate field verification of terrain, including the locations of boulders and other features that could impact constructability, results of geotechnical investigations, specific input regarding construction methodology (including equipment requirements that SDG&E's contractor will implement during construction), requests and requirements from resources agencies, and continued right-of-way (ROW) acquisitions and landowner coordination. As a result, minor refinements to the pole locations and workspace requirements as estimated in the Final EIR/EIS were necessary.

A list of refinements and the reason for each refinement is included in Attachment A: Refinement Table. Each maintenance pad was slightly refined to provide adequate space for operation and maintenance activities. In some cases, the pad was reconfigured or enlarged to allow for adequate workspace during construction and maintenance. Some pole maintenance pads and poles were shifted for specific reasons, such as newly identified land use conflicts determined through the ROW acquisition process. SP-60A was added to accommodate the relocation of SP-60 and meet General Order (GO) 95 clearance requirements, as shown on page 18 and 19 of Attachment D: Impact Comparison Maps and pages 16 and 17 of Attachment E: Approved Project Versus Final Design Comparison Maps. In addition, the two riser poles—SP-91A and SP-91B—were relocated, as depicted in Attachment D: Impact Comparison Maps and Attachment E: Approved Project Versus Final Design Comparison Maps, and a new steel pole—SP-90—was added. This will allow for the construction of a short-slack span with reduced tension as the overhead transmission line transitions to an underground configuration. In addition, the underground transmission line route that was previously located in an undisturbed area between Old Highway 80 and the riser poles will be relocated into the permanent access road to riser poles SP-91A and SP-91B, as depicted on page 45 of Attachment D: Impact Comparison Maps and page 37 of Attachment E: Approved Project Versus Final Design Comparison Maps.

Additional temporary workspace can be attributed to final engineering and incorporating field verification of terrain and specific input regarding construction methodology. Typical workspace requirements around the permanent footprint of the graded areas are approximately 10 feet beyond the cut slope for large earthmoving equipment (e.g., a bulldozer or excavator) to clear boulders, brush, or other obstacles in creating the top of the cut slope properly. Approximately 20 feet of workspace is required below the fill slopes to allow equipment to access the toe of fill and allow for compaction. These buffers also allow for minor differences between real elevations after clearing materials (e.g., brush and rock) and the assumed design elevations based on the existing topography shown on the plans. At some locations in flat terrain, only five feet of temporary space has been added for cut and fill slopes.

Detailed field investigations associated with final engineering also revealed that some of the roads required adjustments to allow for improved construction and maintenance access to the pole. For example, certain road intersections require larger footprints to allow for an adequate turning radius of large construction equipment. Additional adjustments were made to avoid high-density boulder areas that would require extensive civil work and blasting. However, removal of rock around SP-41, SP-42, and SP-43 is required to reduce the potential hazard of rocks falling during construction.

Additional temporary workspaces are also included as refinements, even though they may have been contemplated or discussed in the EIR/EIS analysis, because their exact locations and estimated footprints were not identified. Examples include additional and expanded guard structure locations and pull site relocations.

Four poles—SP-42, SP-43, SP-46, and SP-52—will each measure between 155 and 170 feet tall. The Final EIR/EIS states that the height of the steel poles associated with the 138 kV Transmission Line would vary by location up to a maximum height of 150 feet. The increase in height of these three poles is required to maintain minimum clearances and wire sag as required by GO 95 in light of the slope and terrain at these specific pole locations.

Date refinement is expected to be implemented:	07-29-13
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SDG&E Approvals

Title	Name	Approval Initials	Date	Conditions (see attached)
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Environmental Project Manager	Don Houston	DH	07-05-13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Environmental Compliance Lead	Kirstie Reynolds	KR	07-03-13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Construction Manager	Molly Amendt	MA	07-02-13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Construction Manager	Brian Telesmanic	BT	07-03-13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Environmental Field Supervisor	Jeffry Coward	JC	07-03-13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Cultural Resource Specialist	Nicole Morgan	NM	07-05-13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Land Advisor	Pete McMorris	PM	07-05-13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Landowner Approval (if required)

Landowner Name	Signature or Other Consent
[This information has been redacted due to its confidential nature]	<p>SDG&E has evaluated all the refinements in relation to the existing landowner easement agreements acquired for the 138 kV Overhead Transmission Line, and with the exception of a few landowners, most all of the refinements are contemplated and allowed for in the individual easement agreements. Moreover, the easement language specifies that SDG&E has been granted an easement in order to “excavate for, erect, construct, install, change the size of, improve, modify” and “have the right to construct such roads as are necessary and appropriate for the exercise of the ingress and egress rights granted herein.” SDG&E is currently coordinating with a few landowners regarding the specific changes discussed in this MPR request and expects to have a documentation or acceptance or updated easement agreements prior to construction in these locations. Documentation of landowner coordination will be included with the Notice to Proceed request for the 138 kV Overhead Transmission Line.</p>
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Resource Agency Coordination

Resource Agency	Name	Action Required	Date	Documentation (see attached if yes)	
CDFW	Eric Weiss	Notification or Minor Amendment	To be Determined (TBD)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No, documentation will be provided separately
USACE	Shanti Santulli	Notification or Permit Modification	TBD	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No, documentation will be provided separately
Colorado River Basin RWQCB	Jay Mirpour	Notification or Amendment	TBD	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No, documentation will be provided separately
USFWS	Eric Porter	Consultation	TBD	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No, documentation will be provided separately
BLM	Carrie Simmons	Section 106 Consultation	TBD	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No, documentation will be provided separately

ATTACHMENT A: REFINEMENT TABLE

ATTACHMENT A: REFINEMENT TABLE

This table lists the refinements associated with each facility/location along the 138 Kilovolt (kV) Overhead Transmission Line as part of the San Diego Gas & Electric Company (SDG&E) East County Substation Project (Project) that are a result of the Project's final design. A brief explanation of the need for each refinement has also been included. This table also includes the difference in net temporary and permanent impacts associated with the requested refinements at each facility/location when compared to the approved Project design in the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) and any Minor Project Refinements (MPRs) approved to date. The calculations of temporary and permanent impact areas may not add up to the Project-wide calculations described in this MPR request due to the conversion of approved temporary to permanent, and permanent to temporary, impact areas, as well as overlap between the approved Project and requested refinement areas.

Facility/Location	Refinement	Need for Refinement	Difference in Net Impacts ¹ (Approved Design versus Requested Refinements)	
			Temporary (acres)	Permanent (acres)
Steel Pole (SP)-38A Riser	<ul style="list-style-type: none"> Shift and expansion of permanent pad Widening of access road Addition of temporary workspace around permanent pad and access road 	The riser pole shifted approximately 22 feet within the previously approved workspace to better align with the Section 1 underground cable; however, this shift required a change to the permanent pad. In addition, a larger workspace is required for the sweep-up side of the riser poles due to different equipment needs at the cable transition.	0.46	0.08
SP-38B Riser	<ul style="list-style-type: none"> Shift and expansion of permanent pad Shift and expansion of pull site Addition of temporary workspace around permanent pad 	The riser pole shifted approximately 35 feet within the previously approved workspace to better align with the Section 1 underground cable; however, this shift required a change to the permanent pad. In addition, a larger workspace is required for the sweep-up side of the riser poles due to different equipment needs at the cable transition.		
SP-39	<ul style="list-style-type: none"> Shift and reconfiguration of permanent pad Addition of temporary workspace around permanent pad and spur road 	The permanent pad was shifted to provide adequate space for operation and maintenance activities, as well as improved access to the pole. Additional temporary workspace was determined to be necessary to construct the pad and spur road.		
SP-40	<ul style="list-style-type: none"> Reconfiguration of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pole shifted approximately 11 feet within the previously approved workspace; however, the shift required a change in the permanent pad to provide adequate space for operation and maintenance activities, as well as improved access to the pole. Additional permanent impacts also resulted from the turning radii for access to the spur road. Additional temporary workspace was determined to be necessary to construct the pad and spur road.	0.18	0.04
SP-41	<ul style="list-style-type: none"> Reconfiguration of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road Addition of permanent workspace to allow for rock removal 	The pole shifted approximately nine feet within the previously approved workspace; however, the shift required a change in the permanent pad to provide adequate space for operation and maintenance activities, as well as improved access to the pole. Additional permanent impacts also resulted from the turning radii for access to the spur road and to allow for rock removal. Boulder piles north and southeast of pad will require removal prior to pad grading.	0.38	0.09
SP-42	<ul style="list-style-type: none"> Pole shift of approximately 53 feet to the east Shift and reconfiguration of permanent pad Removal of new spur road to SP-42 Addition of temporary workspace around permanent pad Addition of permanent workspace to allow for rock removal 	The pad location was adjusted to reduce potential hazards from a rock fall directly above the Southwest Powerlink (SWPL) tower. The pole was shifted as a result of the pad adjustment. Temporary workspace was added to install a temporary rock fall barrier during construction, as needed. A permanent impact area was also added to allow for the removal of boulders and rocks.	0.30	-0.36

¹ Temporary and permanent impact calculations for a select number of adjacent facilities have been combined due to their connectivity.

Attachment A: Refinement Table

Facility/Location	Refinement	Need for Refinement	Difference in Net Impacts ¹ (Approved Design versus Requested Refinements)	
			Temporary (acres)	Permanent (acres)
SP-43	<ul style="list-style-type: none"> Reconfiguration of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road Addition of permanent workspace to allow for rock removal 	The pole shifted approximately 11 feet within the previously approved workspace. While the pad shifted to accommodate this change, it was also designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole. Additional permanent impacts resulted from the turning radii for access to the spur road. Additional temporary and permanent workspace was added for equipment access for boulder removal to the north and southeast of the pad.	0.43	-0.14
SP-44	<ul style="list-style-type: none"> Reconfiguration of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pole shifted approximately nine feet within the previously approved workspace. While the pad shifted to accommodate this change, it was also redesigned to provide adequate space for operation and maintenance activities, as well as improved access to the pole. Additional permanent impacts resulted from the turning radii for access to the spur road.	0.20	-0.02
SP-45	<ul style="list-style-type: none"> Shift and reconfiguration of permanent pad Addition of temporary workspace around permanent pad 	The original access road impacted the foundation of the adjacent SWPL tower. As a result, the road was realigned to the east to avoid impacts to the existing SWPL tower. Adjustments to the pad were made to accommodate the changes made to the access road and were designed to provide adequate space for operation and maintenance activities. The pole also shifted six feet to the southwest; however, the shift is within the previously approved workspace.	0.24	-0.08
SP-46	<ul style="list-style-type: none"> Reconfiguration of permanent pad Addition of temporary workspace around permanent pad 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole.	0.05	0.01
SP-47	<ul style="list-style-type: none"> Reconfiguration of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including turning radii for access to the spur road. Temporary workspace was added to construct the pad. The pole also shifted seven feet to the southwest; however, the shift is within the previously approved workspace.	0.84	0.25
SP-48	<ul style="list-style-type: none"> Shift and reconfiguration permanent pad Realignment and widening of access road Addition of temporary workspace around access road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole. The access road was realigned to avoid constructing the road in a jurisdictional drainage feature and reduce long-term erosion. The pole also shifted seven feet to the southwest; however, the shift is within the previously approved workspace.	0.27	0.13
SP-49	<ul style="list-style-type: none"> Shift and reconfiguration of permanent pad Realignment and widening of access road Addition of temporary workspace around permanent pad and existing access road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole. Temporary workspace was added to construct the pad. The pole also shifted 38 feet to the east; however, the shift is within the previously approved workspace.	0.25	-0.08
SP-51	<ul style="list-style-type: none"> Expansion of permanent pad Addition of temporary workspace around permanent pad 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole.	0.08	0.03

Facility/Location	Refinement	Need for Refinement	Difference in Net Impacts ¹ (Approved Design versus Requested Refinements)	
			Temporary (acres)	Permanent (acres)
SP-52	<ul style="list-style-type: none"> Expansion of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including turning radii for access to the spur road. Temporary workspace was added to construct the pad.	0.19	0.02
SP-53	<ul style="list-style-type: none"> Reconfiguration of permanent pad Addition of temporary workspace around permanent pad 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole. Temporary workspace was added to construct the pad.	0.12	0.01
SP-54	<ul style="list-style-type: none"> Reconfiguration of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including turning radii for access to the spur road. Temporary workspace was added to construct the pad.	0.12	0.03
SP-55	<ul style="list-style-type: none"> Reconfiguration of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including turning radii for access to the spur road. Temporary workspace was added to construct the pad.	0.26	-0.08
SP-56	<ul style="list-style-type: none"> Reconfiguration of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including a turning radius for access to the spur road. Temporary workspace was added to construct the pad.	0.11	0.01
SP-57	<ul style="list-style-type: none"> Reconfiguration of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including larger turning radii for access to the spur road. Temporary workspace was added to construct the pad.	0.23	-0.09
SP-59	<ul style="list-style-type: none"> Expansion of permanent pad Addition of temporary workspace around permanent pad 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole. Temporary workspace was added to construct the pad.	0.06	0.01
SP-60	<ul style="list-style-type: none"> Pole shift of approximately 275 feet to the southwest Addition of temporary workspace around new pole location 	The temporary workspace was shifted adjacent to an existing road to avoid land use conflicts associated with an existing San Diego County Open Space easement.	0.01	-0.26
SP-60A	<ul style="list-style-type: none"> Addition of pole location Addition of permanent pad Addition of temporary workspace around permanent pad and spur road 	This pole has been added to accommodate the move of SP-60 and to meet General Order 95 clearance requirements.	0.17	0.31
SP-61	<ul style="list-style-type: none"> Reconfiguration of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including turning radii for access to the spur road. Temporary workspace was added to construct the pad.	0.09	-0.02

Attachment A: Refinement Table

Facility/Location	Refinement	Need for Refinement	Difference in Net Impacts ¹ (Approved Design versus Requested Refinements)	
			Temporary (acres)	Permanent (acres)
SP-62	<ul style="list-style-type: none"> Reconfiguration of permanent pad Reduced permanent footprint of spur road Addition of temporary workspace around permanent pad and spur road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including turning radii for access to the spur road. Temporary workspace was added to construct the pad.	0.57	-0.24
SP-63	<ul style="list-style-type: none"> Reconfiguration of one pole into a three-pole structure Expansion of permanent pad Widening of existing access road Addition of temporary workspace around permanent pad and existing access road 	This pole, formerly a single pole structure, has been redesigned as a three-pole structure to better accommodate crossing under the existing 500 kV SWPL transmission line and to meet the Project's phasing requirements. With a three-pole structure, the phases move to a horizontal configuration, allowing better access for maintenance as well. The pad was designed to provide adequate space for operation and maintenance activities. Temporary workspace was added to construct the pad.	0.31	0.30
SP-64	<ul style="list-style-type: none"> Reconfiguration of one pole into a three-pole structure Expansion of permanent pad Realignment of spur road Relocation of a pull site Addition of temporary workspace around permanent pad and spur road 	This pole, formerly a single-pole structure, has been designed as a three-pole structure to better accommodate crossing under the existing 500 kV SWPL transmission line and to meet the Project's phasing requirements. With a three-pole structure, the phases move to a horizontal configuration, allowing better access for maintenance as well. The pad was designed to provide adequate space for operation and maintenance activities. Temporary workspace was added to construct the pad.	0.20	0.19
SP-65	<ul style="list-style-type: none"> Expansion and reconfiguration of permanent pad Widening of existing access road Addition of temporary workspace around permanent pad and existing access road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole. Temporary workspace was added to construct the pad.	0.24	0.07
SP-66	<ul style="list-style-type: none"> Reconfiguration of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pad was shifted to avoid land use conflicts associated with an existing San Diego County road easement. The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including turning radii for access to the spur road. Temporary workspace was added to construct the pad.	0.14	0.03
SP-67	<ul style="list-style-type: none"> Expansion of permanent pad Addition of temporary workspace around permanent pad 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole. Temporary workspace was added to construct the pad.	0.12	-0.02
SP-69	<ul style="list-style-type: none"> Expansion of permanent pad Widening of existing road and spur road Addition of temporary workspace around permanent pad, spur road, and existing access road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including larger turning radii for access to the spur road. Temporary workspace was added to construct the pad.	0.35	0.08
SP-70	<ul style="list-style-type: none"> Expansion of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including turning radii for access to the spur road. Temporary workspace was added to construct the pad.	0.21	0.09

Facility/Location	Refinement	Need for Refinement	Difference in Net Impacts ¹ (Approved Design versus Requested Refinements)	
			Temporary (acres)	Permanent (acres)
SP-71	<ul style="list-style-type: none"> Expansion of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including larger turning radii for access to the spur road. Temporary workspace was added to construct the pad.	0.13	0.02
SP-72	<ul style="list-style-type: none"> Reconfiguration of permanent pad Widening of existing road Removal of proposed spur road Addition of temporary workspace around permanent pad and existing road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole. Temporary workspace was added to construct the pad.	0.15	-0.17
SP-73	<ul style="list-style-type: none"> Expansion of permanent pad Addition of temporary workspace around permanent pad 	The pad was designed to provide adequate space for operation and maintenance activities. The existing road is not wide enough to allow safe passage of construction vehicles; therefore, the narrow curves need to be widened. Temporary workspace was added to construct the pad.	0.08	0.04
SP-75	<ul style="list-style-type: none"> Removal of permanent pad Removal of proposed spur road Addition of temporary workspace around pole 	The permanent pad was removed and replaced with a temporary workspace around the pole to reduce potential impacts to cultural resources in accordance with the Memorandum of Agreement (MOA).	0.09	-1.31
SP-76	<ul style="list-style-type: none"> Removal of permanent pad Addition of temporary workspace around pole 	The permanent pad was removed and replaced with a temporary workspace around the pole to reduce potential impacts to cultural resources in accordance with the MOA.	0.14	-0.18
SP-77	<ul style="list-style-type: none"> Removal of permanent pad Addition of temporary workspace around pole 	The permanent pad was removed and replaced with a temporary workspace around the pole to reduce potential impacts to cultural resources in accordance with the MOA. The temporary workspace was rotated to better utilize the space given the terrain.	0.06	-0.07
SP-78	<ul style="list-style-type: none"> Removal of permanent pad Addition of temporary workspace around pole Removal of proposed spur road 	The permanent pad was removed and replaced with a temporary workspace around the pole to reduce potential impacts to cultural resources in accordance with the MOA.	0.09	-0.12
SP-79	<ul style="list-style-type: none"> Expansion of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including turning radii for access to the spur road. Temporary workspace was added to construct the pad.	0.26	0.06
SP-80	<ul style="list-style-type: none"> Expansion of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including larger turning radii for access to the spur road. Temporary workspace was added to construct the pad.	0.28	0.02
SP-81	<ul style="list-style-type: none"> Shift of permanent pad Realignment and widening of spur road Addition of temporary workspace around permanent pad and spur road 	The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including turning radii for access to the spur road. The spur road was realigned to reduce grading and fill on the steep slopes. Temporary workspace was added to construct the pad.	1.76	0.11

Attachment A: Refinement Table

Facility/Location	Refinement	Need for Refinement	Difference in Net Impacts ¹ (Approved Design versus Requested Refinements)	
			Temporary (acres)	Permanent (acres)
SP-82	<ul style="list-style-type: none"> Reconfiguration of permanent pad Addition of temporary workspace around permanent pad and spur road 	<p>The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole. The spur road was realigned to reduce grading and fill on the steep slopes. Temporary workspace was added to construct the pad.</p>		
SP-83	<ul style="list-style-type: none"> Reconfiguration of permanent pad Addition of spur road Addition of temporary workspace around permanent pad and spur road 	<p>There was no improved access provided to this pad in the Final EIR/EIS, as engineering was not completed at that time for the road design. The road will be used to construct the pole. The road will also be utilized by SDG&E for long-term maintenance of the line and the pole. The pad was then reconfigured to accommodate road and turning radii within the pad impact limits. Temporary workspace was added to construct the pad.</p>		
SP-84	<ul style="list-style-type: none"> Reconfiguration of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	<p>The pad was designed provide adequate space for operation and maintenance activities, as well as improved access to the pole, including turning radii for access to the spur road. Temporary workspace was added to construct the pad.</p>	-0.41	0.13
SP-85	<ul style="list-style-type: none"> Reconfiguration and expansion of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road 	<p>The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including turning radii for access to the spur road. Temporary workspace was added to construct the pad.</p>	-0.39	0.24
SP-86	<ul style="list-style-type: none"> Reconfiguration of permanent pad Addition of temporary workspace around permanent pad 	<p>The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole. Temporary workspace was added to construct the pad.</p>	0.02	-0.03
SP-87	<ul style="list-style-type: none"> Reconfiguration of permanent pad Widening of spur road Addition of temporary workspace around permanent pad and spur road Removal of one pull site 	<p>The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including larger turning radii for access to the spur road. Temporary workspace was added to construct the pad.</p>	0.07	0.03
SP-88	<ul style="list-style-type: none"> Shift of permanent pad Shift of proposed spur road Addition of temporary workspace around permanent pad and spur road 	<p>The pad was designed to provide adequate space for operation and maintenance activities, as well as improved access to the pole, including turning radii for access to the spur road. The spur road was shifted to utilize the existing access road and reduce newly-disturbed areas. Temporary workspace was added to construct the pad.</p>	0.05	-0.11
SP-90	<ul style="list-style-type: none"> Addition of a new 138 kV pole Reconfiguration of permanent pad Relocation of a pull site Addition of temporary workspace around permanent pad and spur road 	<p>The pole was added as a terminal dead-end pole where a riser pole (SP-90) was previously located. The pad was designed to provide adequate space for operation and maintenance activities. Temporary workspace was added to construct the pad.</p>	0.67	-0.21

Facility/Location	Refinement	Need for Refinement	Difference in Net Impacts ¹ (Approved Design versus Requested Refinements)	
			Temporary (acres)	Permanent (acres)
SP-9 A and SP-9 B	<ul style="list-style-type: none"> Relocation of two riser poles Addition of permanent pad Relocation of underground transmission line from spur road to existing access road Removal of spur road Widening of existing access road Addition of temporary workspace around permanent pad and existing access road 	Two riser structures were relocated. This will allow for the construction of a short-slack span with reduced tension as the overhead transmission line transitions underground. The access road was adjusted to avoid impacts to the jurisdictional drainage feature to the north.		
Guard Site (GS-) 1	<ul style="list-style-type: none"> Addition of temporary guard structure site Addition of temporary spur road 	A temporary guard structure will be installed to protect a railroad during conductor pulling activities.	0.15	--
GS-2	<ul style="list-style-type: none"> Addition of temporary guard structure site 	A temporary guard structure will be installed to protect an existing road during conductor pulling activities.	0.02	--
GS-2.1	<ul style="list-style-type: none"> Addition of temporary guard structure site 	A temporary guard structure will be installed to protect an existing road during conductor pulling activities.	0.04	--
GS-3	<ul style="list-style-type: none"> Addition of temporary guard structure site 	A temporary guard structure will be installed to protect an existing road during conductor pulling activities.	0.06	--
GS-4	<ul style="list-style-type: none"> Addition of temporary guard structure site 	A temporary guard structure will be installed to protect an existing road during conductor pulling activities.	0.09	--
GS-5	<ul style="list-style-type: none"> Addition of temporary guard structure site 	A temporary guard structure will be installed to protect a railroad during conductor pulling activities.	0.03	--
GS-5.1	<ul style="list-style-type: none"> Addition of temporary guard structure site 	A temporary guard structure will be installed to protect an existing road during conductor pulling activities.	0.07	--
Access Road (AR-) 1	<ul style="list-style-type: none"> Addition of permanent fill Widening of existing access road 	Erosion at the culvert crossing requires repairs to the rock retaining wall and filling of eroded areas to rebuild and widen the road.	--	< 0.01
AR-2	<ul style="list-style-type: none"> Addition of permanent fill Widening of existing access road 	Erosion at the culvert crossing requires filling of eroded areas to rebuild and widen the road, and placement of steel plating to protect the culverts.	--	< 0.01
AR-4	<ul style="list-style-type: none"> Addition of permanent fill Widening of existing access road 	Erosion at the culvert crossing requires filling of eroded areas to rebuild and widen the road, and placement of steel plating to protect the culverts.	--	< 0.01
AR-4.2	<ul style="list-style-type: none"> Widening of existing access road 	The road will be widened because the existing road is too narrow and the turning radius is too sharp to allow construction vehicles and equipment to pass.	--	0.05
AR-5	<ul style="list-style-type: none"> Widening of existing access road 	A boulder located along the road will be moved because construction vehicles and equipment are unable to pass it. Rock will be excavated and the road will be widened to allow construction vehicles and equipment to pass.	--	0.01
AR-5.1	<ul style="list-style-type: none"> Widening of existing access road 	The road will be widened because the existing road is too narrow and the turning radius is too sharp to allow construction vehicles and equipment to pass.	--	0.03

Attachment A: Refinement Table

Facility/Location	Refinement	Need for Refinement	Difference in Net Impacts ¹ (Approved Design versus Requested Refinements)	
			Temporary (acres)	Permanent (acres)
AR-6	<ul style="list-style-type: none"> Widening of existing access road 	<p>A boulder located along the road will be moved and a coast live oak tree (<i>Quercus agrifolia</i>) removed to allow construction vehicles and equipment to pass. Rock will be excavated and the road will be widened to allow construction vehicles and equipment to pass.</p>	--	0.09
AR-6.1	<ul style="list-style-type: none"> Widening of existing access road 	<p>The road will be widened and brush will be cleared because the existing roadway is too narrow to allow construction vehicles and equipment to pass, and brush is overgrown.</p>	--	0.05
AR-7	<ul style="list-style-type: none"> Addition of temporary workspace around existing access road 	<p>Steep vertical curves at the water crossing require the installation of a temporary dip section and wire-mesh fencing to catch fill.</p>	0.02	--
AR-7.1	<ul style="list-style-type: none"> Widening of existing access road Addition of temporary workspace around existing access road 	<p>The road will be widened and brush will be cleared because the existing road is too narrow to allow large construction vehicles and equipment to pass at the turn.</p>	0.08	0.01
AR-8	<ul style="list-style-type: none"> Widening of existing access road 	<p>The road will be widened and brush will be removed because the existing roadway is too narrow to allow construction vehicles and equipment to pass.</p>	--	0.06
AR-9	<ul style="list-style-type: none"> Widening of existing access road 	<p>The road will be widened and brush will be removed because the existing roadway is too narrow to allow construction vehicles and equipment to pass.</p>	--	0.07
AR-10	<ul style="list-style-type: none"> Widening of existing access road 	<p>The road will be widened and brush will be removed because the existing roadway is too narrow to allow construction vehicles and equipment to pass.</p>	--	0.02
AR-11	<ul style="list-style-type: none"> Widening of existing access road 	<p>Erosion at the crossing of a shallow, narrow culvert requires filling of eroded areas to rebuild and widen the road, installation of a dip section, and removal of the existing culvert.</p>	--	0.03
AR-12	<ul style="list-style-type: none"> Widening of existing access road 	<p>The road will be widened, the turn will be expanded, and brush will be removed because the existing road is eroded at the water crossing, the road is too narrow, and the turning radius is too sharp to allow construction vehicles and equipment to pass.</p>	--	0.03
AR-17	<ul style="list-style-type: none"> Widening of existing access road 	<p>The road will be widened and brush will be removed because the existing road is too narrow to allow construction vehicles and equipment to pass.</p>	--	0.01
AR-23	<ul style="list-style-type: none"> Widening of existing access road Addition of temporary workspace around existing access road 	<p>The existing access road was redesigned to meet County of San Diego sight distance standards, which will require construction of a curb grade and paving the roadway.</p>	0.04	0.03
AR-23.1	<ul style="list-style-type: none"> Widening of existing access road 	<p>The road will be widened and brush will be cleared because the turning radius is too sharp to allow construction vehicles and equipment to pass.</p>	--	0.01
AR-24	<ul style="list-style-type: none"> Widening of existing access road Addition of temporary workspace around existing access road 	<p>The existing access road was redesigned to meet County of San Diego sight distance standards, which will require construction of a curb grade and paving the roadway.</p>	0.03	0.01
AR-27	<ul style="list-style-type: none"> Widening of existing access road 	<p>The road will be widened because the existing road is too narrow to allow construction vehicles and equipment to pass.</p>	--	0.04
AR-28	<ul style="list-style-type: none"> Widening of existing access road 	<p>The road will be widened because the existing road is too narrow to allow construction vehicles and equipment to pass.</p>	0.08	0.30

ATTACHMENT B: MINOR PROJECT REFINEMENT REQUEST SCREENING FORM

MINOR PROJECT REFINEMENT REQUEST SCREENING FORM

RESOURCE EVALUATION

The proposed Minor Project Refinement (MPR) request was evaluated to verify that it will not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The following table provides a brief summary of the potential impact for each resource area analyzed in the Final EIR/EIS.

EIR/EIS Section	Summary of Potential Impacts
Visual Resources	<p><i>No Change.</i> This MPR request includes the addition of two steel poles and the replacement of two steel poles with three-pole structures along the 138 kilovolt (kV) Overhead Transmission Line alignment. The additional poles will be placed in alignment with the rest of the approved 51 transmission line poles and will result in a 3.9-percent increase in the number of poles along the approximately 14-mile-long transmission line alignment. As a result, their addition will represent a minor change that will not be noticeable.</p> <p>Three steel poles and two riser poles will be relocated. The farthest pole relocation will be steel pole (SP)-60, which will be shifted approximately 275 feet southwest in line with the 138 kV Overhead Transmission Line, as depicted in Attachment D: Impact Comparison Maps. SP-42 will shift approximately 53 feet to the east, and SP-50 will shift approximately 110 feet to the east. Riser poles (SP-91A and SP-91B) will be relocated by approximately 200 feet. Because all of these poles were already contemplated as part of the design and will generally remain in line with the overall transmission line alignment, their relocation will not result in a substantial change to the visual appearance of the transmission line.</p> <p>Four poles—SP-42, SP-43, SP-46, and SP-52—will increase in height to be between 155 and 170 feet tall. The Final EIR/EIS states that the height of the steel poles associated with the 138 kV Transmission Line would vary by location up to a maximum height of 150 feet. The increase in height of these four poles is required to maintain minimum clearances and wire sag, as required by General Order 95 in light of the slope and terrain at these specific pole locations. The increase in height to approximately 170 feet will remain less than the height of the existing Southwest Powerlink 500 kV transmission line towers. Further, the heights of the monopoles going into the East County (ECO) Substation that will be constructed as part of the Energia Sierra Juarez United States (U.S.) Generator-Tie Project are approved at 170 feet as per B-93 in Section B.5.1.1 500 kV or 230 kV Gen-Tie Support Structures of the Final EIR/EIS. Therefore, in accordance with page 54 of Section D.3.3.3 of the Final EIR/EIS, the 138 kV poles will remain the same or smaller in scale and industrial character to their surroundings and will not create a strong contrast in the landscape.</p> <p>A reduction of approximately 1.08 acre of permanent impacts to vegetation and a reduction of 0.4 acre of grading will occur due to maintenance pad and spur road refinements; thus, a reduction to the overall permanent impacts associated with these disturbances will result from the refinements.¹ An increase of approximately 11.08 acres of temporary impacts to vegetation will occur due to maintenance pad and spur road refinements; however, the majority of the additional temporary impact areas that will be required are minor expansions of the approved work areas. Therefore, the visual change due to the proposed</p>

¹ Grading impacts will be larger than vegetation removal because some of the areas to be graded are already disturbed.

EIR/EIS Section	Summary of Potential Impacts
	<p>refinements will not substantially increase the impacts to visual resources that were analyzed in the Final EIR/EIS.</p> <p>As discussed in the Final EIR/EIS, implementation of Mitigation Measures (MMs) VIS-3a, VIS-3b, and VIS-3c—which include avoiding construction in areas visible from recreation facilities and areas during holidays and periods of heavy recreational use, reducing construction night-lighting impacts, and reducing construction impacts to natural features—will ensure that temporary visual impacts during construction of the new and relocated poles will be less than significant.</p> <p>The activities associated with the construction and utilization of the refinement areas will be consistent with those described in the Final EIR/EIS for construction of the 138 kV Overhead Transmission Line. Thus, as described in the preceding discussion, the refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to visual resources, which was determined to be less than significant with mitigation (Class II) in the Final EIR/EIS.</p>
Agriculture	<p><i>No Change.</i> As discussed in the Final EIR/EIS, the 138 kV Overhead Transmission Line spans approximately 0.3 mile of Farmland of Statewide Importance on Ketchum Ranch, where two approved transmission poles—SP-84 and SP-85—will be installed. The refinements on Ketchum Ranch associated with SP-84 and SP-85 will consist of the addition of spur roads and permanent pads, and the addition of guard structure 5.1, which will result in a decrease of approximately 0.72 acre of temporary disturbance and an increase of approximately 0.37 acre of permanent disturbance. The total agricultural portion of Ketchum Ranch is approximately 320 acres; therefore, the maximum area that will be permanently removed from agricultural production due to the refinements represents approximately 0.12 percent of the agricultural area of Ketchum Ranch. The activities associated with construction and utilization of the 138 kV Overhead Transmission Line refinements on agricultural land will be consistent with that which was analyzed in the Final EIR/EIS. Therefore, the refinements will not result in a new significant impact nor a substantial increase in the severity of a previously identified impact to agriculture, which was determined to be less than significant (Class III) in the Final EIR/EIS.</p>
Air Quality	<p><i>No Change.</i> Activities associated with construction and utilization of the refinement areas will be consistent with those discussed in the Final EIR/EIS for construction of the 138 kV Overhead Transmission Line. As described in Impact AIR-1 in the Final EIR/EIS, construction of the 138 kV Transmission Line will generate elevated levels of dust and exhaust emissions, particularly from activities such as general construction, access road construction, pole foundation installation, and conductor stringing and sagging. The Final EIR/EIS also states that construction of the 138 kV Overhead Transmission Line will exceed the daily significance thresholds for nitrogen oxide during construction activities. Further, the Final EIR/EIS stated that identified impacts would be unavoidable and adverse under the National Environmental Policy Act (NEPA), as the significance threshold could be exceeded. While mitigation measures would be implemented, impacts were determined to be significant (Class I).</p> <p>Grading for the pole maintenance pads and roads will decrease slightly from what was previously identified. The amount of heavy equipment utilized or the number of trips needed to construct the 138 kV Overhead Transmission Line is not anticipated to increase beyond what was analyzed in the Final EIR/EIS as a result of the refinements. Therefore, equipment emissions and objectionable odors as a result of the refinements will also not exceed those described in the Final EIR/EIS.</p> <p>The expected construction duration associated with the refinements in this MPR will be</p>

EIR/EIS Section	Summary of Potential Impacts
	<p>similar to the schedule anticipated for construction of the originally approved ECO Project (Project). Existing access road modifications will not be located substantially closer to any sensitive receptors than what was analyzed in the Final EIR/EIS for the 138 kV Overhead Transmission Line as the 138 kV Transmission Line is remaining in its originally proposed alignment. The Project-specific Dust Control Plan and MMs AQ-1 and AQ-2—which include fugitive dust control measures, reduced idling times for construction equipment, cleaner engine technology, and appropriate transport of fill materials—will be implemented for the refinements. As a result, the total emissions for the refinements will be consistent with what was analyzed in the Final EIR/EIS.</p> <p>As described in the preceding discussion, the refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to air quality, which was determined to be significant and unmitigable (Class I) in the Final EIR/EIS.</p>
Climate Change	<p><i>No Change.</i> As previously discussed, a decrease of approximately 0.4 acre of grading will occur as a result of the refinements. The Climate Change section of the Final EIR/EIS calculates the maximum annual construction-related greenhouse gas emissions to be approximately 9,000 metric tons of carbon dioxide equivalent (MTCO₂E) per year, which is well under the NEPA threshold of 25,000 MTCO₂E per year. The reduction of grading will reduce emissions; therefore, proposed refinements will not trigger an exceedance of this threshold. Therefore, the refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to climate change, which was determined to be less than significant (Class III) in the Final EIR/EIS.</p>
Biological Resources	<p><i>No Change.</i> The approved 138 kV Overhead Transmission Line alignment was surveyed for vegetation, wildlife, and rare plants during the initial jurisdictional surveys that were conducted for the Project and were assessed for impacts in the Final EIR/EIS. Some limited areas were surveyed in 2013, as shown in Attachment F: Survey Maps. Rare plant surveys were conducted for the Project between 2009 and 2013. The results of these surveys are detailed in the 2009, 2010, 2011, and 2012 Rare Plant Survey Reports for the Project. Rare plant surveys for 2013 are currently underway and will be documented in the 2013 Rare Plant Survey Report, which will be prepared in August 2013.</p> <p>As shown in Attachment D: Impact Comparison Maps, a number of sensitive plant species were identified in the refinement areas during the rare plant surveys. The refinements will necessitate removal of approximately 113 additional rare plant individuals, including 57 sticky geraea (<i>Geraea viscida</i>), 30 Oceanblue larkspur (<i>Delphinium parishii</i> ssp. <i>subglobosum</i>), 15 desert beauty (<i>Linanthus bellus</i>), 10 Jacumba milk-vetch (<i>Astragalus douglasii</i> var. <i>perstrictus</i>), and one Campo pea (<i>Lathyrus splendens</i>).² The refinements will also avoid impacts to approximately 41 rare plant individuals, including 39 Tecate taplant (<i>Deinandra floribunda</i>) and two Jacumba monkeyflower (<i>Mimulus bigelovii</i>). Thus, the net impact to plants will be increased by 72 individuals as a result of the refinements. The Final EIR/EIS provides that the Project could result in impacts to approximately 267 rare plants, including 19 Jacumba milk-vetch, 28 sticky geraea, five slender-leaved ipomopsis, and 215 desert beauty individuals. The Final EIR/EIS describes that impacts to special-status plant species will be mitigated to a less-than-significant level through implementation of MMs BIO-1a through BIO-1g, BIO-3a, BIO-4a, and BIO-5a through</p>

² Due to the blooming period and weather in 2013, the number of Tecate tarplant individuals impacted is based on data from the 2012 surveys. The number of other rare plant individuals impacted is based on data from the 2013 surveys.

EIR/EIS Section	Summary of Potential Impacts
	<p>BIO-5b, which include special-status species compensation and habitat restoration. Mitigation for impacts to rare plants is also described in the Project’s Compensatory Mitigation Plan, which was approved by the California Department of Fish and Wildlife (CDFW) on December 11, 2012.</p> <p>A few special-status wildlife species, such as loggerhead shrike (<i>Lanius ludovicianus</i>) and Quino checkerspot butterfly (<i>Euphydryas editha quino</i>), have the potential to occur within the refinement areas; however, all of these species were formerly identified and analyzed in previous wildlife surveys conducted for the Project. Temporary impacts to Quino checkerspot butterfly occupied habitat and critical habitat will increase from none to approximately 2.01 acres and 1.57 acres, respectively, as a result of the refinements. However, permanent impacts to Quino checkerspot butterfly occupied habitat and critical habitat will decrease by approximately 1.59 acres and 1.13 acres, respectively, as a result of the refinements.</p> <p>As a result of the refinements, temporary impacts to vegetation will increase by approximately 11.08 acres and permanent impacts to vegetation will decrease by approximately 1.08 acre.³ The additional temporary impacts to vegetation communities represent less than a 12-percent increase in the overall Project’s total impact to vegetation, which is minor. Tree trimming will be conducted, as described in the Final EIR/EIS, and one coastal live oak (<i>Quercus agrifolia</i>) tree will be removed as a result of the existing access road modifications to allow vehicle access. All areas temporarily impacted will be restored following construction in accordance with the Project’s Habitat Restoration Plan, which has been approved by the California Public Utilities Commission and CDFW.</p> <p>As described in the preceding discussion, the refinements will not result in a new significant impact nor result in a substantial increase in the severity of a previously identified impact to biological resources, which was determined to be significant and unmitigable (Class I) in the Final EIR/EIS.</p>
<p>Cultural and Paleontological Resources</p>	<p><i>Reduced Change.</i> The 138 kV Overhead Transmission Line alignment was surveyed for cultural resources during pre-construction and cultural resources inventory work for the 2010 Final Report, <i>Prehistoric Artifact Scatters, Bedrock Milling Stations, and Tin Can Dumps: Results of a Cultural Resources Study for the SDG&E East County Substation Project</i> (Berryman and Whitaker, 2010). However, as the refinement areas include approximately seven acres that were not previously surveyed, a supplemental archaeological resources survey was conducted by ASM Affiliates, Inc. between April 15 and 18, 2013. Field survey methods were conducted in accordance with the Management Plan for Archaeological Monitoring, Post Review Discovery, and Unanticipated Effects, which was revised in January 2013. Seven new archeological sites and five new isolated resources were identified during the supplemental survey. Because the sites have not been formally evaluated for the National Register of Historic Places or the California Register of Historic Resources, they are treated as eligible and will be avoided by the proposed refinements. None of the new sites are within the area of direct impact for the proposed refinements and all seven are within 100 feet of proposed work areas. In accordance with the Memorandum of Agreement (MOA) and MM CUL-1A of the Final EIR/EIS, these resources will be identified as environmentally sensitive areas (ESAs) and protected from direct impacts with fencing or other boundary defining materials during construction.</p> <p>The proposed refinements will reduce potential impacts to known cultural resource areas</p>

³ Impacts to vegetation do not include residential/developed areas, roads, or agriculture vegetation types.

EIR/EIS Section	Summary of Potential Impacts
	<p>by approximately 0.11 acre. Each refinement area has been micro-sited to avoid impacts to known cultural resources.</p> <p>In accordance with the MOA and MM CUL-1A in the Final EIR/EIS, all archaeological sites located within 100 feet of work areas are designated as ESAs and will be fenced or marked with other boundary defining materials, and Archaeological Monitors and Tribal Cultural Consultants will be present during initial ground-disturbing activities within 100 feet of ESAs.</p> <p>The proposed refinements are located within the same geological formation as the original 138 kV Transmission Line that was analyzed in the EIR/EIS. The paleontological monitoring requirements at the refinement areas will remain unchanged.</p> <p>As described in the preceding discussion, the refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified potential impact to cultural or paleontological resources, which was determined to be less than significant with mitigation (Class II) in the Final EIR/EIS.</p>
<p>Geology, Mineral Resources, and Soils</p>	<p><i>No Change.</i> The refinement areas were included in the evaluation of geology, mineral resources, and soils in the Project area as part of the geotechnical studies performed for the 138 kV Overhead Transmission Line alignment design, and will not result in new geology or soils characterization not previously analyzed in the EIR/EIS impacts. The reduction of approximately 0.4 acre of grading will occur as a result of refinements to roads and pads. The proposed refinements will be subject to the same best management practices (BMPs) that will be implemented for the whole overhead transmission line, as required by the Linear Storm Water Pollution Prevention Plan (SWPPP) for the Project. As a result, no additional impacts to soils caused by erosion are anticipated.</p> <p>There are no identified mines located within the refinement areas. The ground-disturbing activities that will be required to construct the 138 kV Overhead Transmission Line will include grading and excavation, which is consistent with the Project's Final EIR/EIS. As a result, the refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to geology, mineral resources, and soils, which was determined to be less than significant with mitigation (Class II) in the Final EIR/EIS.</p>
<p>Public Health and Safety; Fire and Fuels Management</p>	<p><i>No Change.</i> The activities performed and the materials utilized during construction of the refinement areas will occur in accordance with the description of uses provided in the Project's Final EIR/EIS. The refinement areas will not create new hazards; rather, the improvements to existing roads and adjustments to approved spur roads and pads are proposed to allow safe use for construction vehicles through expansion of turning radii and road widths. The new spur road to be constructed has been designed to meet safety standards and will facilitate safe access to SP-83. Construction of the refinement areas will include use of materials listed in Table D-10.2 of the Project's Final EIR/EIS and Table 1: Hazardous Materials and Uses of the Project's Hazardous Materials and Waste Management Plan. These materials were previously included in the Final EIR/EIS analysis, and all hazardous materials that will be used will be handled and disposed of in accordance with the Project's Hazardous Materials and Waste Management Plan and with the Health and Safety Program.</p> <p>As discussed in the Final EIR/EIS, the presence of overhead transmission lines presents an ongoing source of potential wildfire ignitions. The refinements will include improvements to existing San Diego County roadways and existing unpaved roads through widening and brush removal to allow for improved access to Project facilities, as described in Attachment A: Refinement Table. As discussed in the Final EIR/EIS, firefighting response</p>

EIR/EIS Section	Summary of Potential Impacts
	<p>times will be facilitated by the widened roads and provided fuel modification resulting from brush removal. Construction in the refinement areas will be conducted in accordance with the Project's Construction Fire Prevention Plan.</p> <p>As described in the preceding discussion, the refinements will not result in a new significant impact nor a substantial increase in the severity of a previously identified impact to public health and safety or fire and fuels management, which was determined to be less than significant with mitigation (Class II) in the Final EIR/EIS.</p>
Water Resources	<p><i>No Change.</i> The approved 138 kV Overhead Transmission Line alignment was surveyed for drainages during the initial jurisdictional surveys that were conducted for the Project. In addition, some of the refinement areas were surveyed for drainages during the supplemental jurisdictional surveys conducted from April 8 to 11, 2013. Data collected for each drainage feature was based on the 2005 U.S. Army Corps of Engineers (USACE) Regulatory Guidance Letter No. 05-05 Ordinary High Water Mark Identification and the 2008 Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States. Attachment F: Survey Maps depicts the surveyed areas.</p> <p>The refinements will not degrade water quality due to erosion, sedimentation, or spills of potentially harmful materials with the implementation of the Linear SWPPP to reduce erosion and sedimentation and prevent non-storm water from entering surface or groundwater. No change in the amount of impervious surface will occur because the pads and roads will not be paved. Due to the reduction of grading, additional water for dust control and soil compaction will not be required. The refinements associated with the 138 kV Overhead Transmission Line alignment will increase temporary impacts to CDFW-jurisdictional drainages by approximately 0.17 acre and decrease permanent impacts by approximately 0.21 acre. In addition, temporary impacts to USACE-jurisdictional drainages will increase by approximately 0.03 acre, while permanent impacts will decrease by approximately 0.03 acre. SDG&E will initiate consultation with the CDFW, USACE, and Colorado River Basin Regional Water Quality Control Board regarding the changes to impacts to jurisdictional resources, and SDG&E will amend and modify permits, as necessary, following the completion of the final design for the rest of the Project.</p> <p>The refinement areas will be constructed using the same construction practices as those described in the Project's Final EIR/EIS. The BMPs provided in the Linear SWPPP will be implemented to reduce the potential for storm water runoff, erosion, sedimentation, and significant alterations to drainage patterns.</p> <p>As described in the preceding discussion, the refinements will not result in a new significant impact nor a substantial increase in the severity of a previously identified impact to water resources, which was determined to be less than significant with mitigation (Class II) in the Final EIR/EIS.</p>

EIR/EIS Section	Summary of Potential Impacts
Land Use	<p><i>No Change.</i> As discussed in the Final EIR/EIS, land use impacts would be significant under the California Environmental Quality Act if the Project results in a conflict with an applicable land use plan, policy, or regulations and/or results in a division of an established community or disrupts a recently approved land use. As indicated in the Final EIR/EIS, the land on which the 138 kV Overhead Transmission Line is located is designated as Multiple Rural Use and Specific Plan Area in the County of San Diego General Plan and is currently undeveloped. The refinement areas will also be located on land designated as Multiple Rural Use and Specific Plan Area in the County of San Diego General Plan. As a result, the construction and operation of the refinements will be consistent with the analysis in the Final EIR/EIS and will not conflict with any land use plans, policies, or regulations. The landowner agreements allow for SDG&E to adjust the location of Project components, and the appropriate rights to construct the 138 kV Overhead Transmission Line have been obtained.</p> <p>No additional landowners will be affected beyond those that were analyzed in the Final EIR/EIS for construction of the 138 kV Overhead Transmission Line. As a result, the refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to land use, which was determined to be less than significant with mitigation (Class II) in the Final EIR/EIS.</p>
Noise	<p><i>No Change.</i> Constructing additional poles will result in additional construction-related noise during excavation. The impacts from noise will be similar to those analyzed for construction of the 138 kV Overhead Transmission Line in the Final EIR/EIS. As discussed in the Air Quality section of this MPR request, no additional noise-generating activities or heavy equipment will be required to construct the refinements aside from that which was analyzed in the Final EIR/EIS. The additional poles will be located in line with the approved 138 kV Overhead Transmission Line alignment. The additional temporary disturbance from the refinements will be distributed along the transmission line and will occur in areas already planned for disturbance; therefore, no new sensitive receptors will be affected. The overall construction schedule will not be affected by the refinements. Therefore, the impacts from noise will be consistent with those analyzed for construction of the 138 kV Overhead Transmission Line in the Final EIR/EIS. Thus, the refinements will not result in a new significant impact nor a substantial increase in the severity of a previously identified impact related to noise, which was determined to be significant and unmitigable (Class I).</p>
Social and Economic Conditions	<p><i>No Change.</i> The refinements will be constructed in accordance with the description provided in the Project's Final EIR/EIS. The refinements will not cause any additional residential displacement nor have an effect on employment of construction personnel beyond what was analyzed in the Final EIR/EIS. As a result, the refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to social and economic conditions, which was determined to be less than significant (Class III) in the Final EIR/EIS.</p>

EIR/EIS Section	Summary of Potential Impacts
Public Services and Utilities	<p><i>No Change.</i> The refinements will be constructed in accordance with the description provided in the Project’s Final EIR/EIS. Due to the reduction of grading by approximately 0.4 acre, no additional water will be required for dust control and soil compaction. Furthermore, the overall construction schedule will not be affected, and no additional water trucks will be required beyond those anticipated for construction of the 138 kV Overhead Transmission Line.</p> <p>The additional poles will be located in line with the approved 138 kV Overhead Transmission Line alignment and will not be located in closer proximity to any overhead or underground utilities than those which were identified in the Final EIR/EIS. As a result, the potential to disrupt existing utilities will not increase beyond that which was previously identified and analyzed within the Final EIR/EIS. In addition, as discussed in the Final EIR/EIS, implementation of MMs PSU-1a, PSU-1b, and PSU-1c, which include notification of utility service interruption, protection of underground utilities, and coordination with utility providers, will ensure that impacts remain less than significant.</p> <p>Construction of the refinements will generate similar types and volumes of waste as that which was analyzed in the Final EIR/EIS for construction of the Project.</p> <p>As described in the preceding discussion, the refinements will not result in a new significant impact nor a substantial increase in the severity of a previously identified impact to public services and utilities, which was determined to be less than significant with mitigation (Class II) in the Final EIR/EIS.</p>
Wilderness and Recreation	<p><i>No Change.</i> The refinement areas will be located within the approved alignment of the 138 kV Overhead Transmission Line. The refinements will not be closer to wilderness areas. Although the spur road improvements near SP-40 will be located approximately 65 feet closer to Lake Domingo than the approved Project, access to the lake will not be restricted or otherwise affected. As a result, the refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to wilderness and recreation, which was determined to be less than significant with mitigation (Class II) in the Final EIR/EIS.</p>
Transportation and Traffic	<p><i>No Change.</i> The location of the refinement areas will be within the approved 138 kV Overhead Transmission Line alignment. The only construction vehicles and heavy equipment that will be used for the addition of the refinements are those that were already required for construction of the approved 138 kV Overhead Transmission Line. In addition, all construction activities associated with the refinements will be conducted in accordance with the 138 kV Overhead Transmission Line Traffic Control Plan. Therefore, the refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to transportation and traffic, which was determined to be less than significant with mitigation (Class II) in the Final EIR/EIS.</p>

ATTACHMENT C: PHOTOGRAPHS

ATTACHMENT C: PHOTOGRAPHS



Photograph 1: View of relocated Pull Site- (PS-) 38 location facing west.



Photograph 2: View of relocated steel pole- (SP-) 50 site facing northwest.



Photograph 3: View of relocated SP-60 site facing northwest.



Photograph 4: View of new SP-60A site facing southeast.



Photograph 5: View of relocated PS-64 location facing east.



Photograph 6: View of relocated riser pole SP-91A site facing west.



Photograph 7: View of relocated riser pole SP-91B site facing east.



Photograph 8: View of relocated PS-91 site facing south.



Photograph 9: View of erosion on Access Road- (AR-) 1 at the culvert crossing, which requires repairs to the rock retaining wall, filling of eroded areas to rebuild and widen the road, and placement of steel plating to protect the culverts.



Photograph 10: View of erosion at culvert crossing on AR-2, which requires filling eroded areas to rebuild and widen the roadway, and placement of steel plating to protect the culvert.



Photograph 11: View of erosion on AR-4, which requires filling eroded areas to rebuild and widen the roadway and placement of steel plating to protect the culvert.



Photograph 12: View of steep vertical curves at the water crossing on AR-7 where installation of a temporary dip section and wire mesh fencing to catch fill is required.



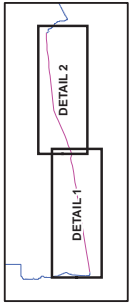
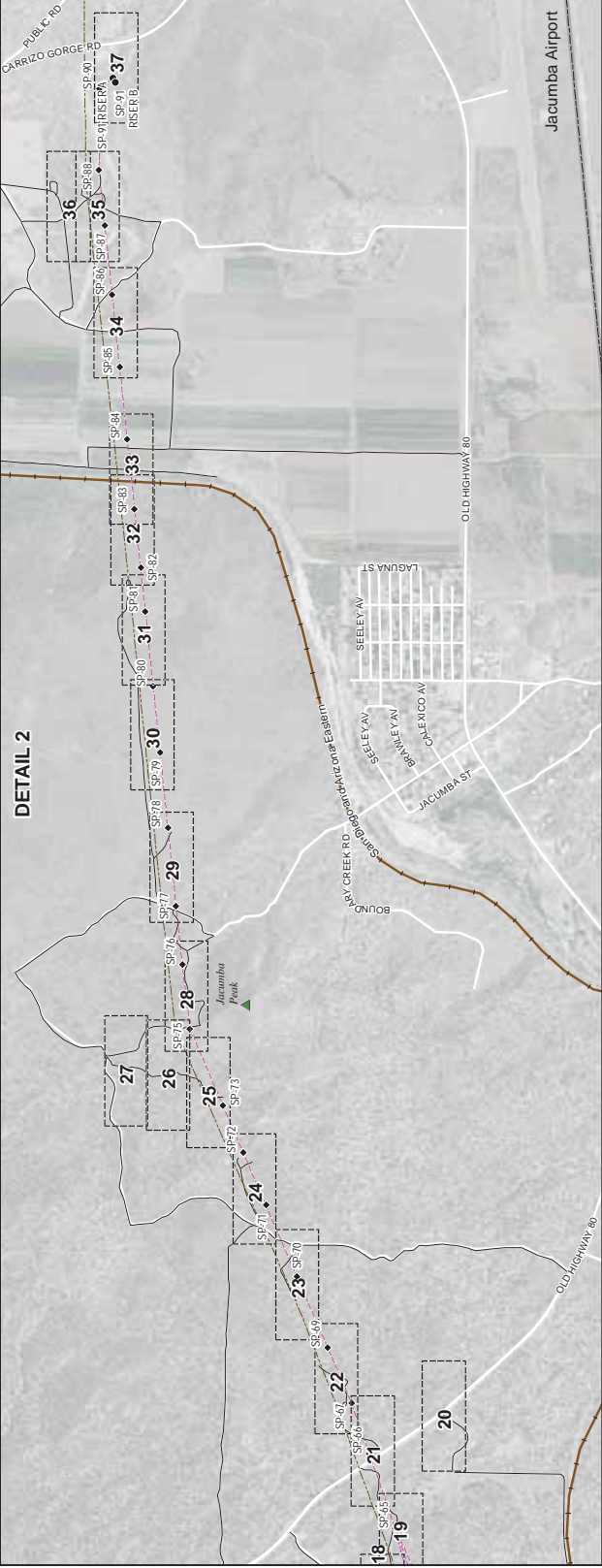
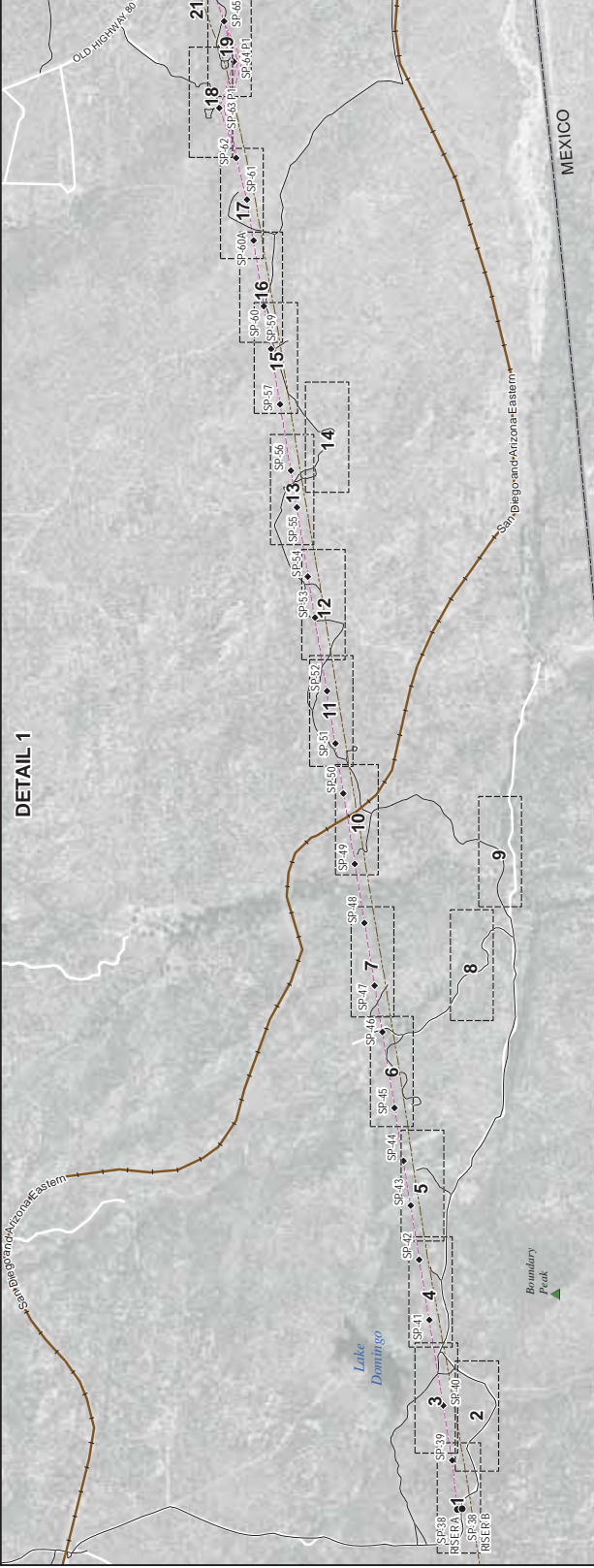
Photograph 13: View of erosion at the crossing of a shallow, narrow culvert on AR-11, which requires installation of a dip section and removal of the existing culvert.

ATTACHMENT D: IMPACT COMPARISON MAPS

Attachment D: Impact Comparison Map Overview

East County Substation Project

- Proposed 138 KV Pole Location
- Proposed Riser Pole
- Relocated 138 KV Overhead
- Existing Transmission Line
- Existing Access Road Centerline
- Map Extent



Attachment D: Impact Comparison Map 1 of 37

East County Substation Project

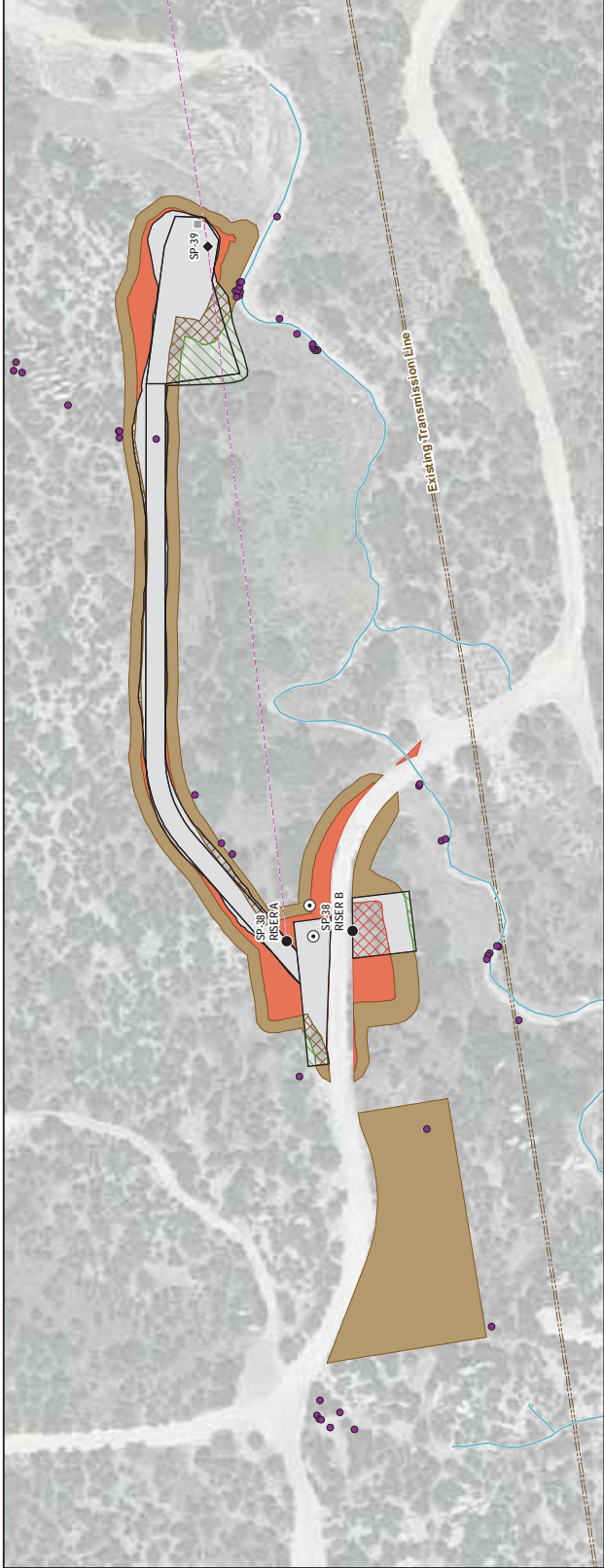
Final Design

- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



Original Design Versus Refinements Impact Comparison

- Original Riser Pole
 - Original 138 kV Pole
 - ◆ Added 138 kV Pole
 - ◆ Relocated 138 kV Pole*
 - Relocated Riser
 - Original Project Outline
 - Removed Permanent/Temporary
 - Added Permanent
 - Added Temporary
 - Permanent to Temporary
 - Temporary to Permanent
 - No Change
 - === Existing Transmission Line
- *Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



**Attachment D:
Impact Comparison Map 2 of 37**

East County Substation Project

Final Design

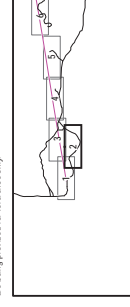
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- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
 - Original 138 kV Pole
 - ◆ Added 138 kV Pole
 - ◆ Relocated 138 kV Pole *
 - Relocated Riser
 - Original Project Outline
 - Removed Permanent/Temporary
 - Added Permanent
 - Added Temporary
 - Permanent to Temporary
 - Temporary to Permanent
 - No Change
 - === Existing Transmission Line
- *Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.

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11,600
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**Attachment D:
Impact Comparison Map 3 of 37**

East County Substation Project

Final Design

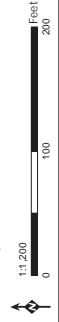
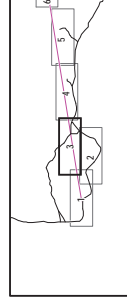
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Riser Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole *
- Relocated Riser
- Original Project Outline
- Removed Permanent/Temporary
- Added Permanent
- Added Temporary
- Permanent to Temporary
- Temporary to Permanent
- No Change
- === Existing Transmission Line

*Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.

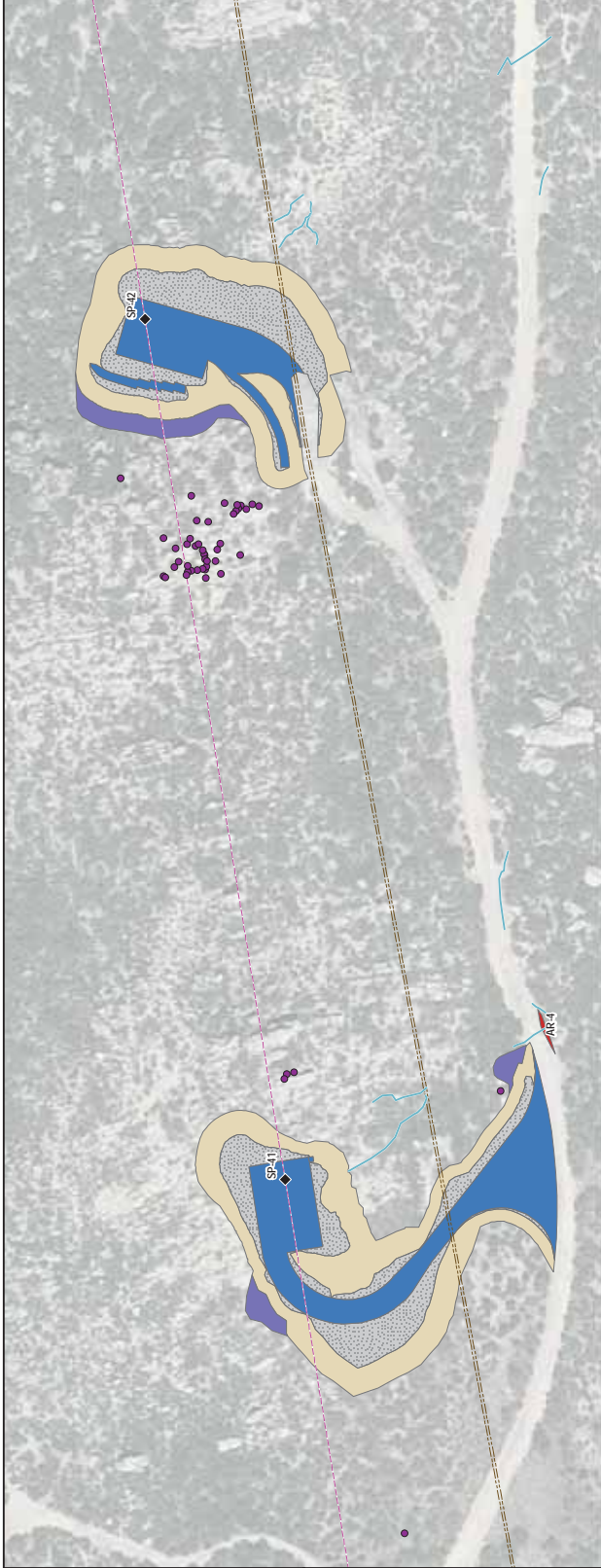


**Attachment D:
Impact Comparison Map 4 of 37**

East County Substation Project

Final Design

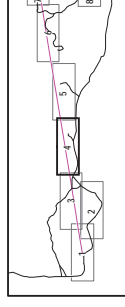
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- Riser Pole
- ◆ 138 kV Overhead
- 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- ▨ Removed Permanent/Temporary
- ▨ Added Permanent
- ▨ Added Temporary
- ▨ Permanent to Temporary
- ▨ Temporary to Permanent
- ▨ No Change
- ▨ Existing Transmission Line

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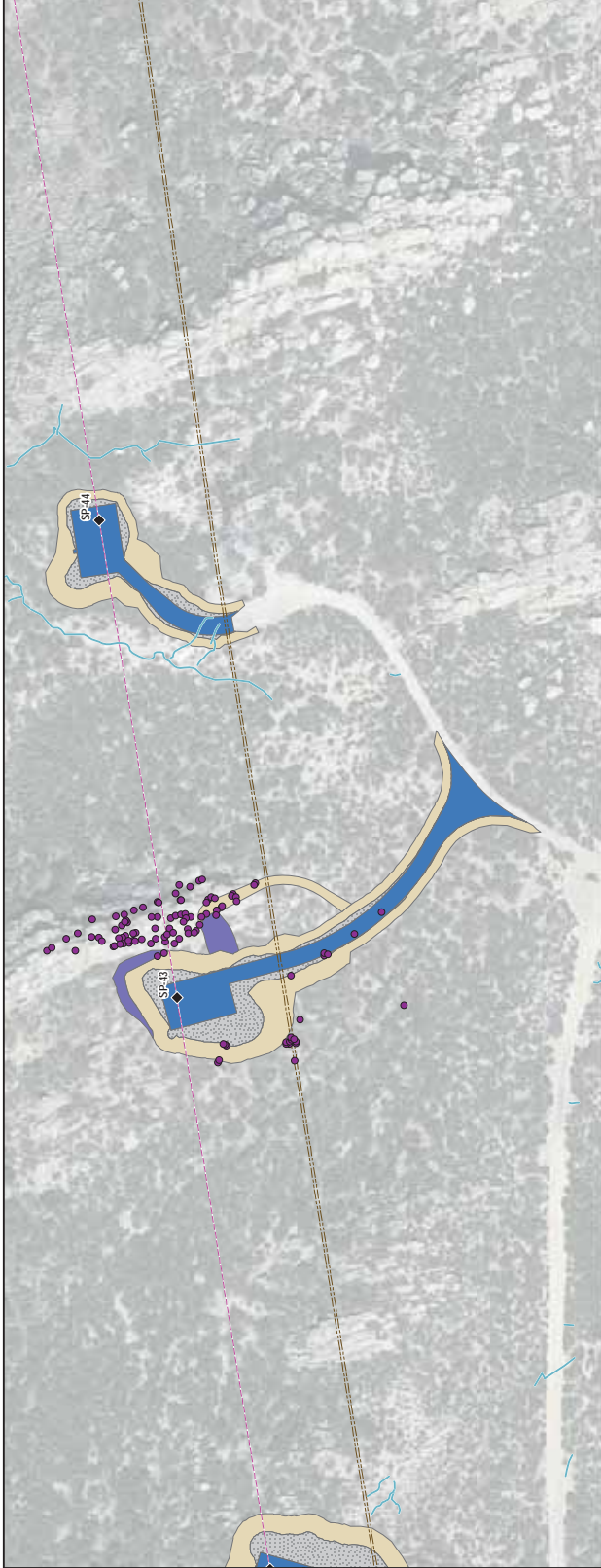
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**Attachment D:
Impact Comparison Map 5 of 37**

East County Substation Project

Final Design

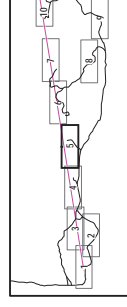
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- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- Removed Permanent/Temporary
- Added Permanent
- Added Temporary
- Permanent to Temporary
- Temporary to Permanent
- No Change
- Existing Transmission Line

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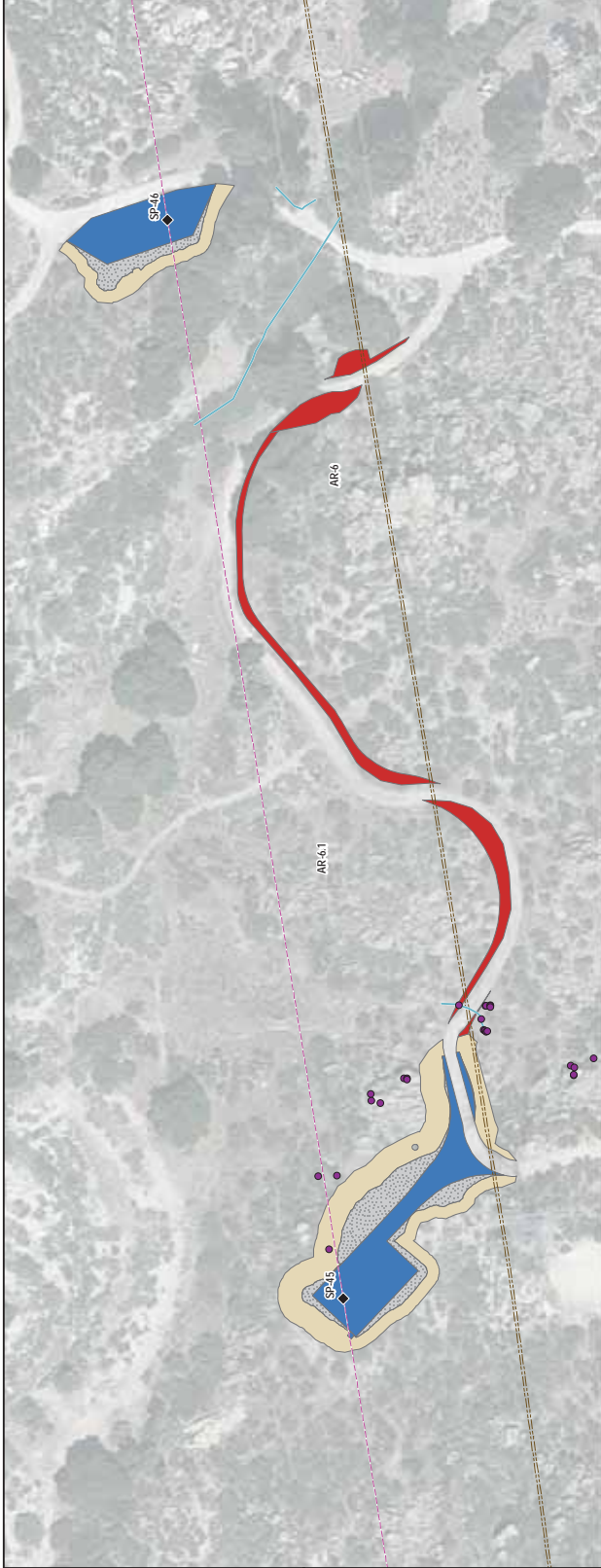


**Attachment D:
Impact Comparison Map 6 of 37**

East County Substation Project

Final Design

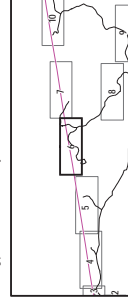
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- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- Removed Permanent/Temporary
- Added Permanent
- Added Temporary
- Permanent to Temporary
- Temporary to Permanent
- No Change
- Existing Transmission Line

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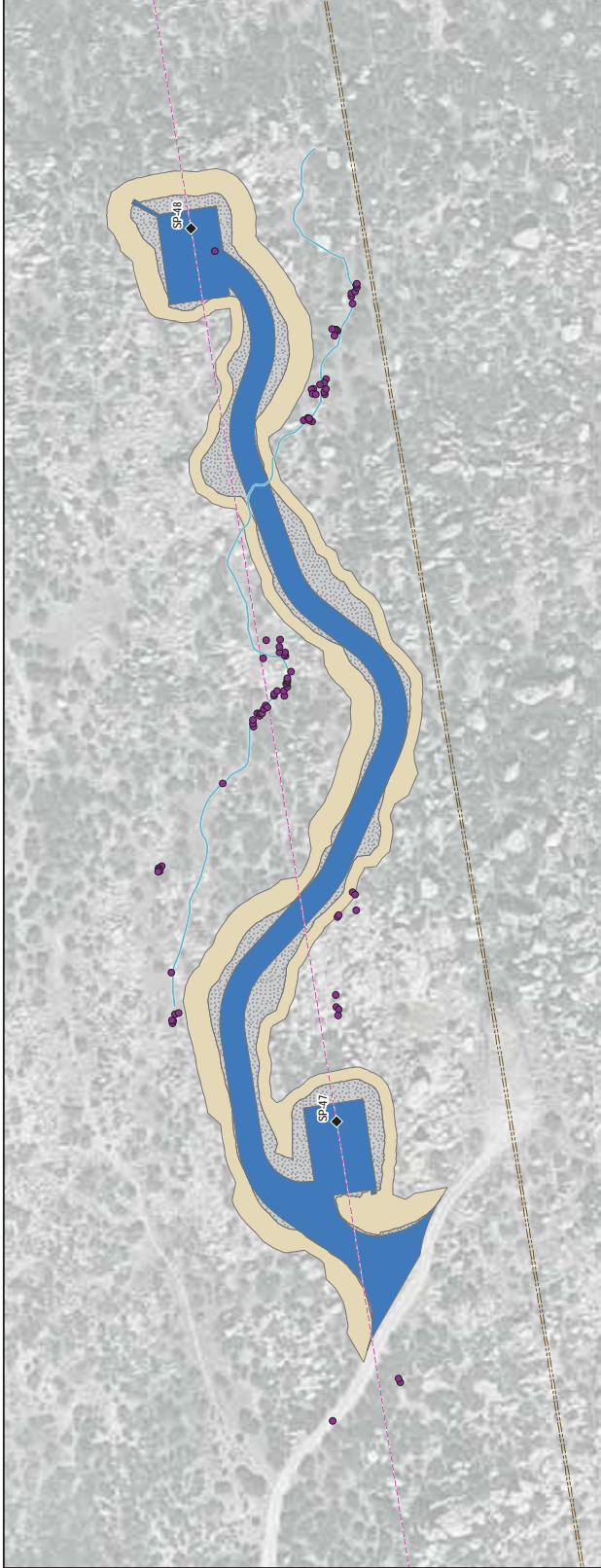


**Attachment D:
Impact Comparison Map 7 of 37**

East County Substation Project

Final Design

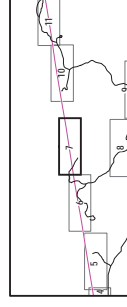
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- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole *
- Relocated Riser
- Original Project Outline
- ▨ Removed Permanent/Temporary
- ▨ Added Permanent
- ▨ Added Temporary
- ▨ Permanent to Temporary
- ▨ Temporary to Permanent
- ▨ No Change
- ▨ Existing Transmission Line

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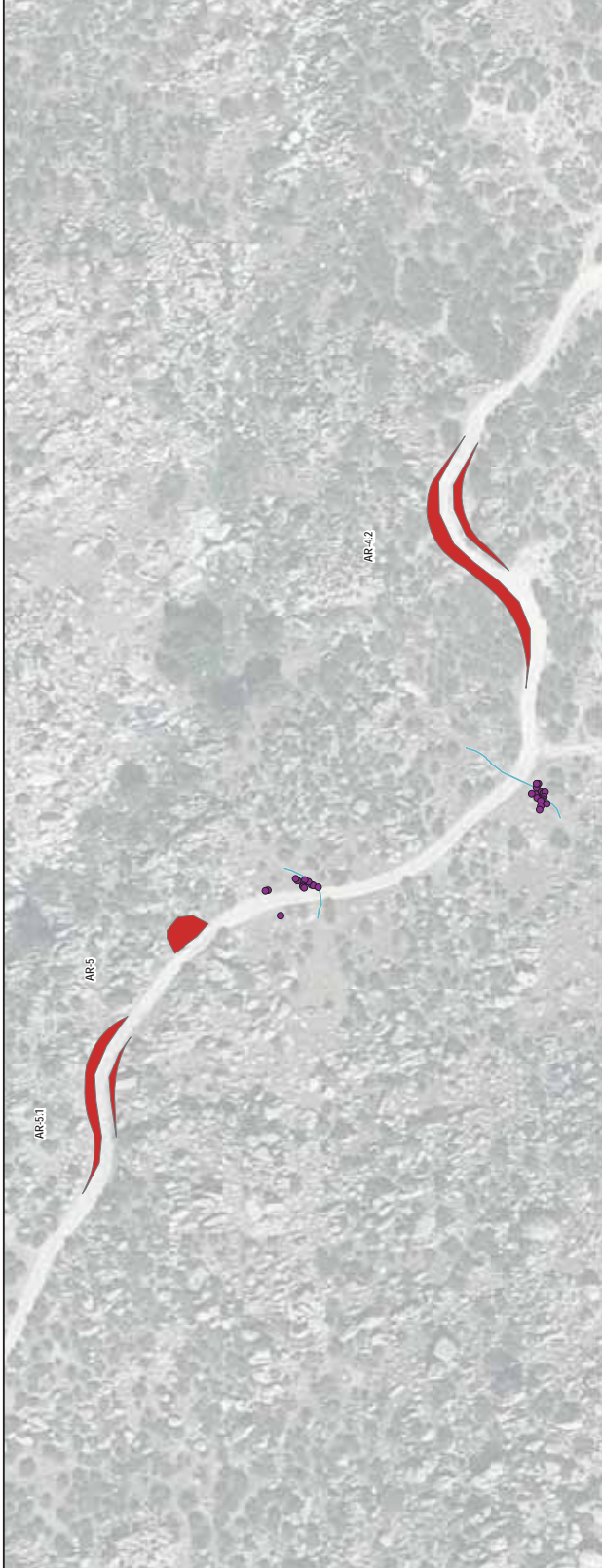


**Attachment D:
Impact Comparison Map 8 of 37**

East County Substation Project

Final Design

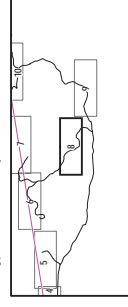
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- Riser Pole
- ◆ 138 kV Overhead
- 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



**Original Design Versus
Refinements Impact Comparison**

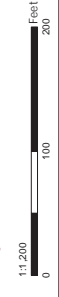
- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- ▨ Removed Permanent/Temporary
- Added Permanent
- Added Temporary
- ▨ Permanent to Temporary
- ▨ Temporary to Permanent
- No Change
- === Existing Transmission Line

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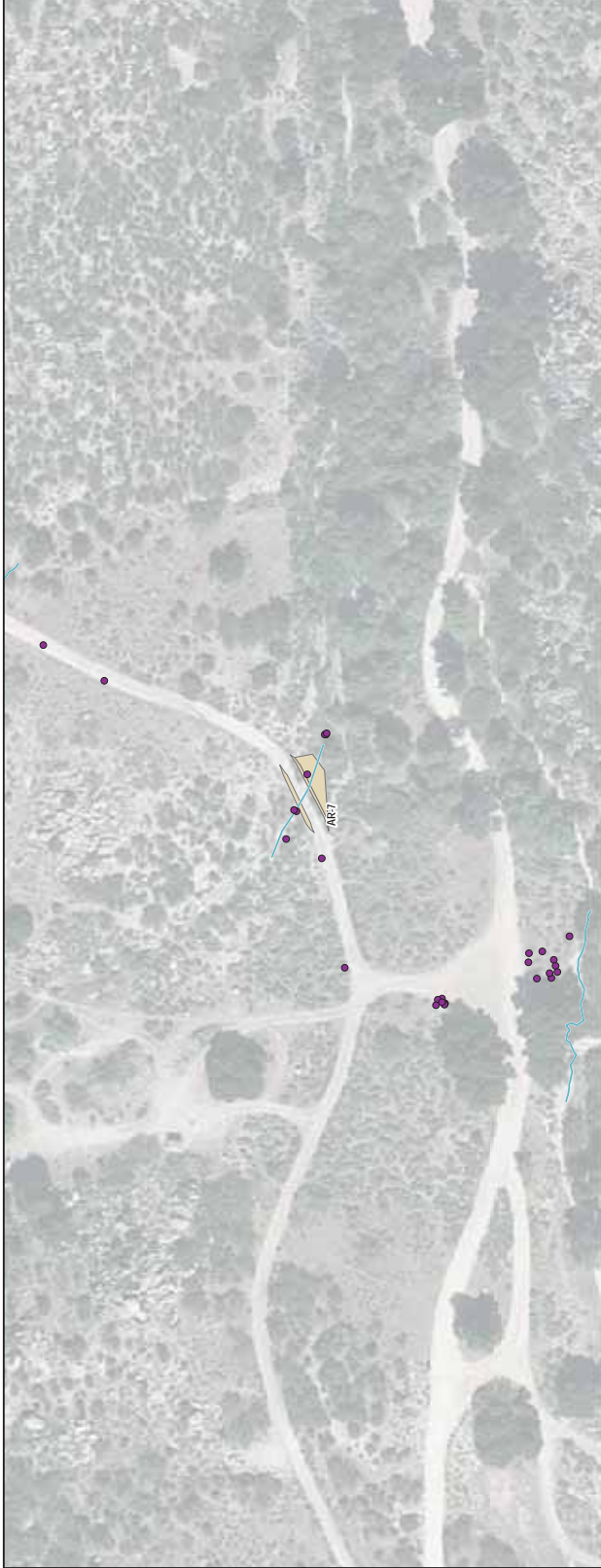


**Attachment D:
Impact Comparison Map 9 of 37**

East County Substation Project

Final Design

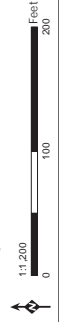
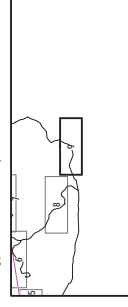
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Riser Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- Removed Permanent/Temporary
- Added Permanent
- Added Temporary
- Permanent to Temporary
- Temporary to Permanent
- No Change
- === Existing Transmission Line

*Many of the substations are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.

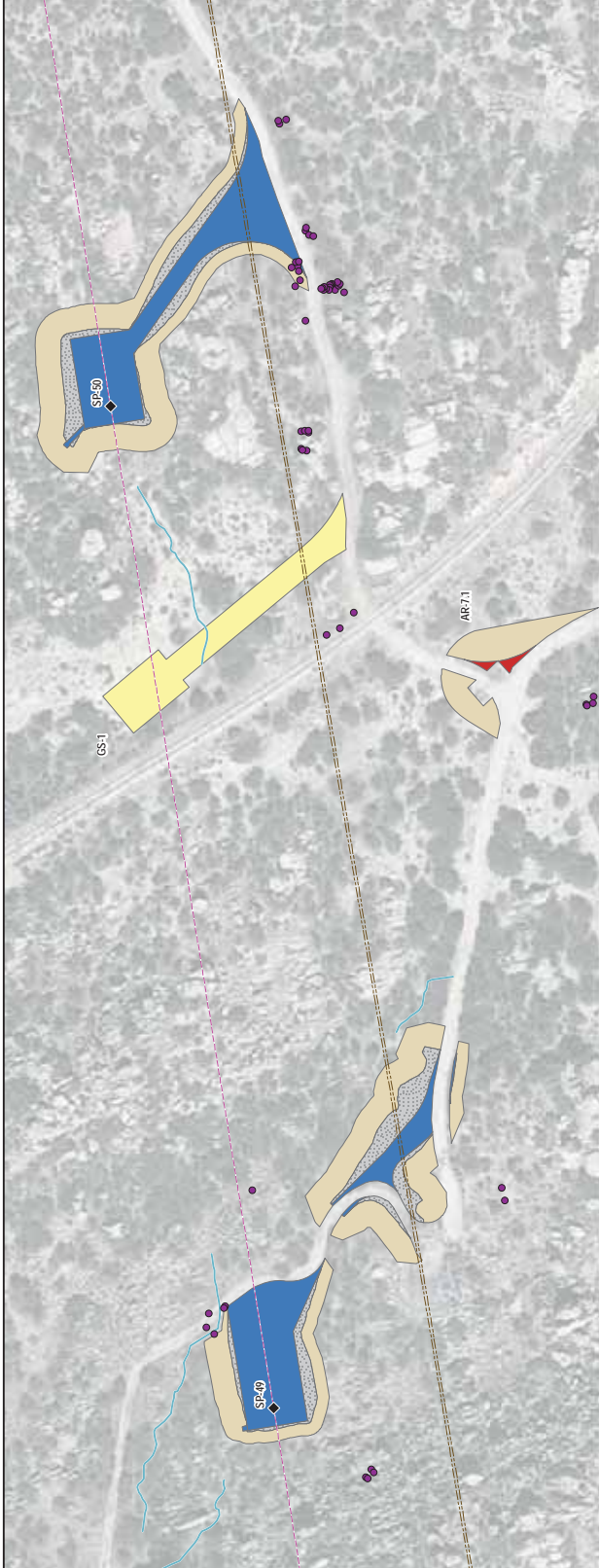


**Attachment D:
Impact Comparison Map 10 of 37**

East County Substation Project

Final Design

- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
 - Original 138 kV Pole
 - ◆ Added 138 kV Pole
 - ◆ Relocated 138 kV Pole *
 - Relocated Riser
 - Original Project Outline
 - ▨ Removed Permanent/Temporary
 - ▨ Added Permanent
 - ▨ Added Temporary
 - ▨ Permanent to Temporary
 - ▨ Temporary to Permanent
 - ▨ No Change
 - ▨ Existing Transmission Line
- *Many of the substations are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.

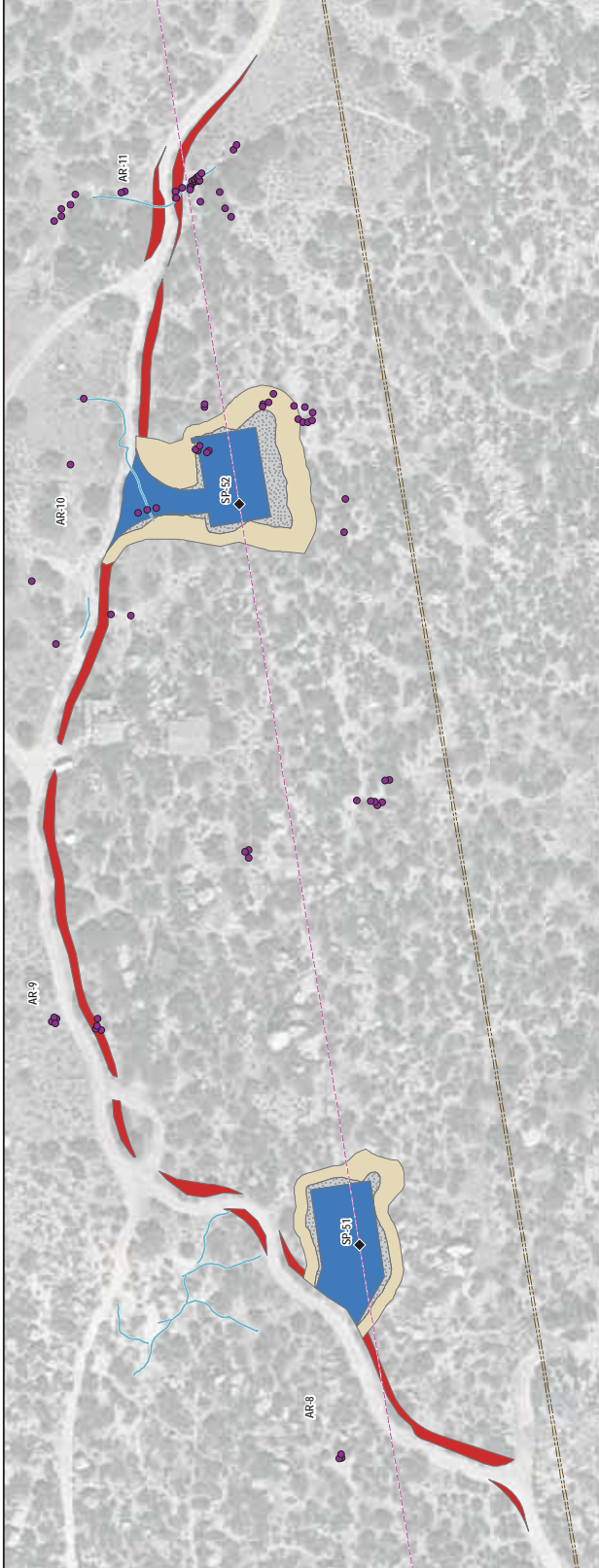


**Attachment D:
Impact Comparison Map 11 of 37**

East County Substation Project

Final Design

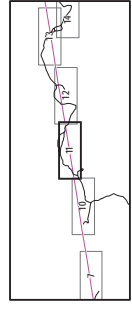
- ◆ 138 kV Pole
 - Riser Pole
 - 138 kV Overhead
 - - - 138 kV Underground
- Temporary**
- Construction Yard
 - Guard Structure Site/Access (GS)
 - Pull Site (PS)
 - Staging Area
 - Workspace
- Permanent**
- Access Road Modifications
 - Grading
 - Pad/New Access Road
 - Rock Removal Workspace
 - Vault
- Resources**
- Drainage
 - Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- ▨ Removed Permanent/Temporary
- ▩ Added Permanent
- ▧ Added Temporary
- ▦ Permanent to Temporary
- ▤ Temporary to Permanent
- ▣ No Change
- ▢ Existing Transmission Line

*Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.

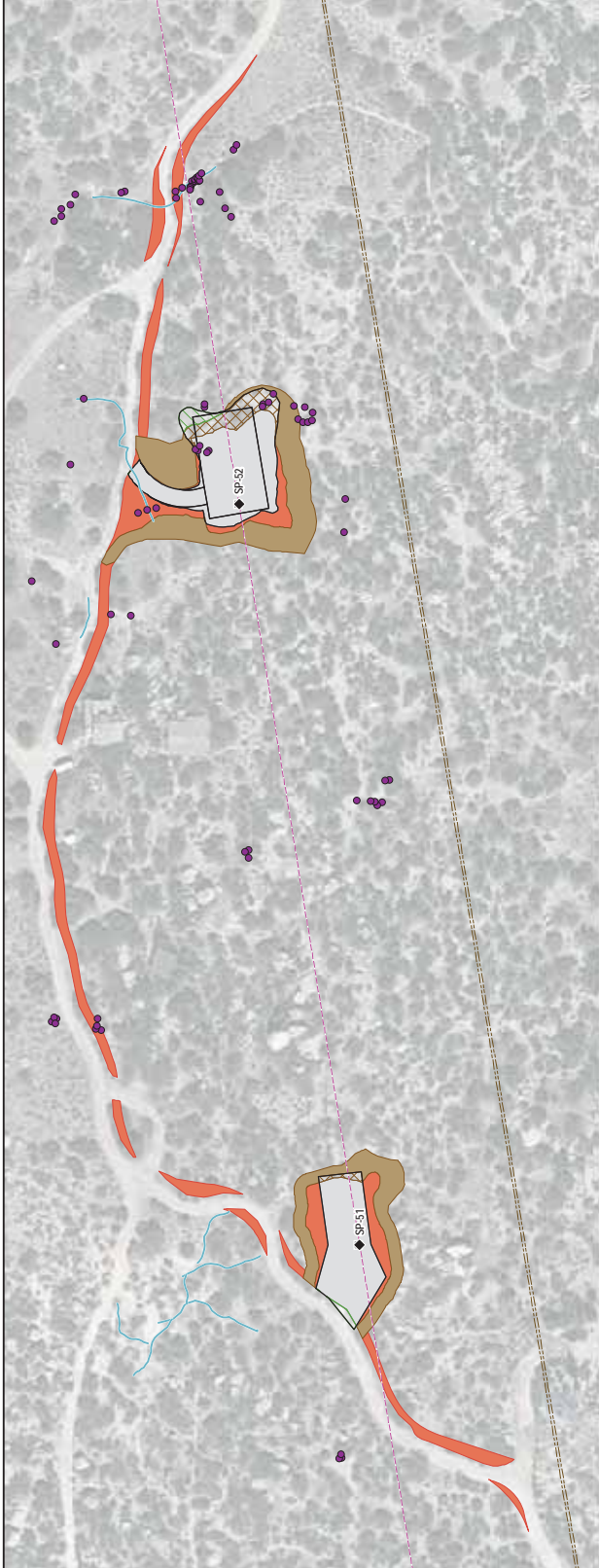


Scale: 1:1,200

0 100 200 Feet

SDGE
SOUTHERN CALIFORNIA GAS & ELECTRIC COMPANY

INSIGNIA

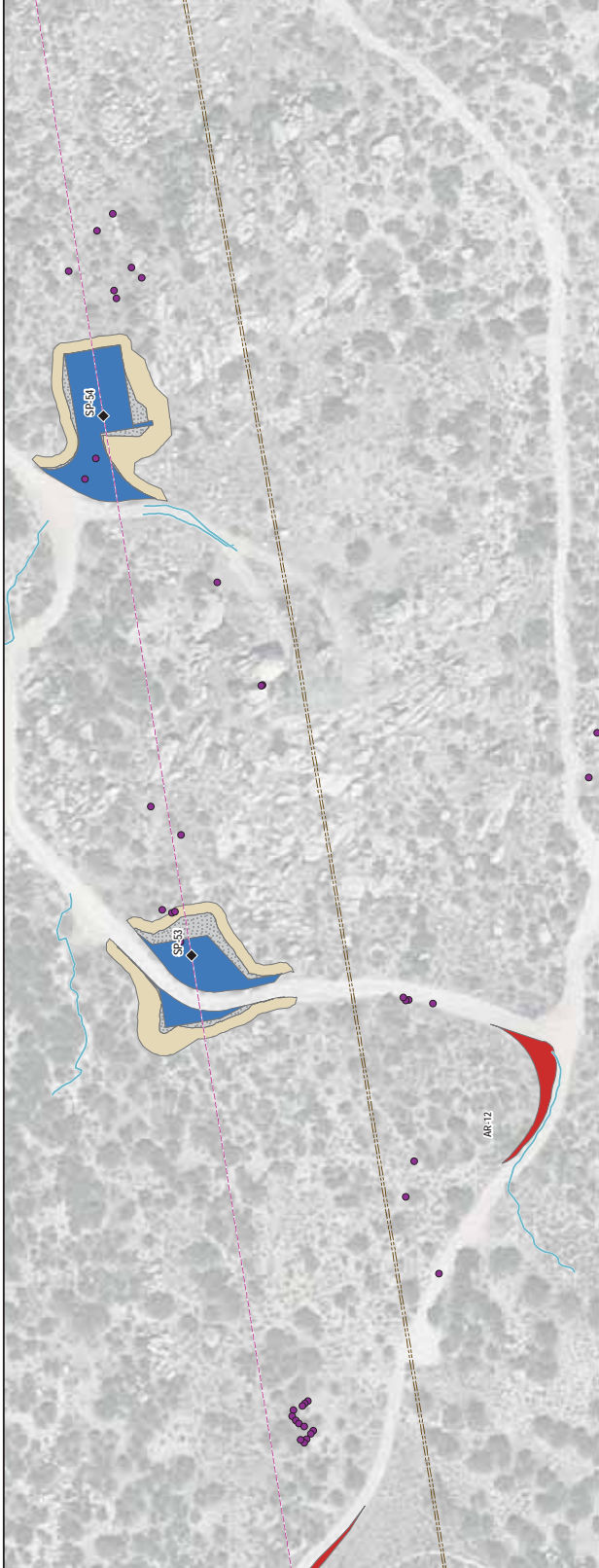


**Attachment D:
Impact Comparison Map 12 of 37**

East County Substation Project

Final Design

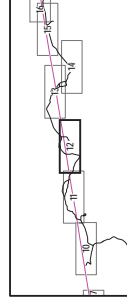
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rare Plant





**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- Removed Permanent/Temporary
- Added Permanent
- Added Temporary
- Permanent to Temporary
- Temporary to Permanent
- No Change
- === Existing Transmission Line

*Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



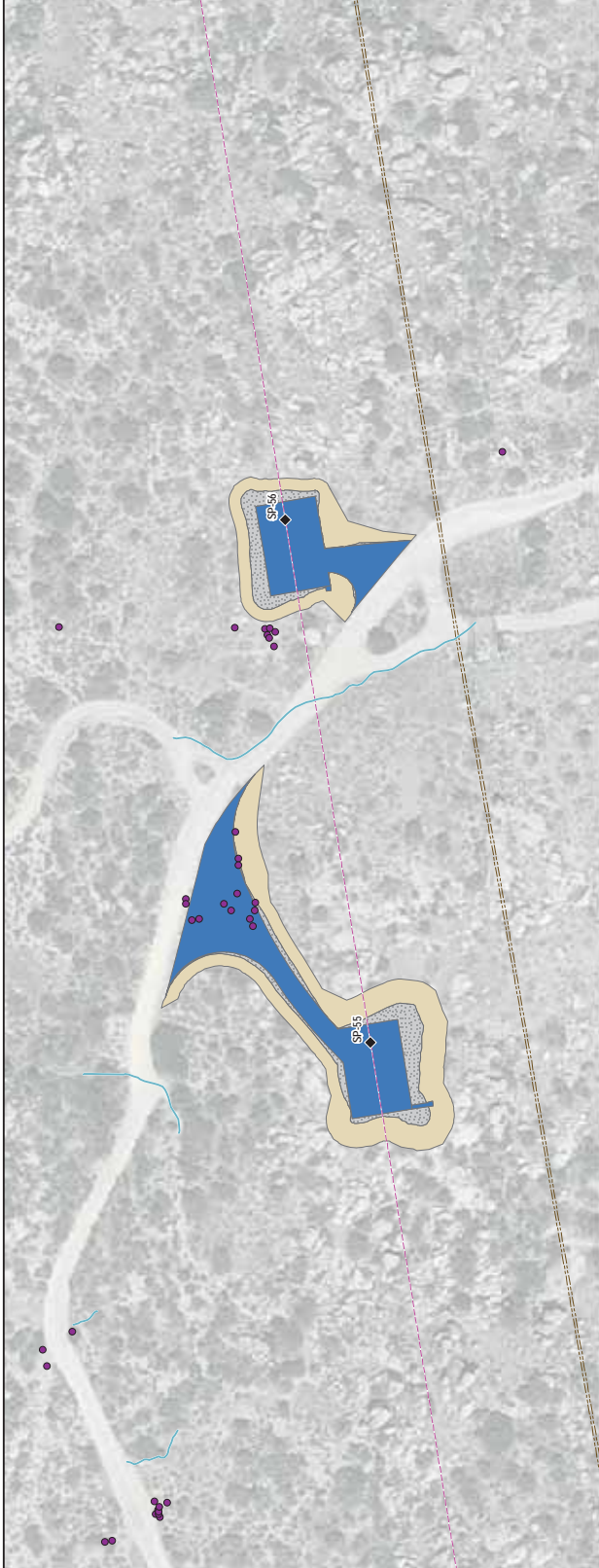
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 0 100 200
 Feet

**Attachment D:
Impact Comparison Map 13 of 37**

East County Substation Project

Final Design

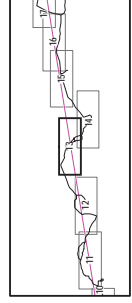
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- Relocated 138 kV Pole *
- Relocated Riser
- Original Project Outline
- ▨ Removed Permanent/Temporary
- ▩ Added Permanent
- ▧ Added Temporary
- ▦ Permanent to Temporary
- ▤ Temporary to Permanent
- ▥ No Change
- ▧ Existing Transmission Line

*Many of the substations are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



Scale: 1:1,200
0 100 200 Feet

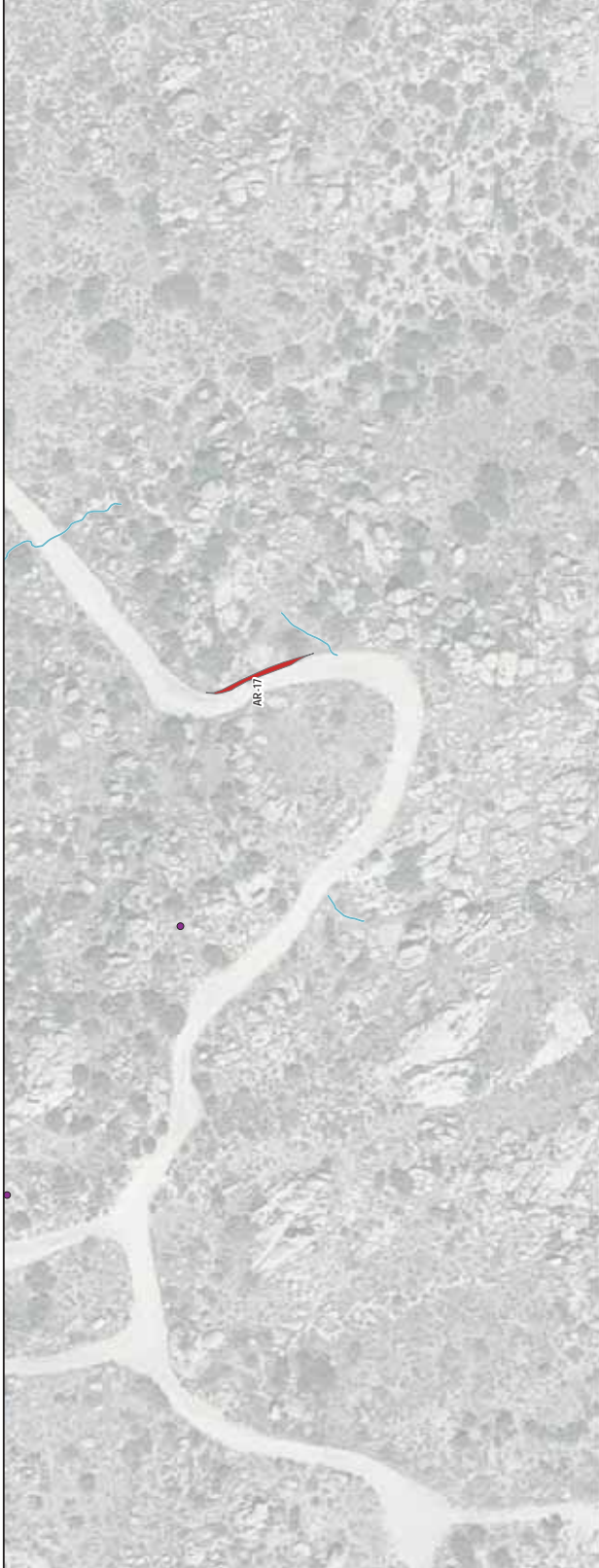
SDOE
INSIGNIA

**Attachment D:
Impact Comparison Map 14 of 37**

East County Substation Project

Final Design

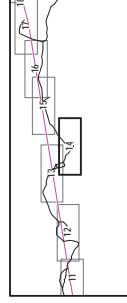
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- Removed Permanent/Temporary
- Added Permanent
- Added Temporary
- Permanent to Temporary
- Temporary to Permanent
- No Change
- === Existing Transmission Line

*Many of the relocated poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



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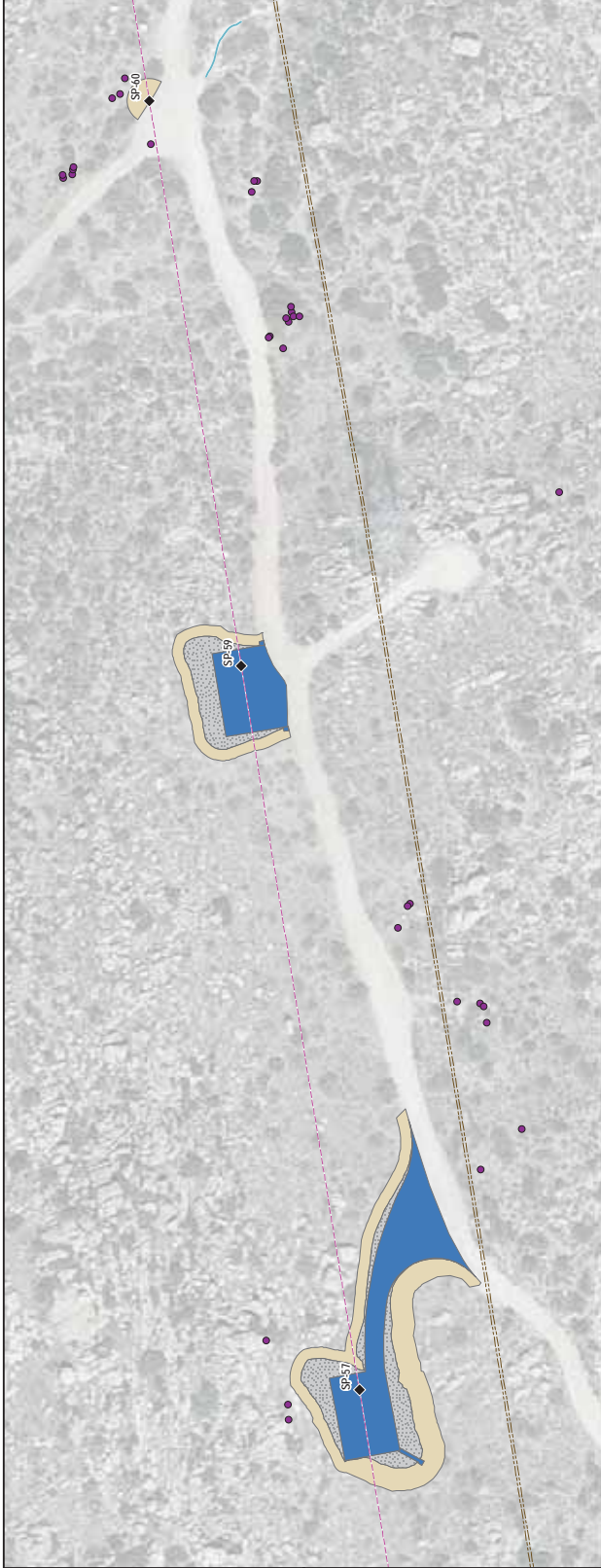
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Feet

**Attachment D:
Impact Comparison Map 15 of 37**

East County Substation Project

Final Design

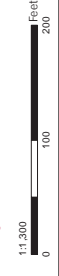
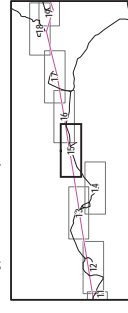
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Path/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- ▨ Removed Permanent/Temporary
- ▩ Added Permanent
- ▧ Added Temporary
- ▦ Permanent to Temporary
- ▥ Temporary to Permanent
- ▤ No Change
- ▣ Existing Transmission Line

*Many of the substation poles within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



**Attachment D:
Impact Comparison Map 16 of 37**

East County Substation Project

Final Design

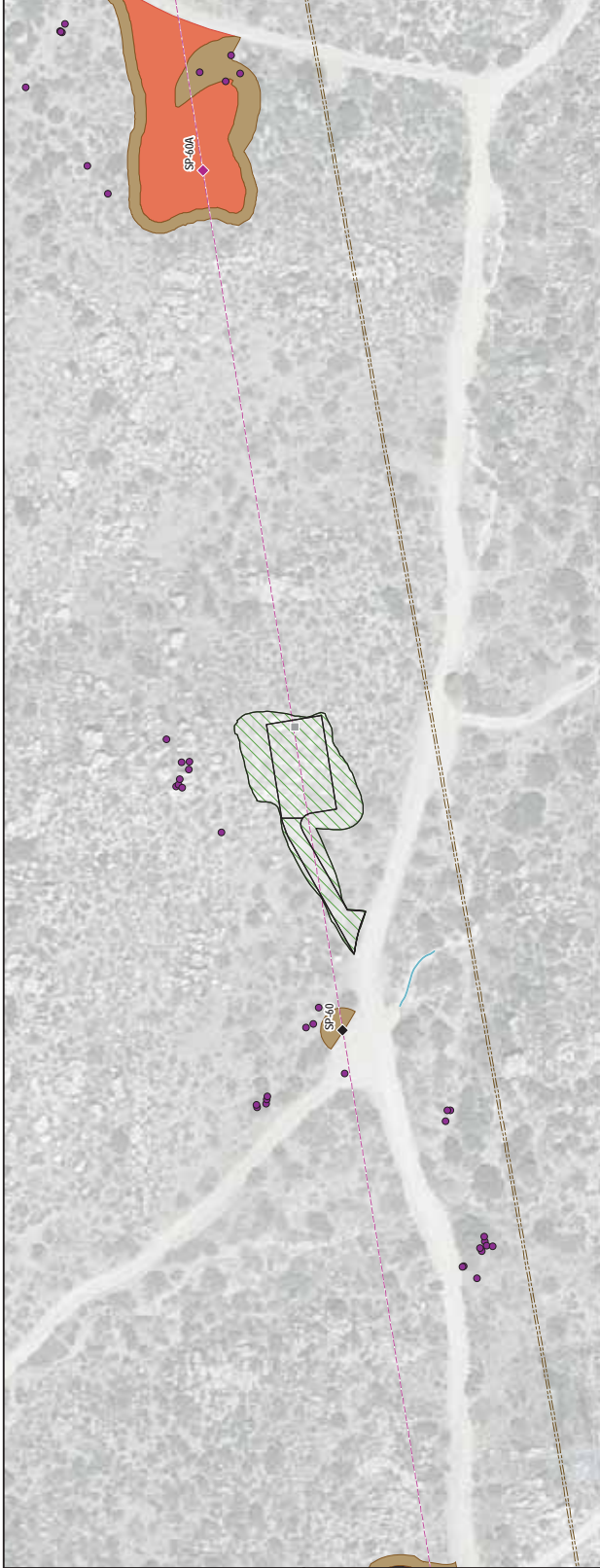
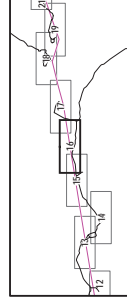
- ◆ 138 kV Pole
 - Riser Pole
 - 138 kV Overhead
 - - - 138 kV Underground
- Temporary**
- Construction Yard
 - Guard Structure Site/Access (GS)
 - Pull Site (PS)
 - Staging Area
 - Workspace
- Permanent**
- Access Road Modifications
 - Grading
 - Pad/New Access Road
 - Rock Removal Workspace
 - Vault
- Resources**
- Drainage
 - Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- ▨ Removed Permanent/Temporary
- ▩ Added Permanent
- ▧ Added Temporary
- ▦ Permanent to Temporary
- ▥ Temporary to Permanent
- ▤ No Change
- ▣ Existing Transmission Line

*Many of the relocated poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.

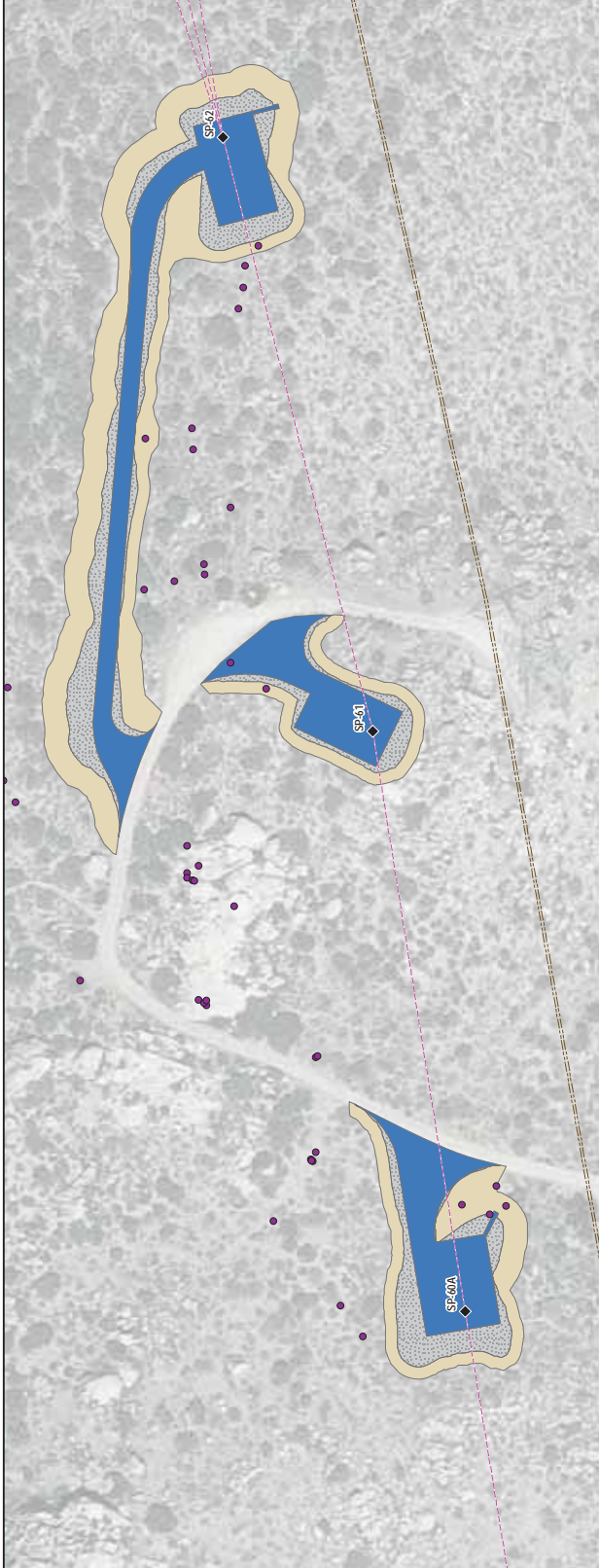


**Attachment D:
Impact Comparison Map 17 of 37**

East County Substation Project

Final Design

- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
 - Original 138 kV Pole
 - ◆ Added 138 kV Pole
 - ◆ Relocated 138 kV Pole *
 - Relocated Riser
 - Original Project Outline
 - ▨ Removed Permanent/Temporary
 - ▨ Added Permanent
 - ▨ Added Temporary
 - ▨ Permanent to Temporary
 - ▨ Temporary to Permanent
 - ▨ No Change
 - ▨ Existing Transmission Line
- *Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



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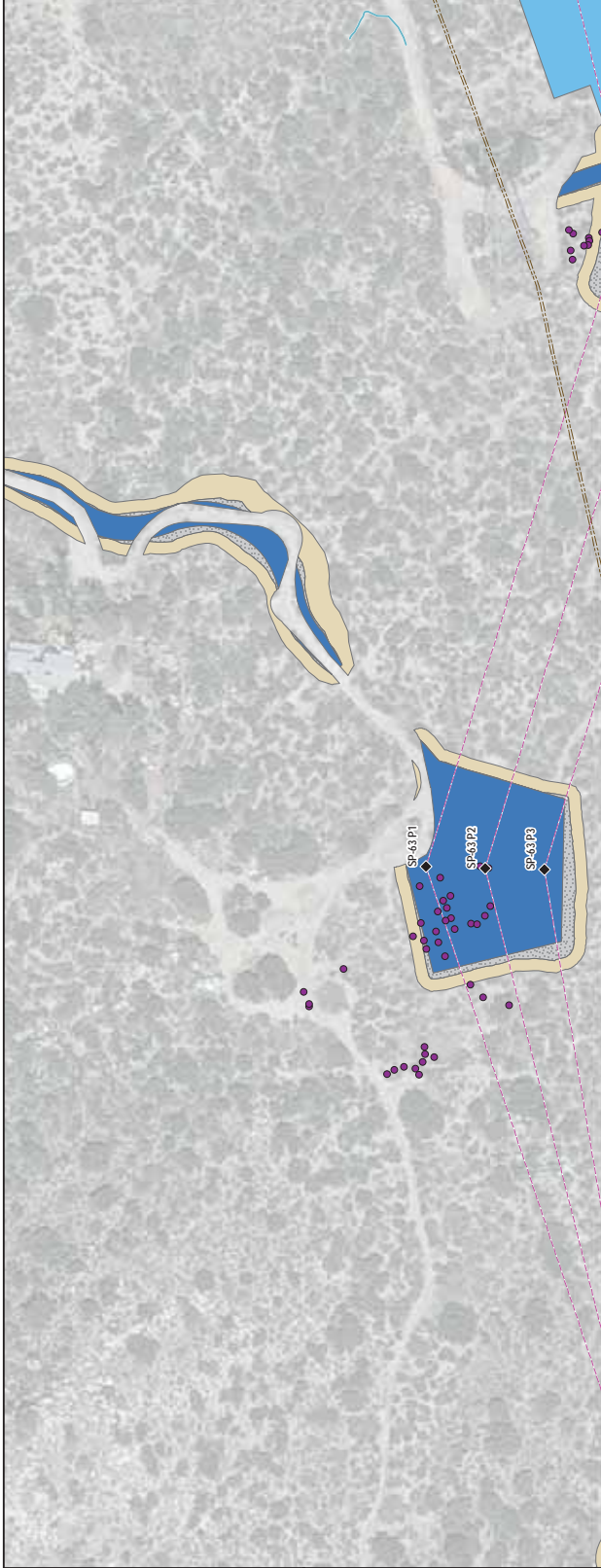
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Feet

**Attachment D:
Impact Comparison Map 18 of 37**

East County Substation Project

Final Design

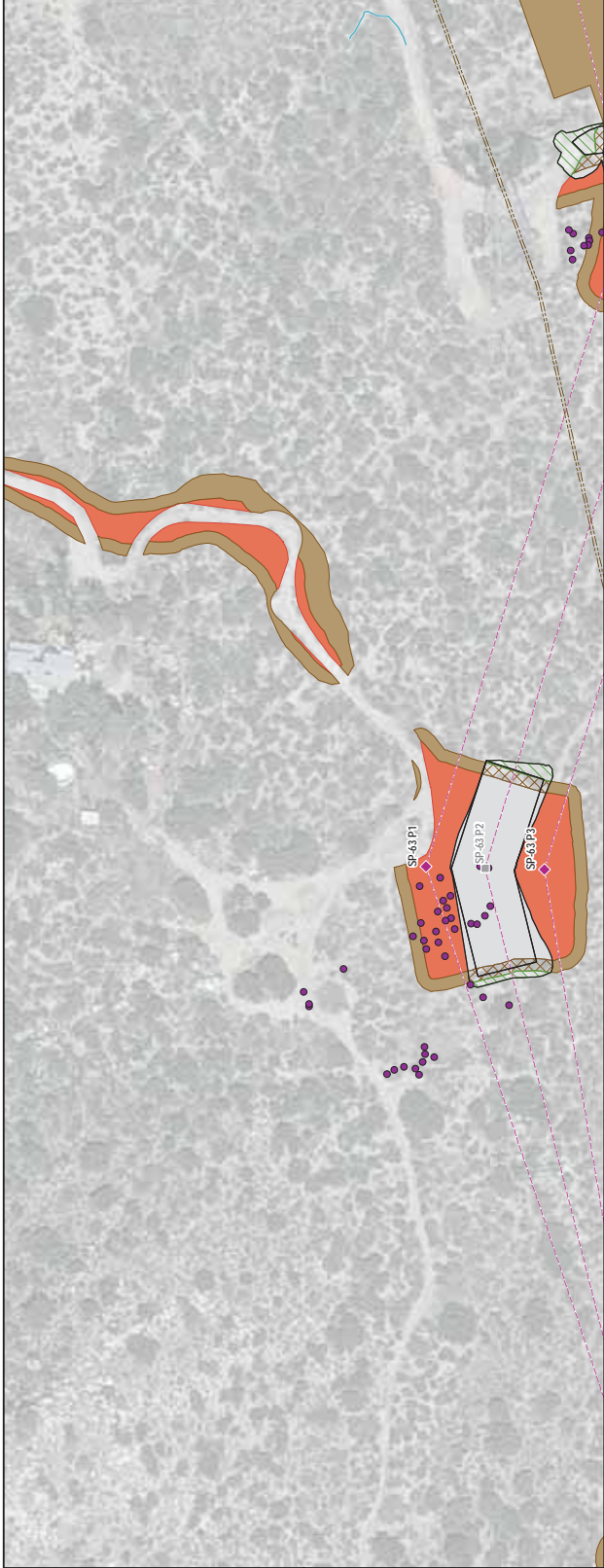
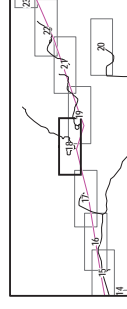
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- ▨ Removed Permanent/Temporary
- ▨ Added Permanent
- ▨ Added Temporary
- ▨ Permanent to Temporary
- ▨ Temporary to Permanent
- ▨ No Change
- ▨ Existing Transmission Line

*Many of the substation poles within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



**Attachment D:
Impact Comparison Map 19 of 37**

East County Substation Project

Final Design

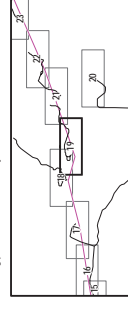
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- Removed Permanent/Temporary
- Added Permanent
- Added Temporary
- Permanent to Temporary
- Temporary to Permanent
- No Change
- === Existing Transmission Line

*Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.

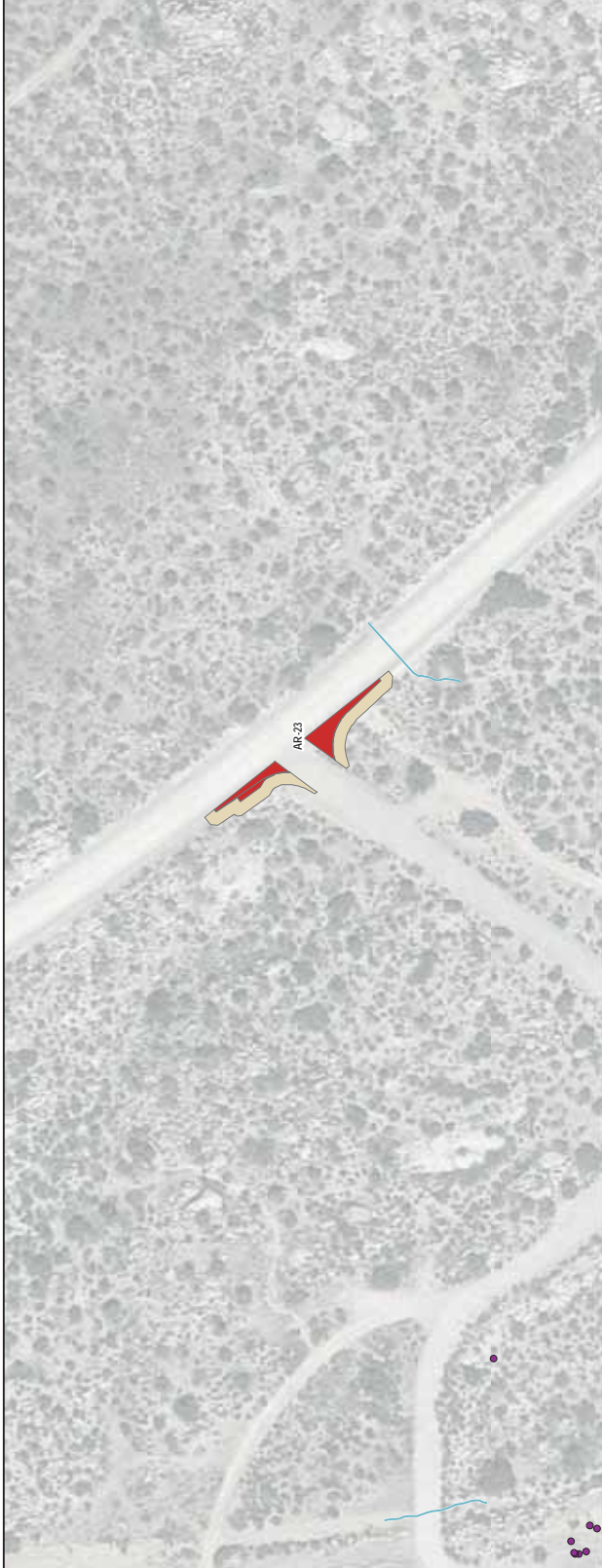


**Attachment D:
Impact Comparison Map 20 of 37**

East County Substation Project

Final Design

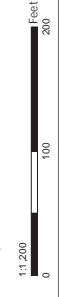
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- Removed Permanent/Temporary
- Added Permanent
- Added Temporary
- Permanent to Temporary
- Temporary to Permanent
- No Change
- === Existing Transmission Line

*Many of the substation poles within the previously identified disturbance area
These relocated poles are not considered refinements requiring approval and
are being provided for reference only.



Attachment D: Impact Comparison Map 21 of 37

East County Substation Project

Final Design

- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



Original Design Versus Refinements Impact Comparison

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- ▨ Removed Permanent/Temporary
- ▨ Added Permanent
- ▨ Added Temporary
- ▨ Permanent to Temporary
- ▨ Temporary to Permanent
- ▨ No Change
- ▨ Existing Transmission Line

*Many of the substation poles within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.

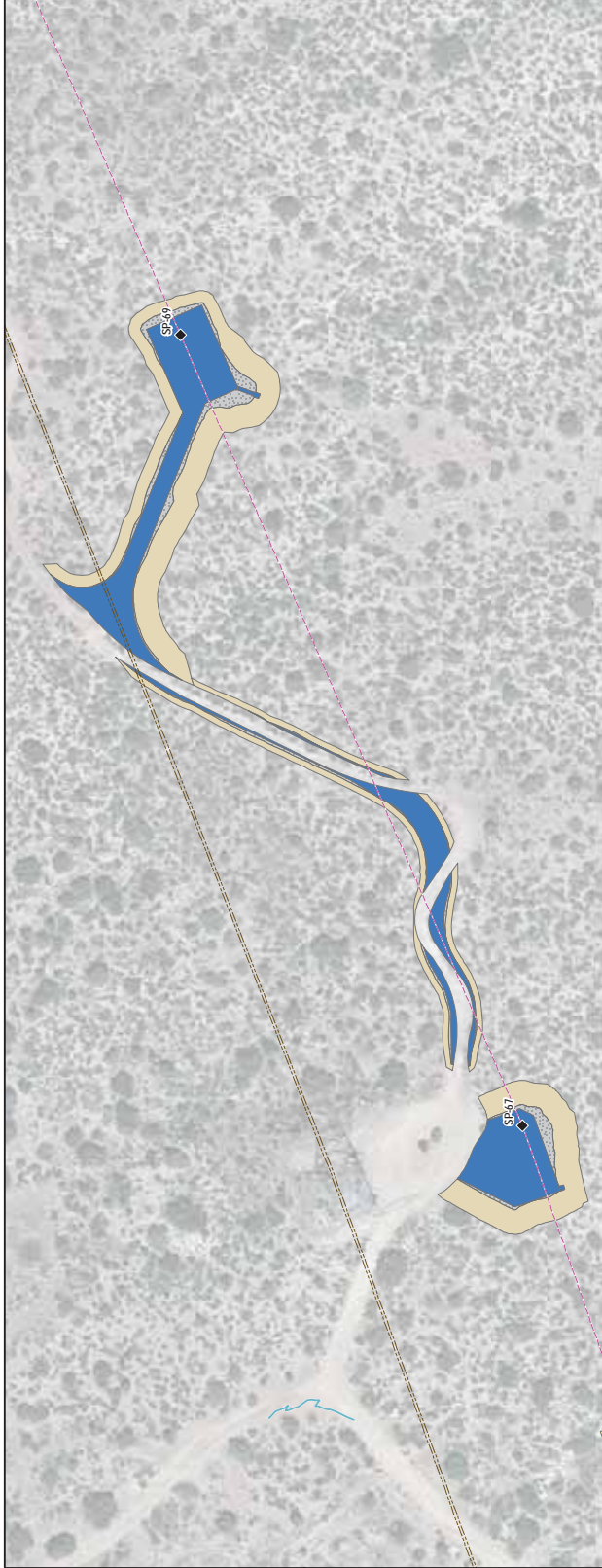


**Attachment D:
Impact Comparison Map 22 of 37**

East County Substation Project

Final Design

- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- Removed Permanent/Temporary
- Added Permanent
- Added Temporary
- Permanent to Temporary
- Temporary to Permanent
- No Change
- === Existing Transmission Line

*Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



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11,200 0 100 200 Feet

7/2/2015

**Attachment D:
Impact Comparison Map 23 of 37**

East County Substation Project

Final Design

- ◆ 138 kV Pole
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workpace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole *
- Relocated Riser
- Original Project Outline
- ▨ Removed Permanent/Temporary
- ▨ Added Permanent
- ▨ Added Temporary
- ▨ Permanent to Temporary
- ▨ Temporary to Permanent
- ▨ No Change
- ▨ Existing Transmission Line

*Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



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INSIGNIA

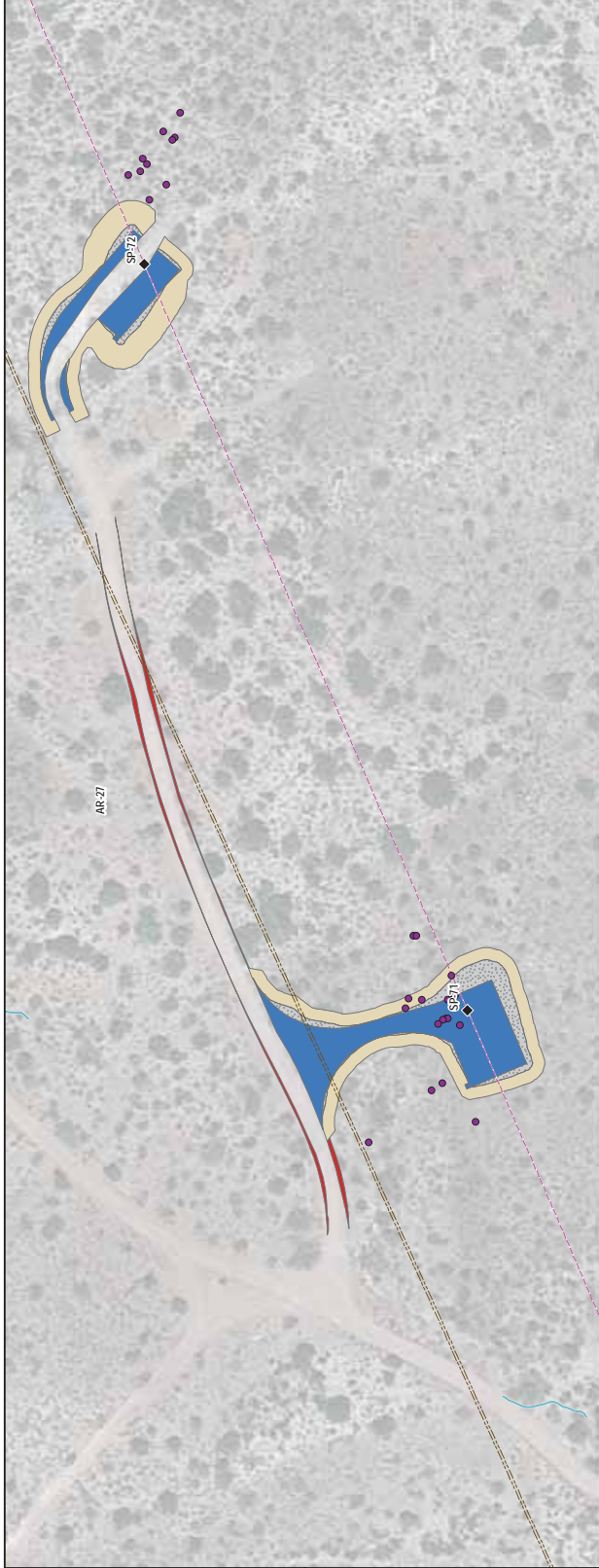
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Feet

**Attachment D:
Impact Comparison Map 24 of 37**

East County Substation Project

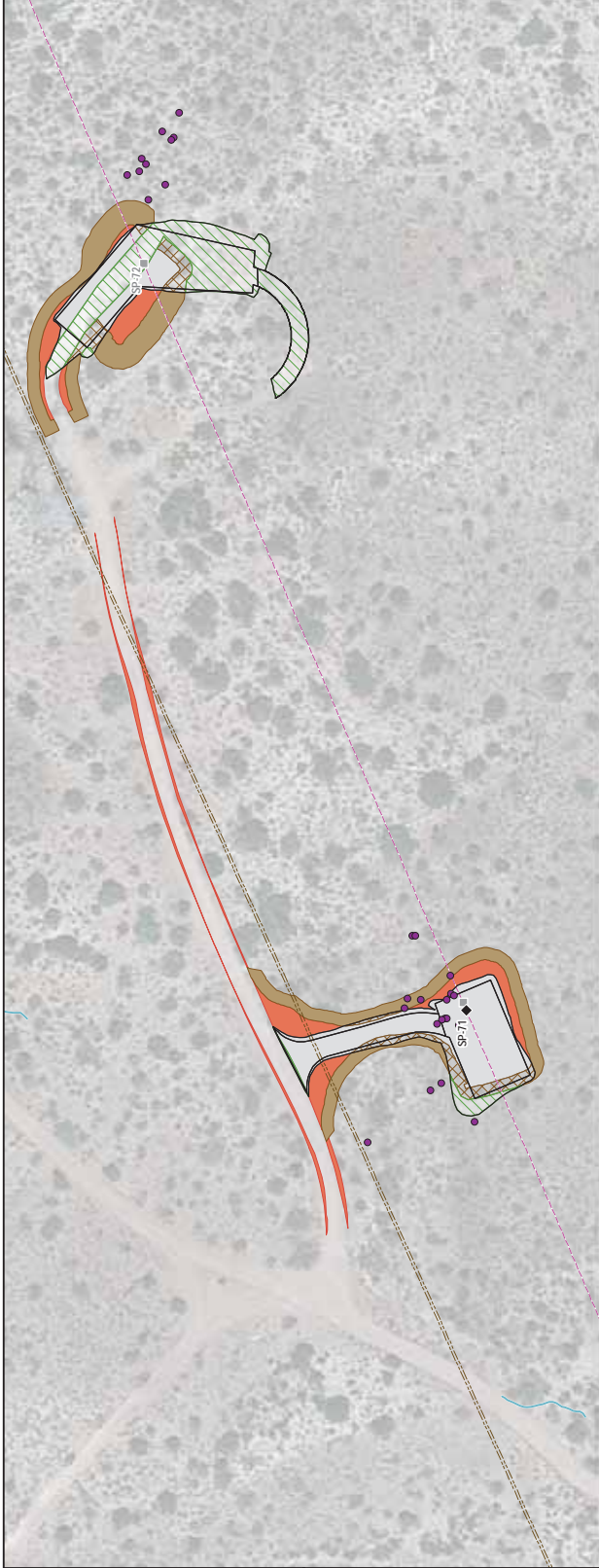
Final Design

- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
 - Original 138 kV Pole
 - ◆ Added 138 kV Pole
 - ◆ Relocated 138 kV Pole*
 - Relocated Riser
 - Original Project Outline
 - ▨ Removed Permanent/Temporary
 - ▨ Added Permanent
 - ▨ Added Temporary
 - ▨ Permanent to Temporary
 - ▨ Temporary to Permanent
 - ▨ No Change
 - ▨ Existing Transmission Line
- *Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



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SOUTHERN DISTRICT ENERGY

INSIGNIA

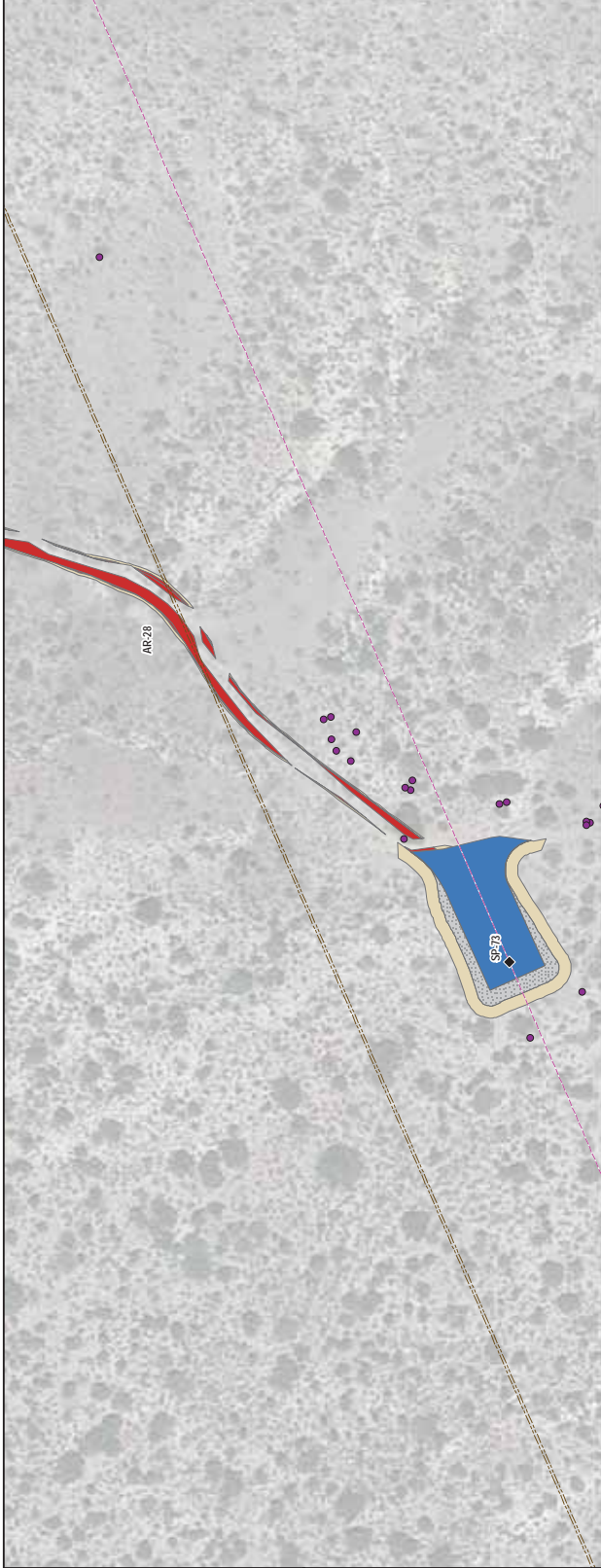
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**Attachment D:
Impact Comparison Map 25 of 37**

East County Substation Project

Final Design

- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
 - Original 138 kV Pole
 - ◆ Added 138 kV Pole
 - ◆ Relocated 138 kV Pole*
 - Relocated Riser
 - Original Project Outline
 - Removed Permanent/Temporary
 - Added Permanent
 - Added Temporary
 - Permanent to Temporary
 - Temporary to Permanent
 - No Change
 - === Existing Transmission Line
- *Many of the substation poles within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



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INSIGNIA

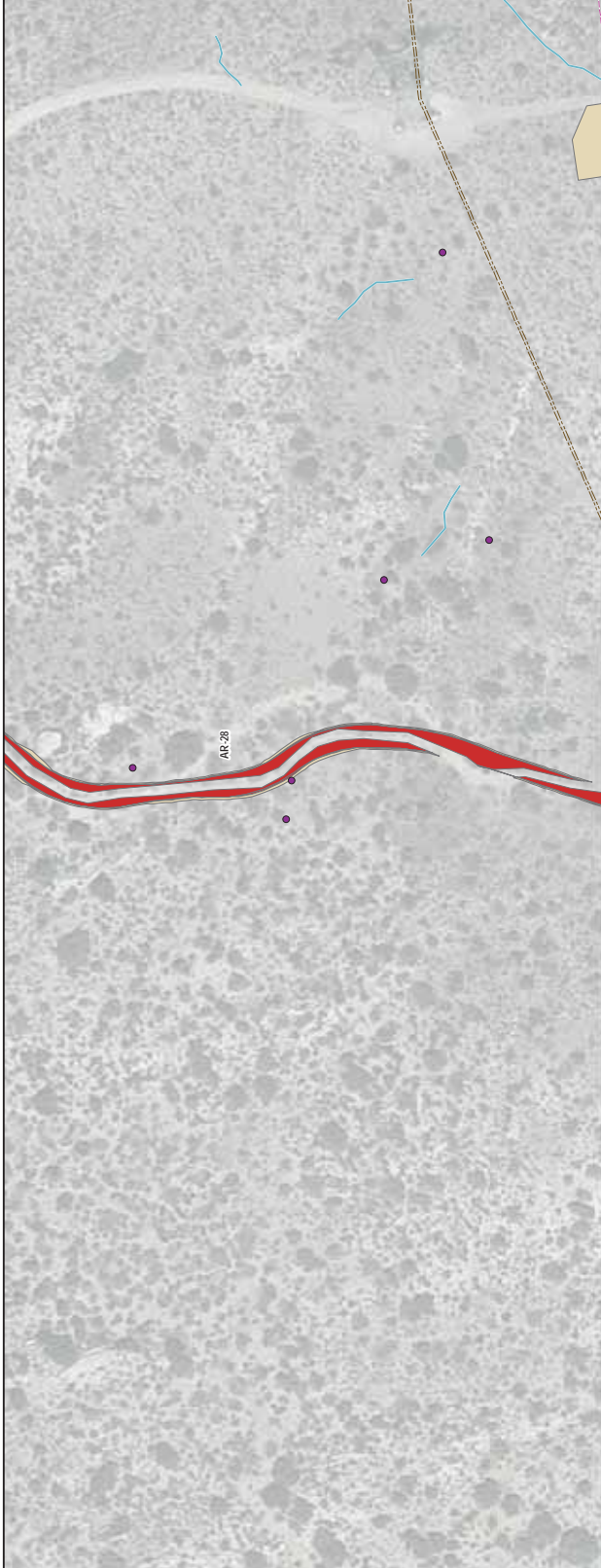
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Feet

Attachment D: Impact Comparison Map 26 of 37

East County Substation Project

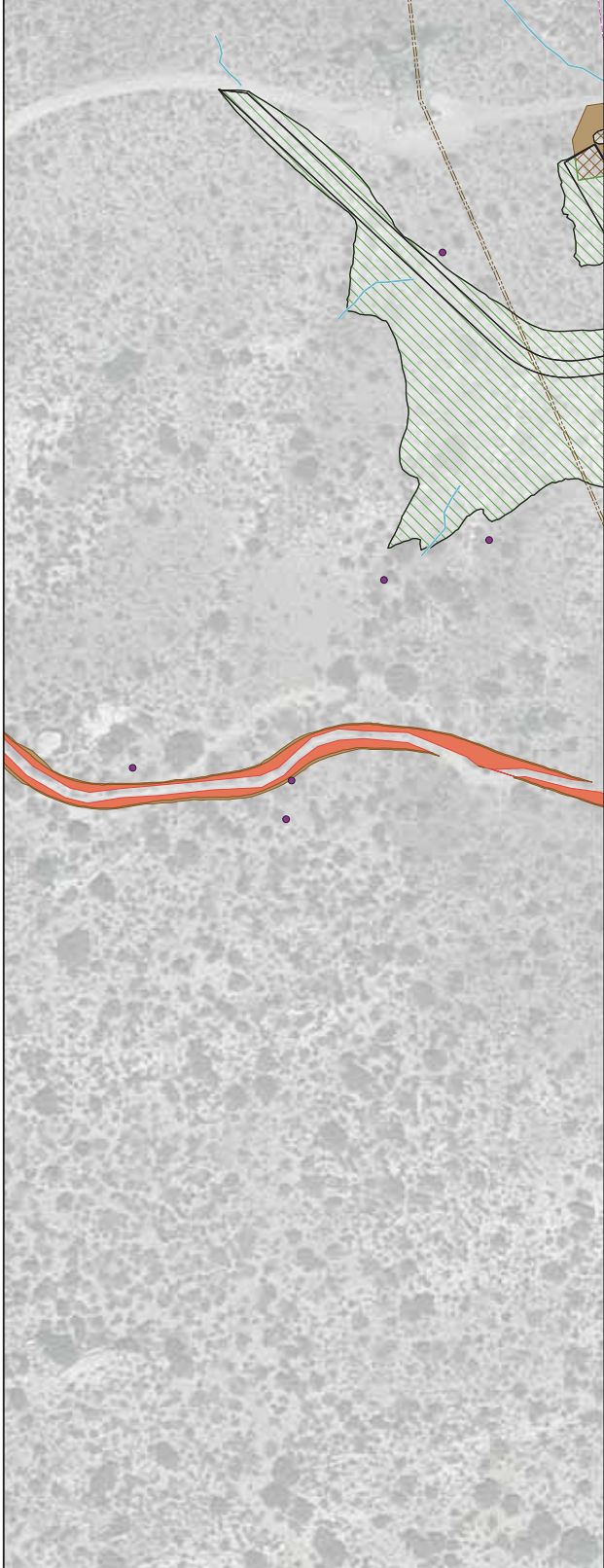
Final Design

- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



Original Design Versus Refinements Impact Comparison

- Original Riser Pole
 - Original 138 kV Pole
 - ◆ Added 138 kV Pole
 - ◆ Relocated 138 kV Pole *
 - Relocated Riser
 - Original Project Outline
 - Removed Permanent/Temporary
 - Added Permanent
 - Added Temporary
 - Permanent to Temporary
 - Temporary to Permanent
 - No Change
 - === Existing Transmission Line
- *Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



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SOUTHERN CALIFORNIA GAS & ELECTRIC COMPANY

INSIGNIA

1:1,200

0 100 200 Feet

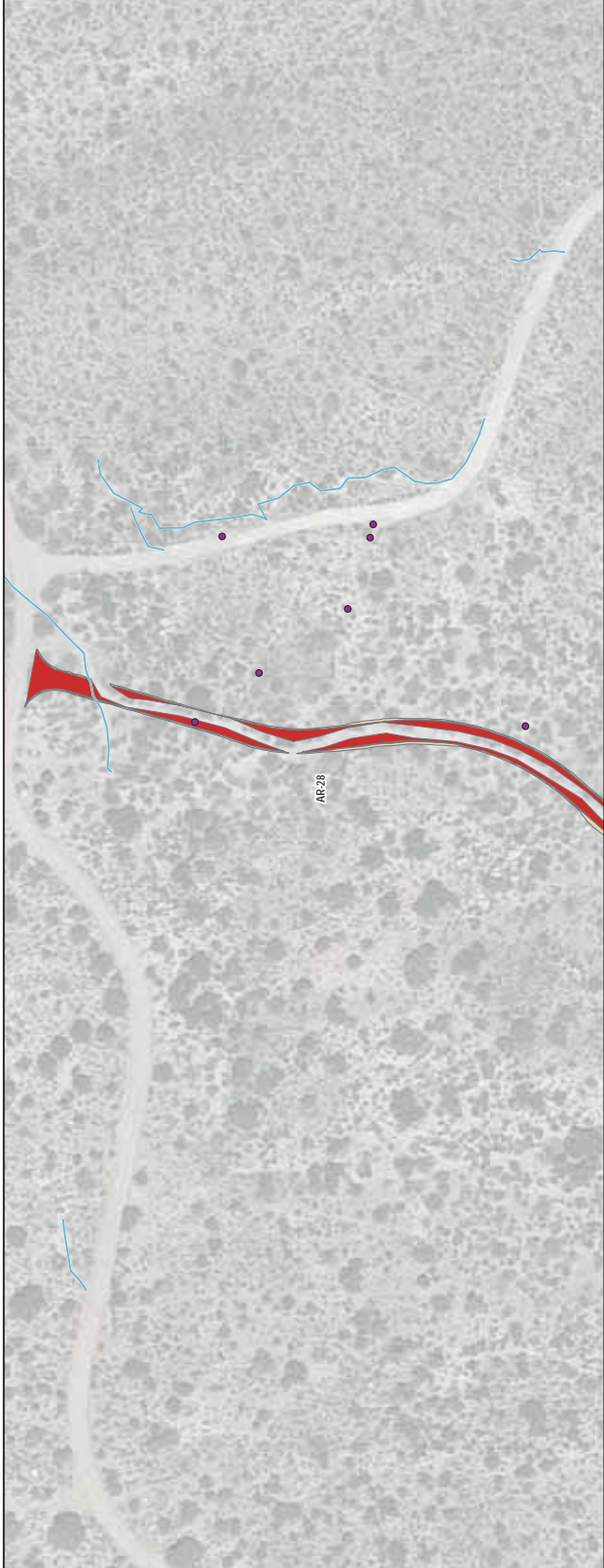
7/2/2015

Attachment D: Impact Comparison Map 27 of 37

East County Substation Project

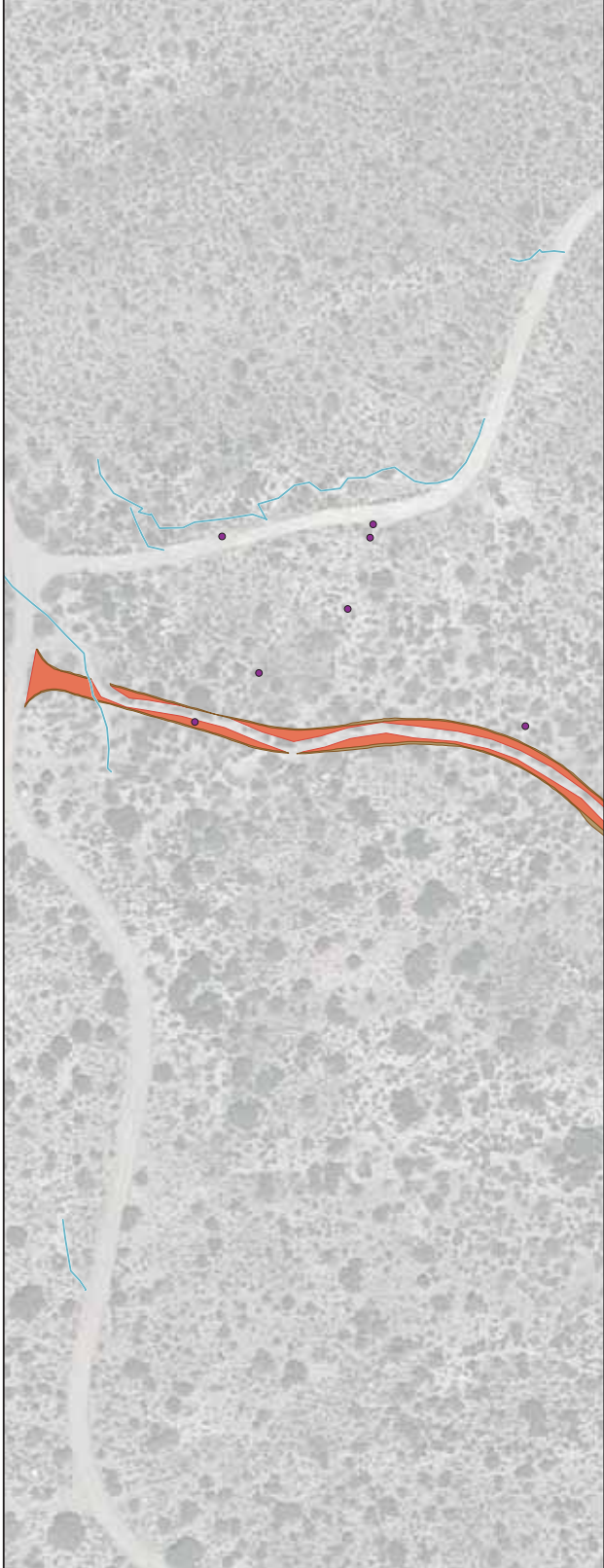
Final Design

- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



Original Design Versus Refinements Impact Comparison

- Original Riser Pole
 - Original 138 kV Pole
 - ◆ Added 138 kV Pole
 - ◆ Relocated 138 kV Pole*
 - Relocated Riser
 - Original Project Outline
 - Removed Permanent/Temporary
 - Added Permanent
 - Added Temporary
 - Permanent to Temporary
 - Temporary to Permanent
 - No Change
 - === Existing Transmission Line
- *Many of the substation poles within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



SDCE
SOUTHERN CALIFORNIA
DIAMOND ENERGY

INSIGNIA

1:1,200

0 100 200 Feet

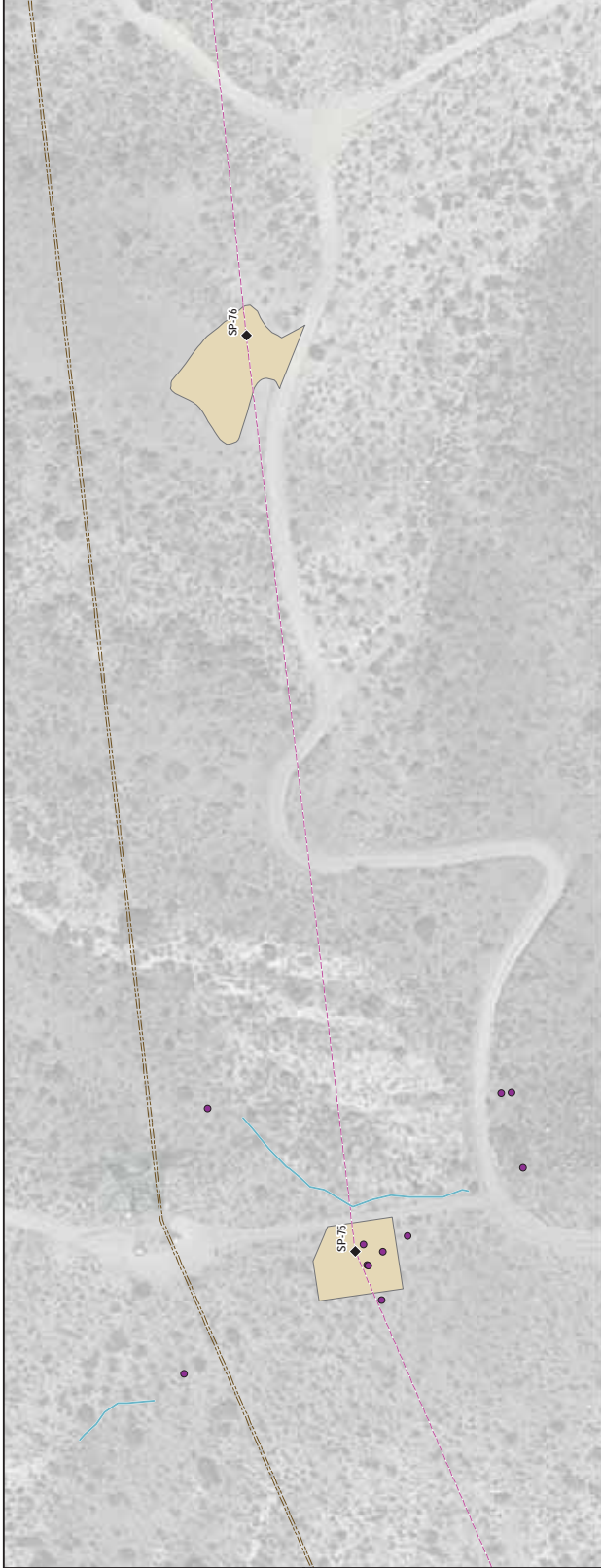
7/2/2015

Attachment D: Impact Comparison Map 28 of 37

East County Substation Project

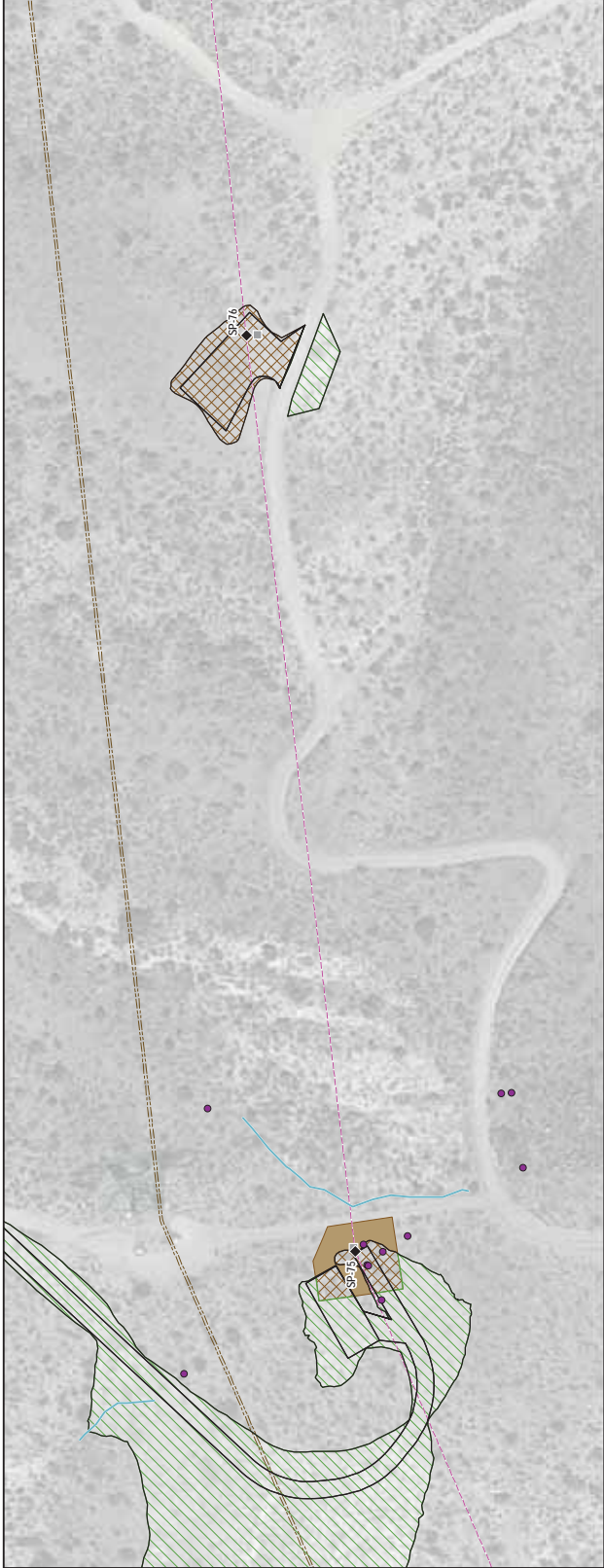
Final Design

- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



Original Design Versus Refinements Impact Comparison

- Original Riser Pole
 - Original 138 kV Pole
 - ◆ Added 138 kV Pole
 - ◆ Relocated 138 kV Pole *
 - Relocated Riser
 - Original Project Outline
 - ▨ Removed Permanent/Temporary
 - ▨ Added Permanent
 - ▨ Added Temporary
 - ▨ Permanent to Temporary
 - ▨ Temporary to Permanent
 - ▨ No Change
 - === Existing Transmission Line
- *Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



SDGE
SOUTHERN CALIFORNIA GAS & ELECTRIC COMPANY

INSIGNIA

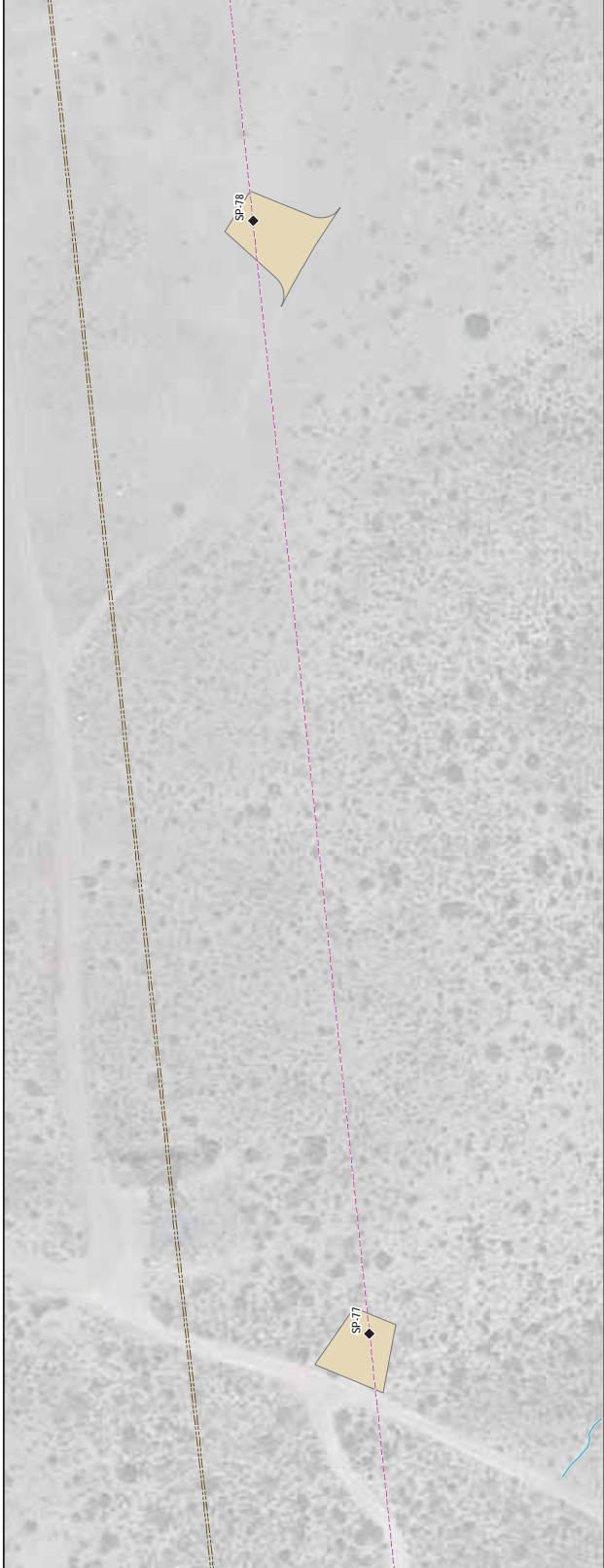
11,200 100 200 Feet

Attachment D: Impact Comparison Map 29 of 37

East County Substation Project

Final Design

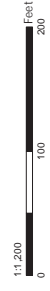
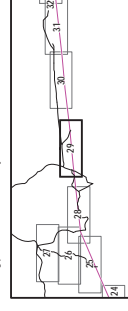
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



Original Design Versus Refinements Impact Comparison

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- Removed Permanent/Temporary
- Added Permanent
- Added Temporary
- Permanent to Temporary
- Temporary to Permanent
- No Change
- === Existing Transmission Line

*Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.

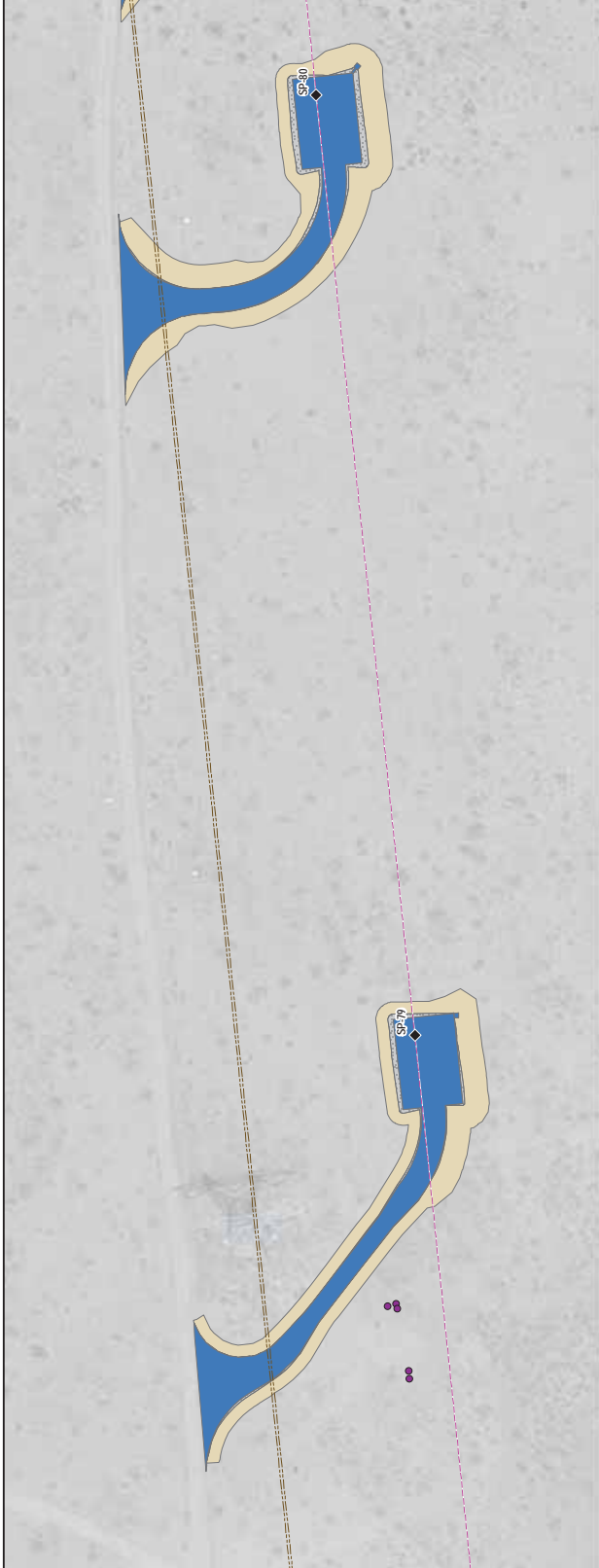


**Attachment D:
Impact Comparison Map 30 of 37**

East County Substation Project

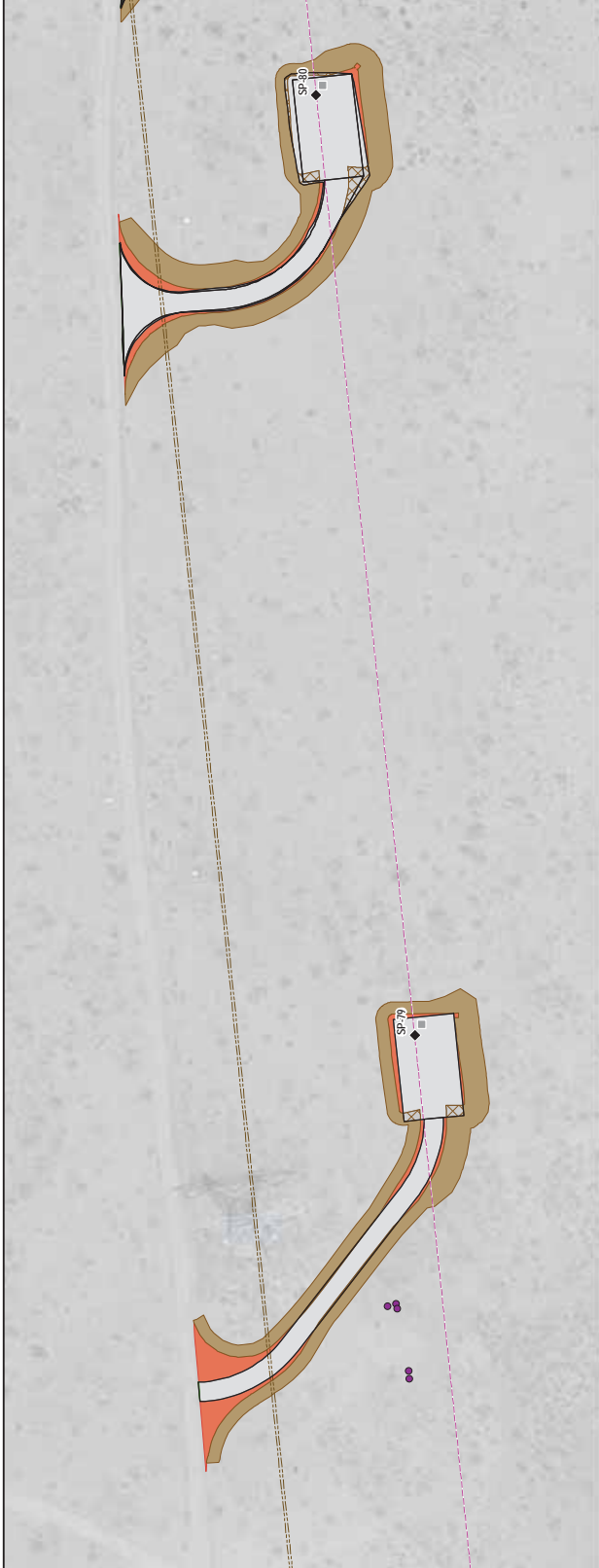
Final Design

- ◆ 138 kV Pole
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
 - Original 138 kV Pole
 - ◆ Added 138 kV Pole
 - ◆ Relocated 138 kV Pole *
 - Relocated Riser
 - Original Project Outline
 - Removed Permanent/Temporary
 - Added Permanent
 - Added Temporary
 - Permanent to Temporary
 - Temporary to Permanent
 - No Change
 - === Existing Transmission Line
- *Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.

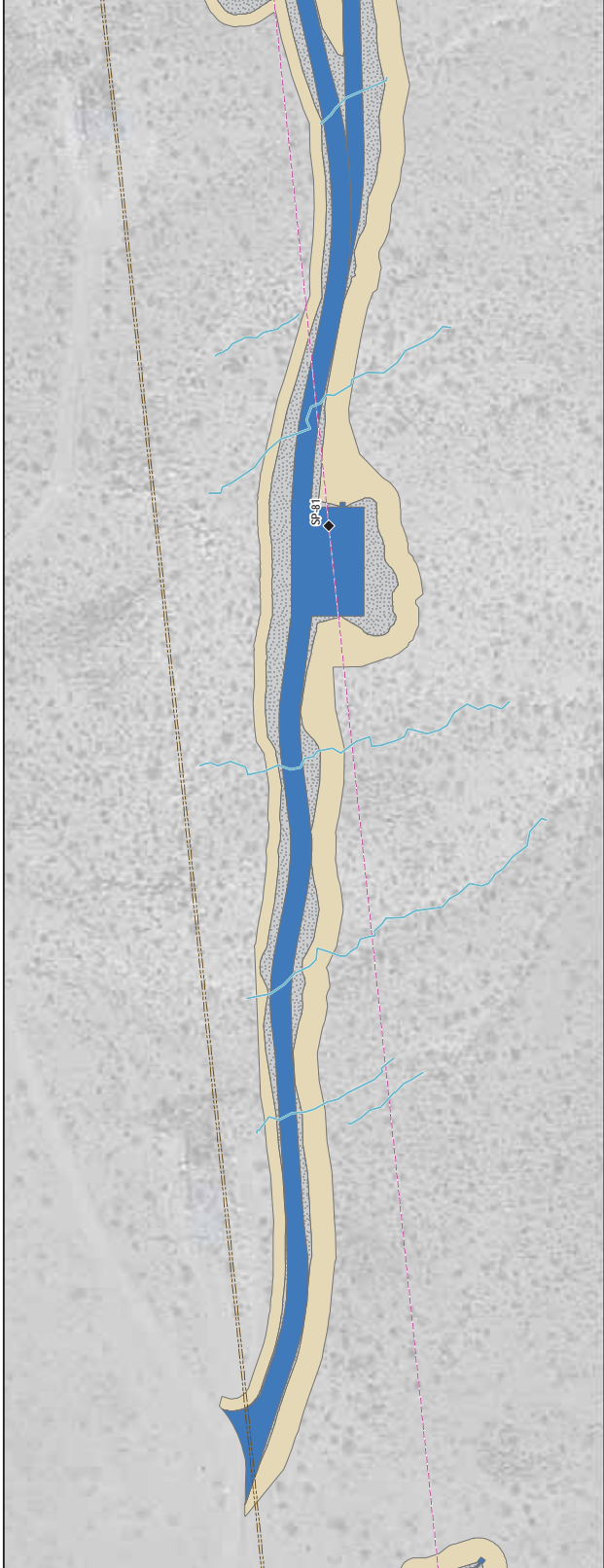


**Attachment D:
Impact Comparison Map 31 of 37**

East County Substation Project

Final Design

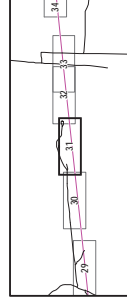
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- Removed Permanent/Temporary
- Added Permanent
- Added Temporary
- Permanent to Temporary
- Temporary to Permanent
- No Change
- === Existing Transmission Line

*Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



SDGE
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INSIGNIA

11,200 0 100 200 Feet

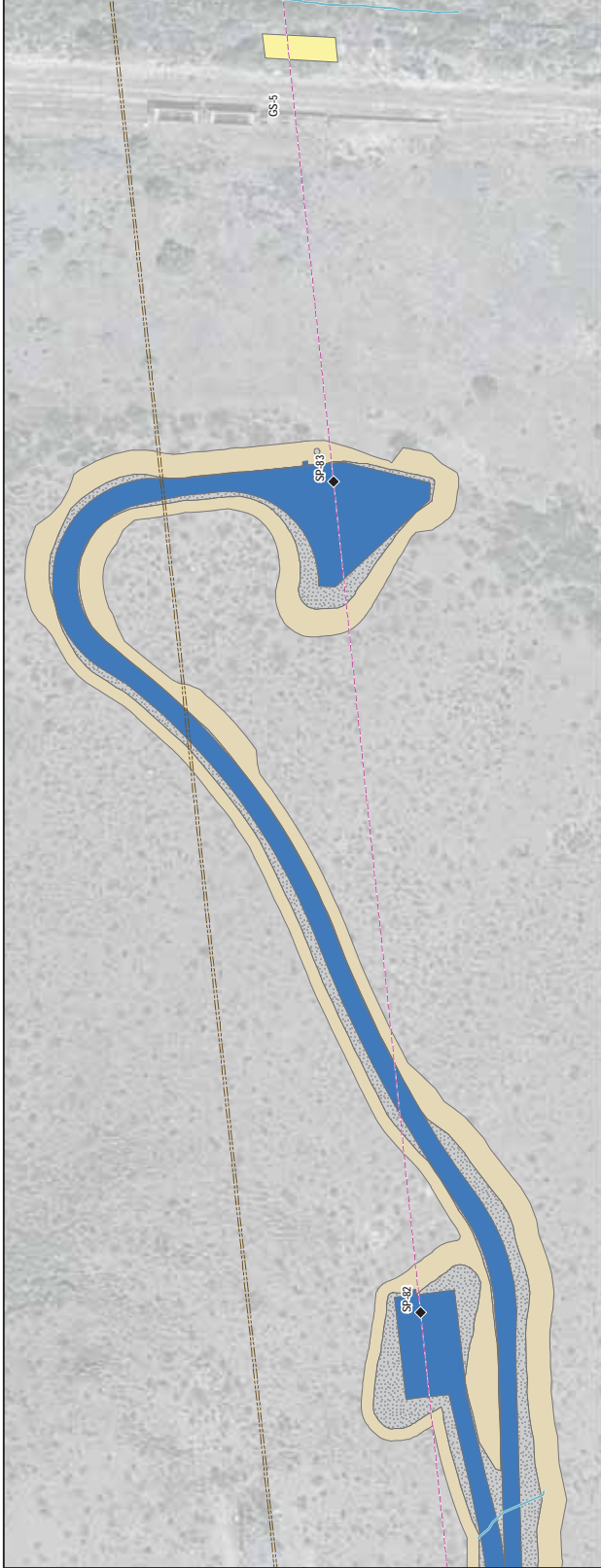
7/2/2015

Attachment D: Impact Comparison Map 32 of 37

East County Substation Project

Final Design

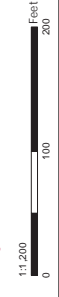
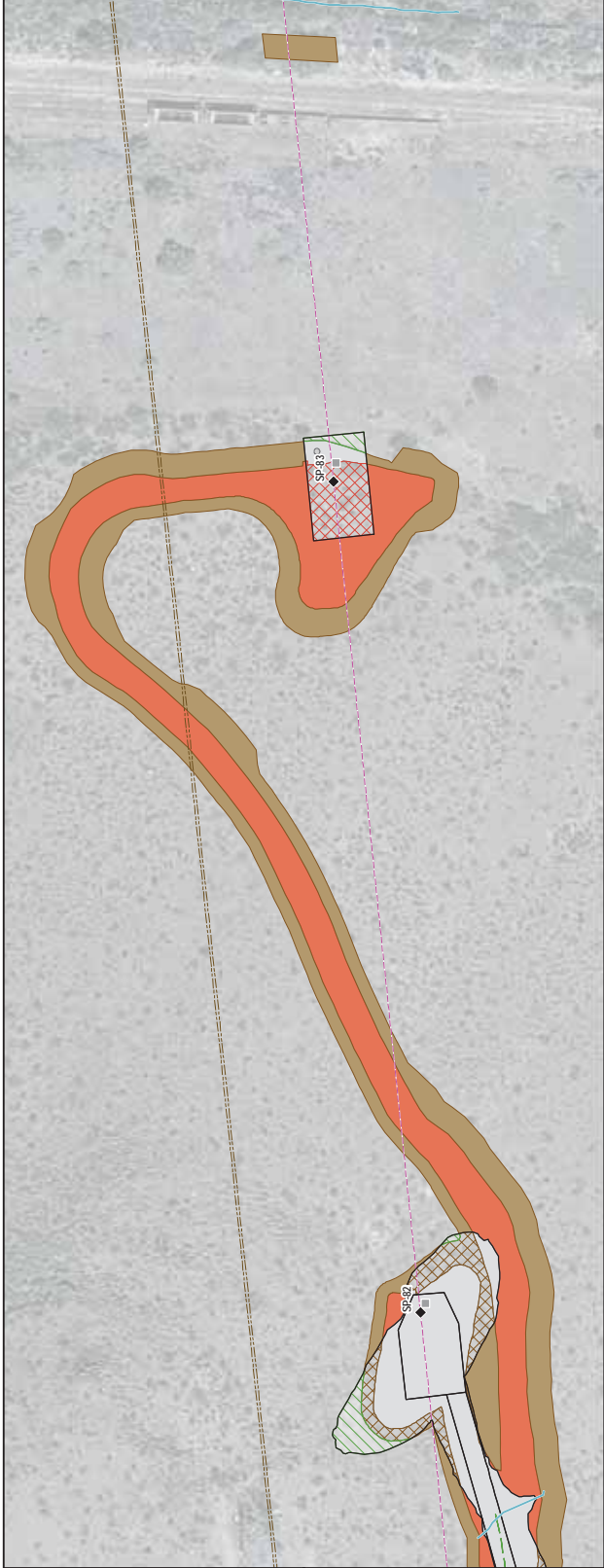
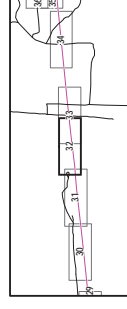
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



Original Design Versus Refinements Impact Comparison

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- ▨ Removed Permanent/Temporary
- ▨ Added Permanent
- ▨ Added Temporary
- ▨ Permanent to Temporary
- ▨ Temporary to Permanent
- ▨ No Change
- ▨ Existing Transmission Line

*Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



Attachment D: Impact Comparison Map 33 of 37

East County Substation Project

Final Design

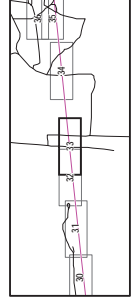
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal/Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



Original Design Versus Refinements Impact Comparison

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- ▨ Removed Permanent/Temporary
- ▨ Added Permanent
- ▨ Added Temporary
- ▨ Permanent to Temporary
- ▨ Temporary to Permanent
- ▨ No Change
- === Existing Transmission Line

*Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.

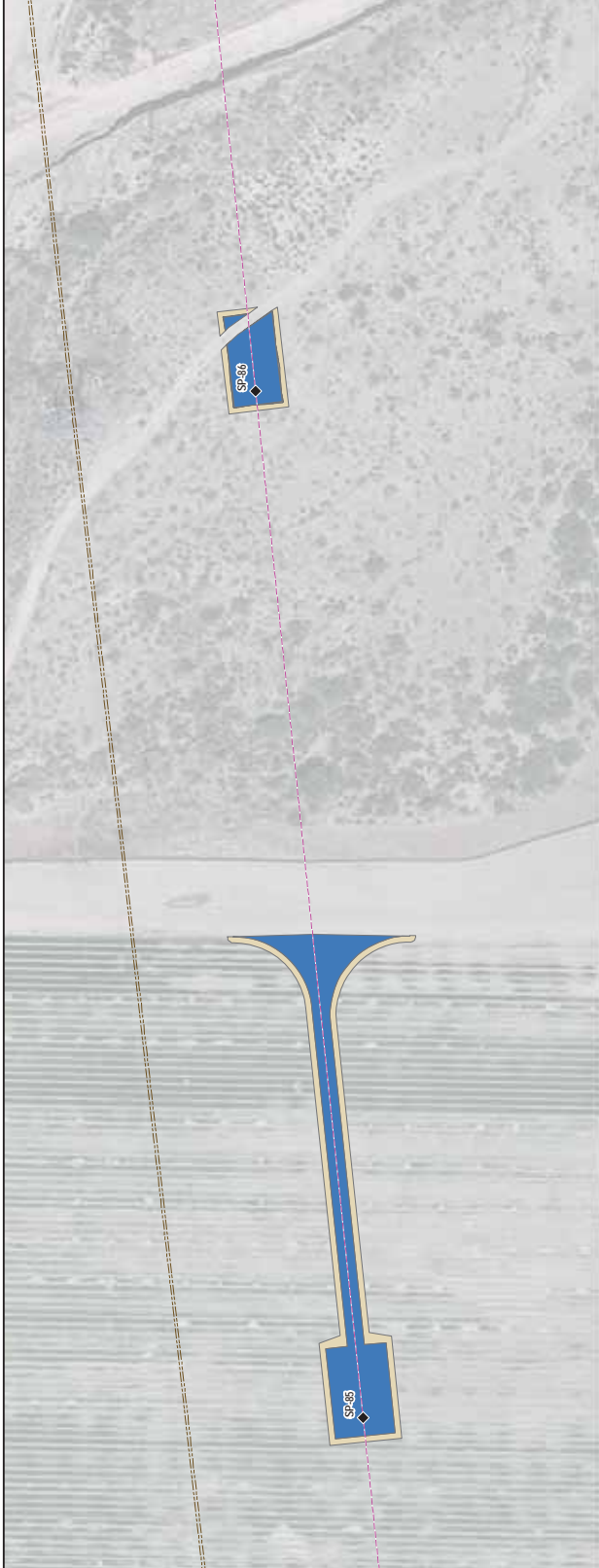


Attachment D: Impact Comparison Map 34 of 37

East County Substation Project

Final Design

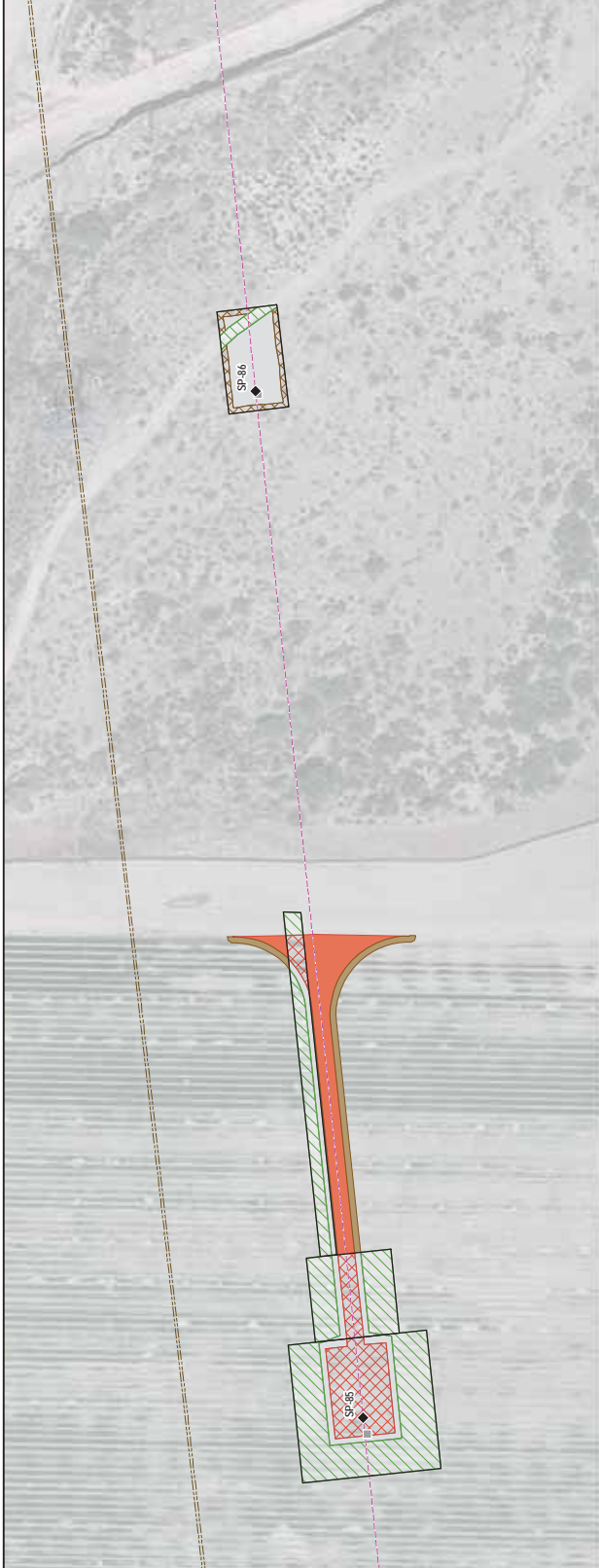
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



Original Design Versus Refinements Impact Comparison

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- Removed Permanent/Temporary
- Added Permanent
- Added Temporary
- Permanent to Temporary
- Temporary to Permanent
- No Change
- === Existing Transmission Line

*Many of the substation poles within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.

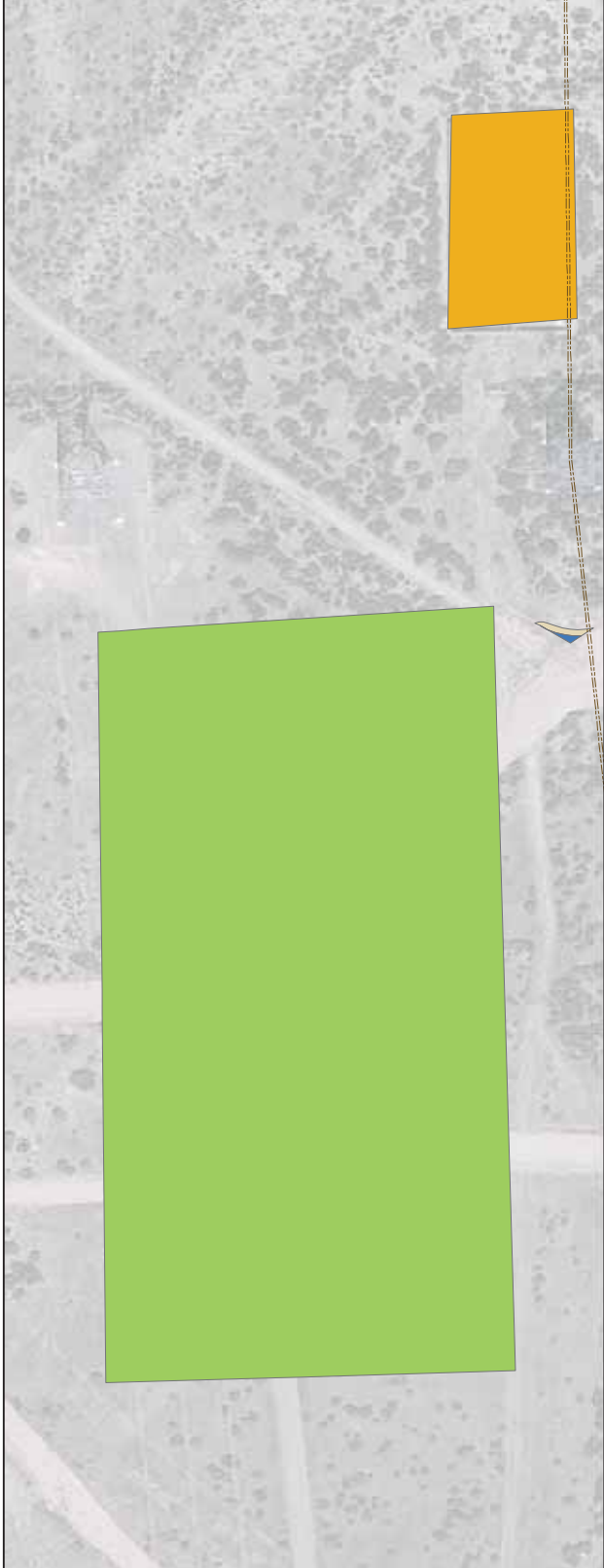


Attachment D: Impact Comparison Map 36 of 37

East County Substation Project

Final Design

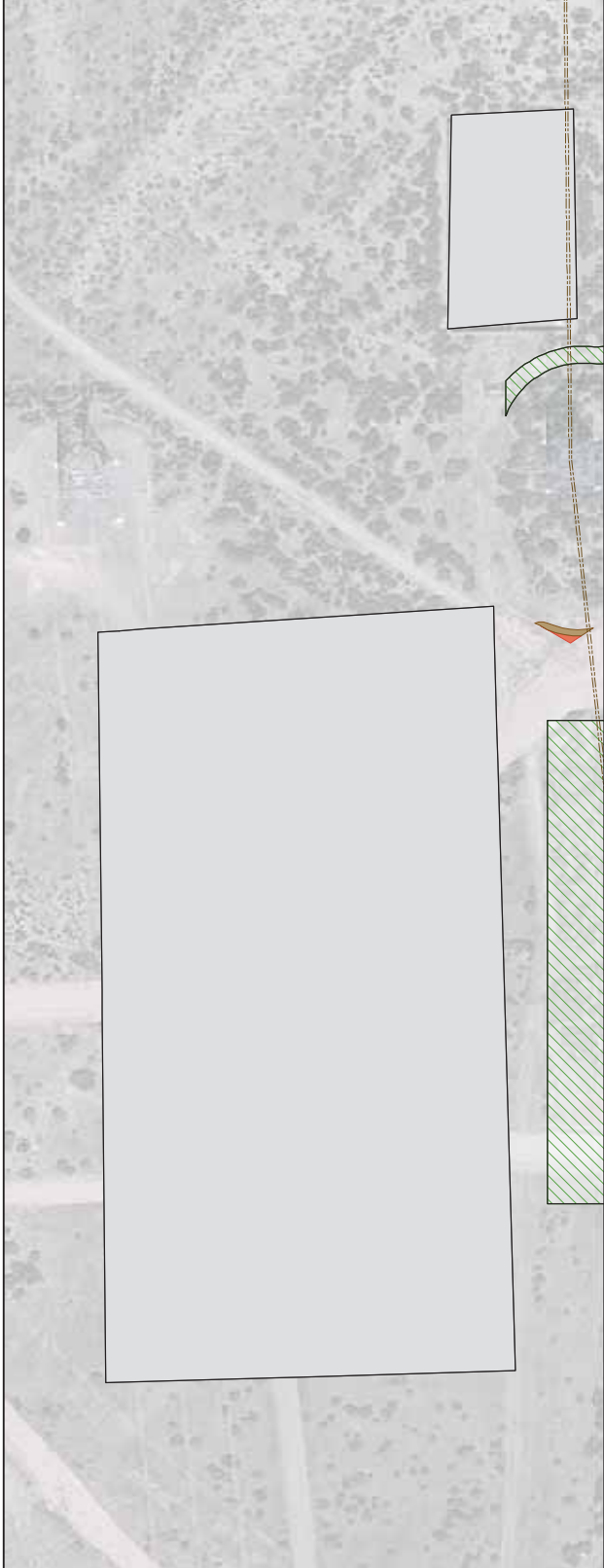
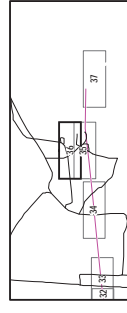
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rate Plant



Original Design Versus Refinements Impact Comparison

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole *
- Relocated Riser
- Original Project Outline
- ▨ Removed Permanent/Temporary
- ▨ Added Permanent
- ▨ Added Temporary
- ▨ Permanent to Temporary
- ▨ Temporary to Permanent
- ▨ No Change
- ▨ Existing Transmission Line

*Many of the substations are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.



**Attachment D:
Impact Comparison Map 37 of 37**

East County Substation Project

Final Design

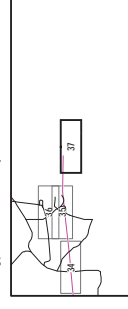
- ◆ 138 kV Pole
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Vault
- Resources**
- Drainage
- Rare Plant



**Original Design Versus
Refinements Impact Comparison**

- Original Riser Pole
- Original 138 kV Pole
- ◆ Added 138 kV Pole
- ◆ Relocated 138 kV Pole*
- Relocated Riser
- Original Project Outline
- Removed Permanent/Temporary
- Added Permanent
- Added Temporary
- Permanent to Temporary
- Temporary to Permanent
- No Change
- === Existing Transmission Line

*Many of the substation poles are within the previously identified disturbance area. These relocated poles are not considered refinements requiring approval and are being provided for reference only.

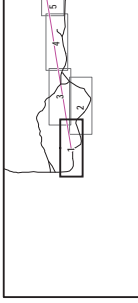


**ATTACHMENT E: APPROVED PROJECT VERSUS FINAL DESIGN COMPARISON
MAPS**

**Attachment E:
Approved Project Versus Final
Design Comparison Map 1 of 37
East County Substation Project**

CRUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

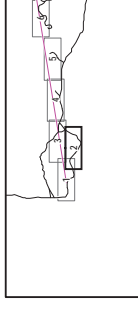
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (P-S)
- Staging Area
- Workspace
- Permanent
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Resources
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 2 of 37
East County Substation Project**

CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

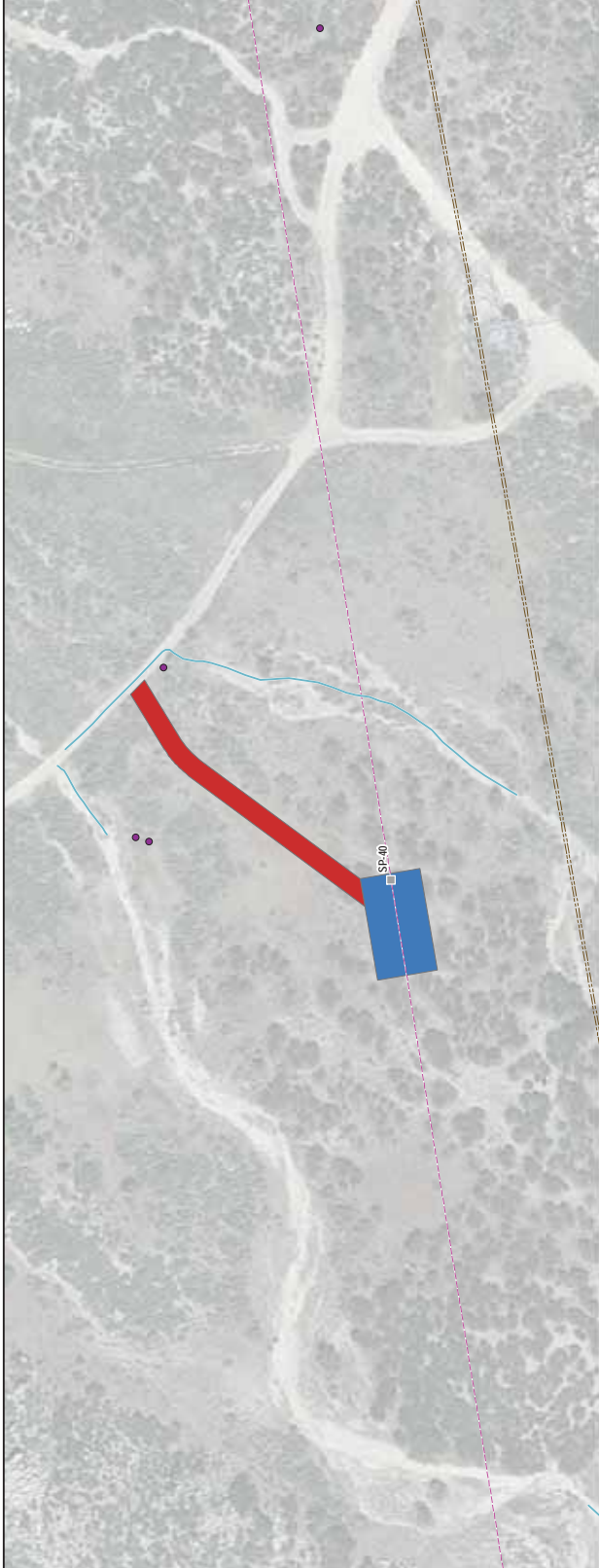
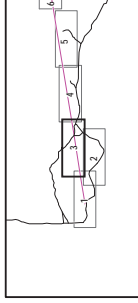
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
 - Construction Yard
 - Guard Structure Site/Access (GS)
 - Pull Site (P-S)
 - Staging Area
 - Workspace
- Permanent
 - Access Road Modifications
 - Grading
 - Pad/New Access Road
 - Rock Removal Workspace
- Resources
 - Drainage
 - Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 3 of 37
East County Substation Project**

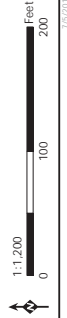
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

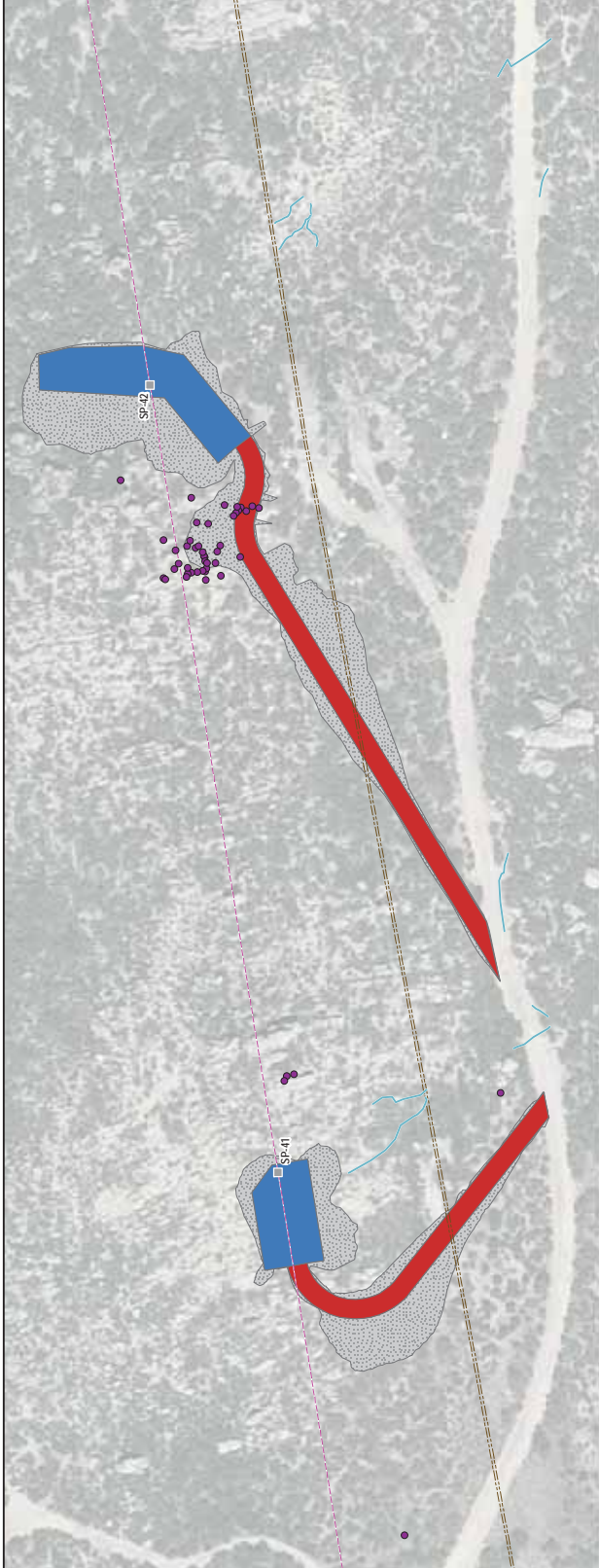
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (P-S)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Resources**
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 4 of 37
East County Substation Project**

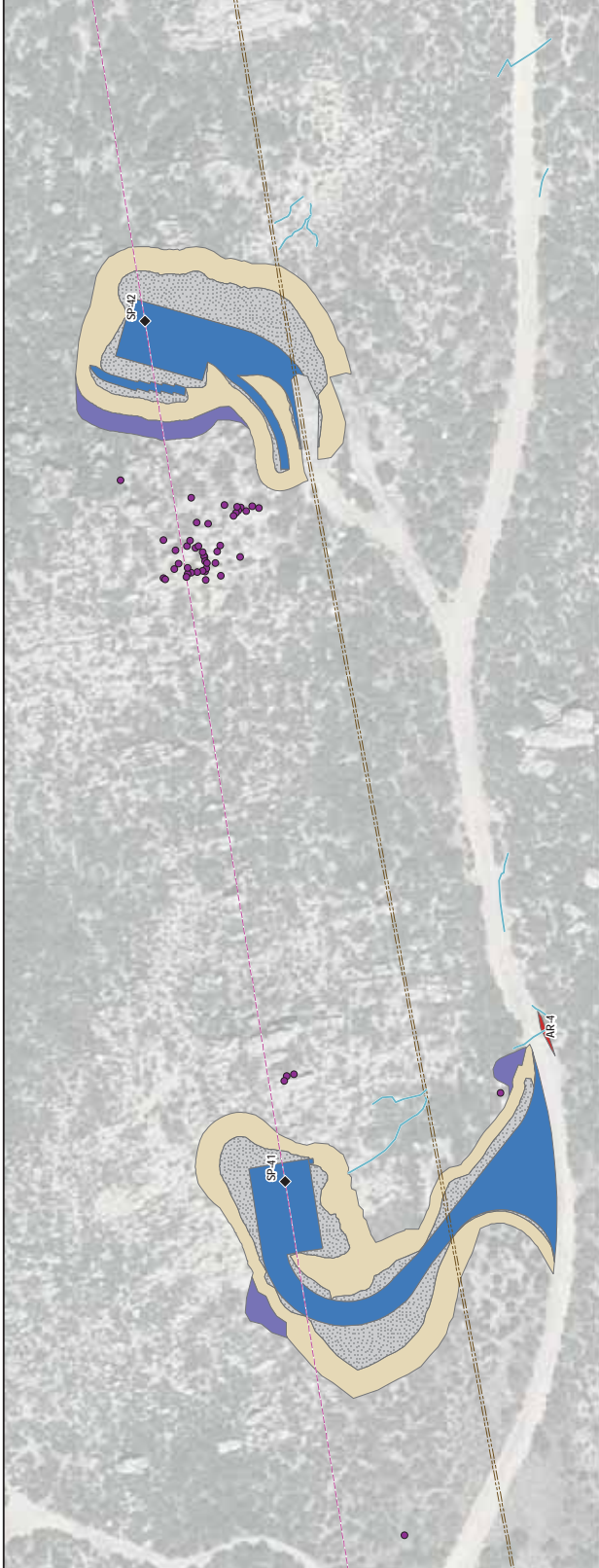
CRUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

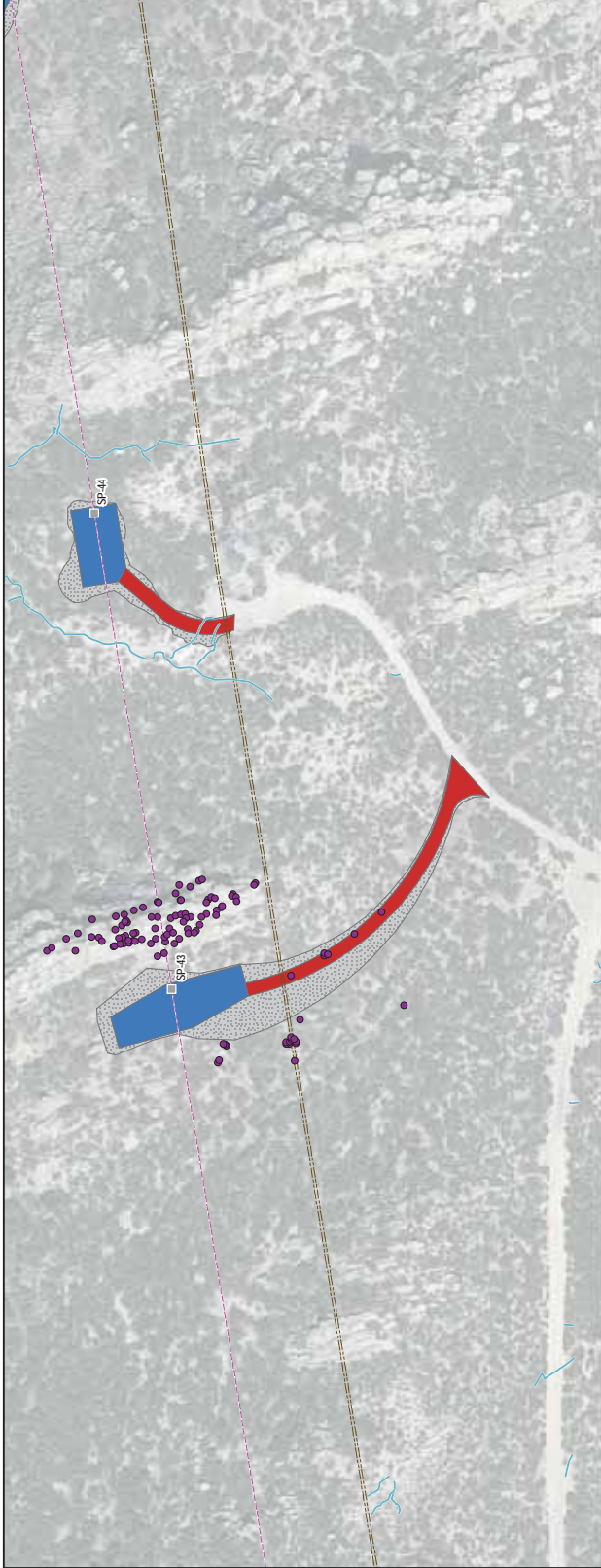
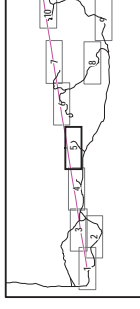
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
 - Construction Yard
 - Guard Structure Site/Access (GS)
 - Full Site (FS)
 - Staging Area
 - Workspace
- Permanent
 - Access Road Modifications
 - Grading
 - Pad/New Access Road
 - Rock Removal Workspace
- Resources
 - Drainage
 - Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 5 of 37
East County Substation Project**

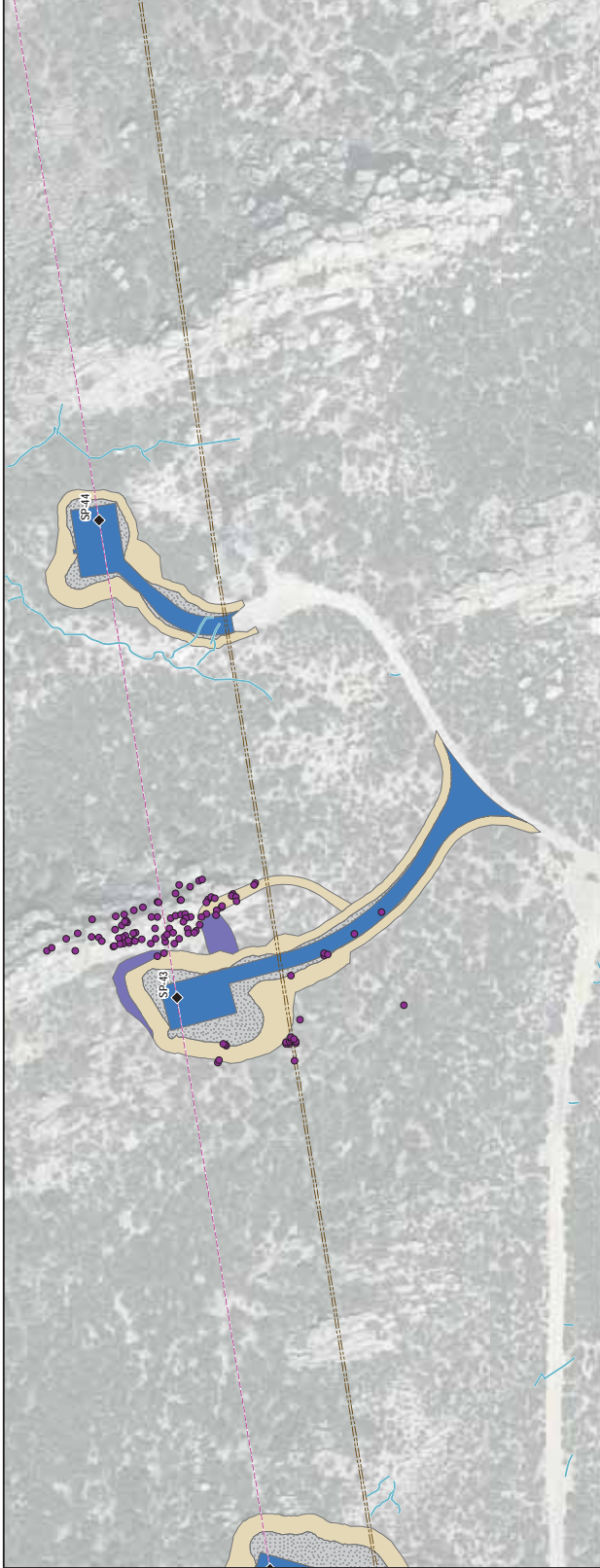
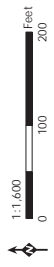
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

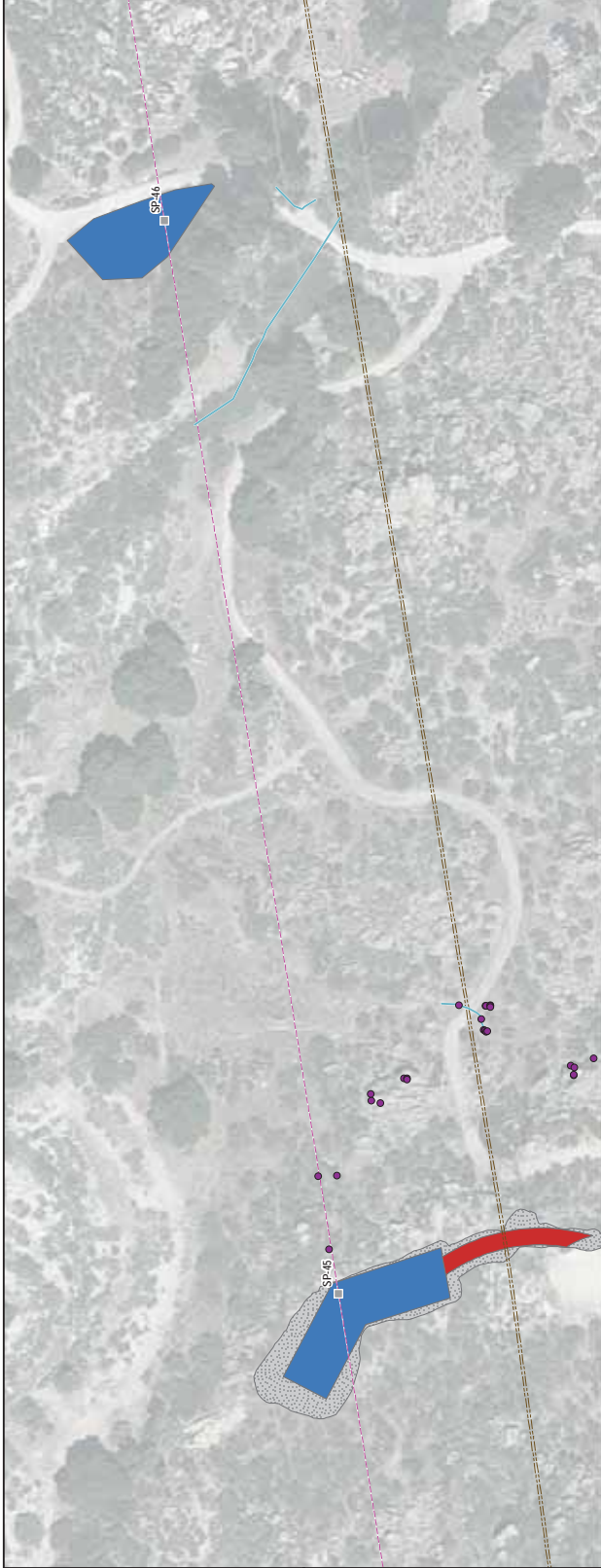
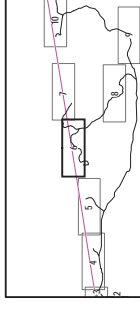
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
 - Construction Yard
 - Guard Structure Site/Access (GS)
 - Full Site (FS)
 - Staging Area
 - Workspace
- Permanent
 - Access Road Modifications
 - Grading
 - Pad/New Access Road
 - Rock Removal Workspace
- Resources
 - Drainage
 - Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 6 of 37
East County Substation Project**

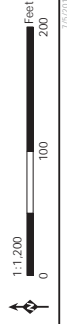
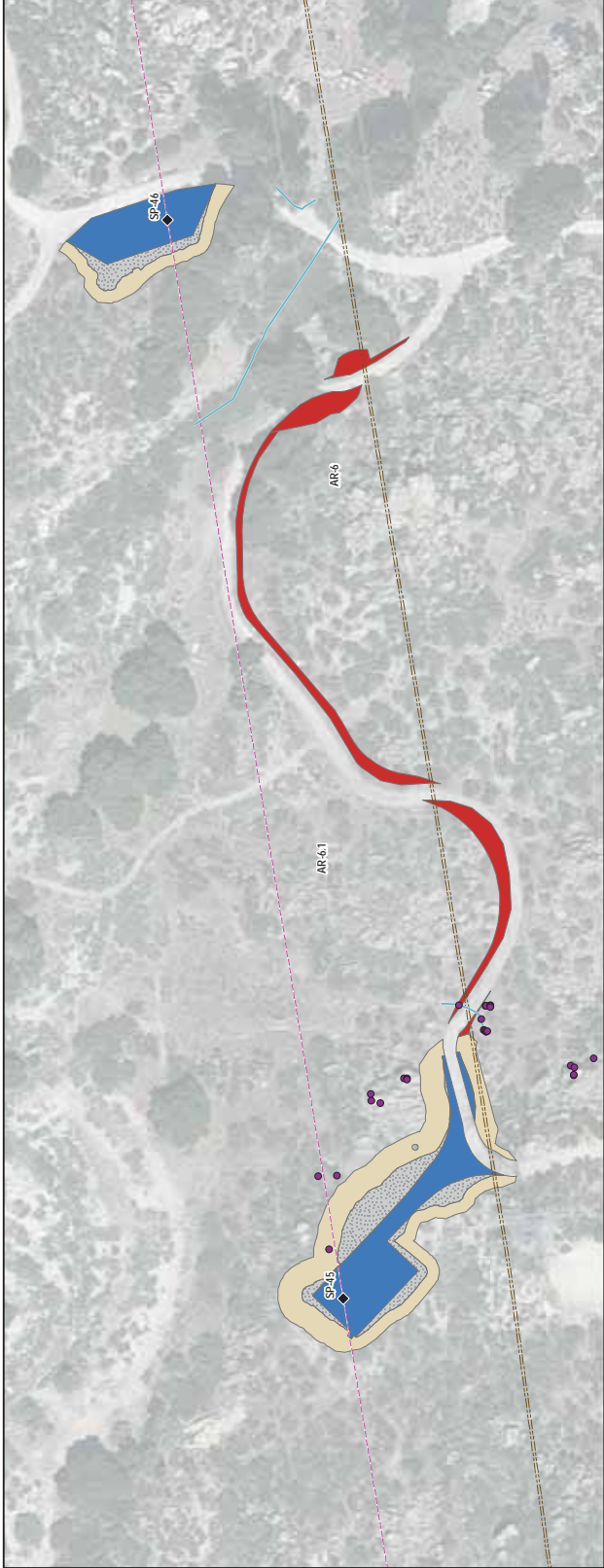
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

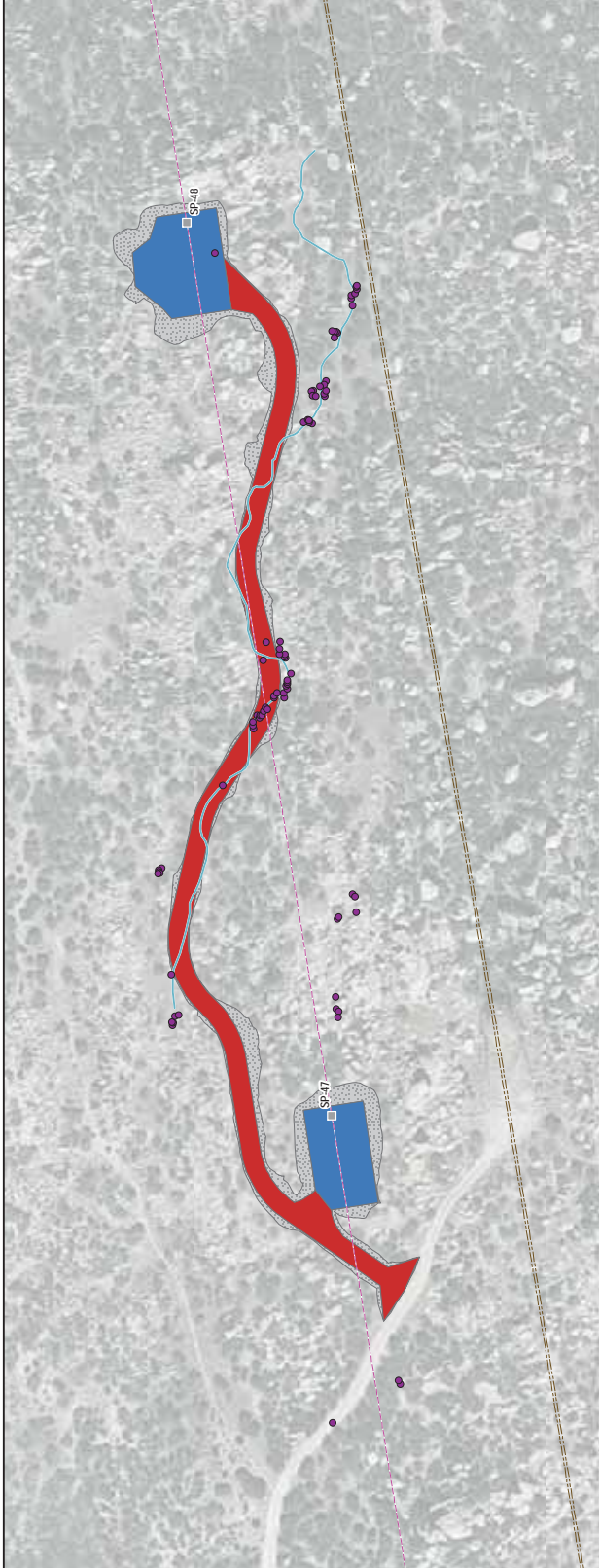
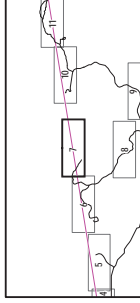
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
 - Construction Yard
 - Guard Structure Site/Access (GS)
 - Pull Site (P-S)
 - Staging Area
 - Workspace
- Permanent
 - Access Road Modifications
 - Grading
 - Pad/New Access Road
 - Rock Removal Workspace
- Resources
 - Drainage
 - Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 7 of 37
East County Substation Project**

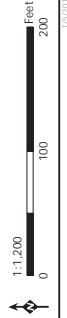
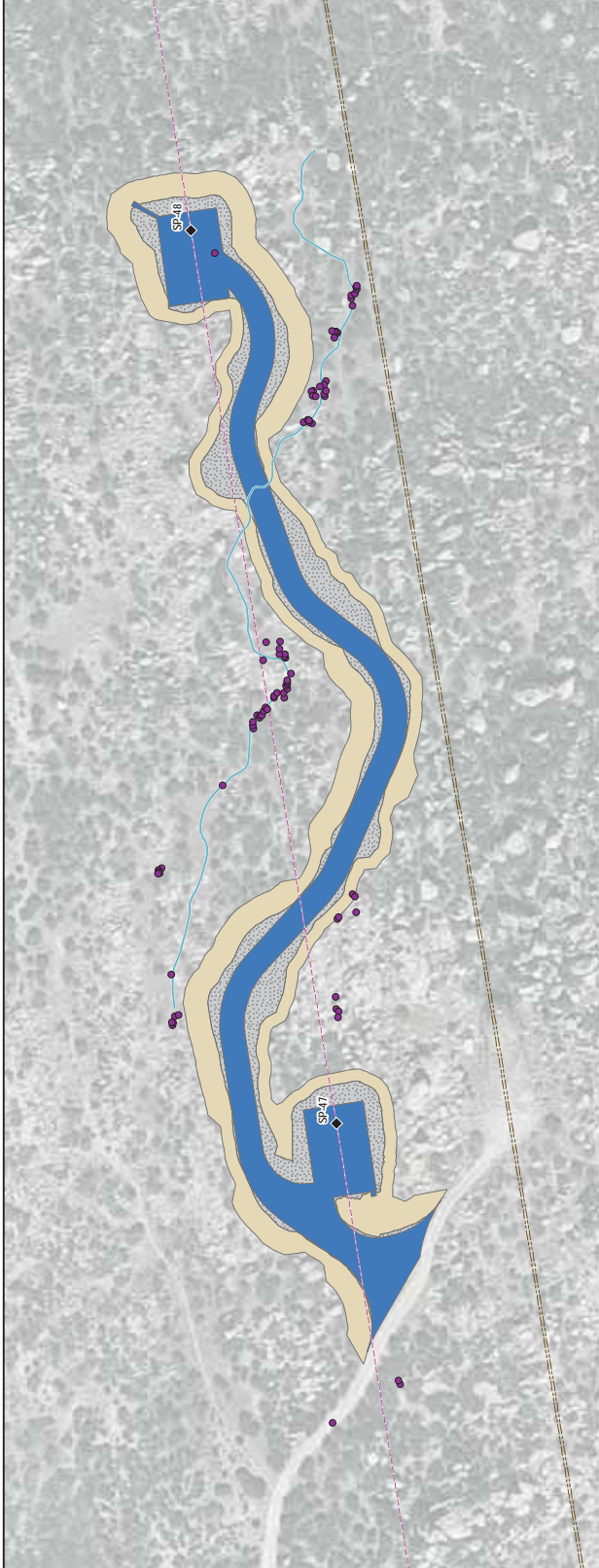
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

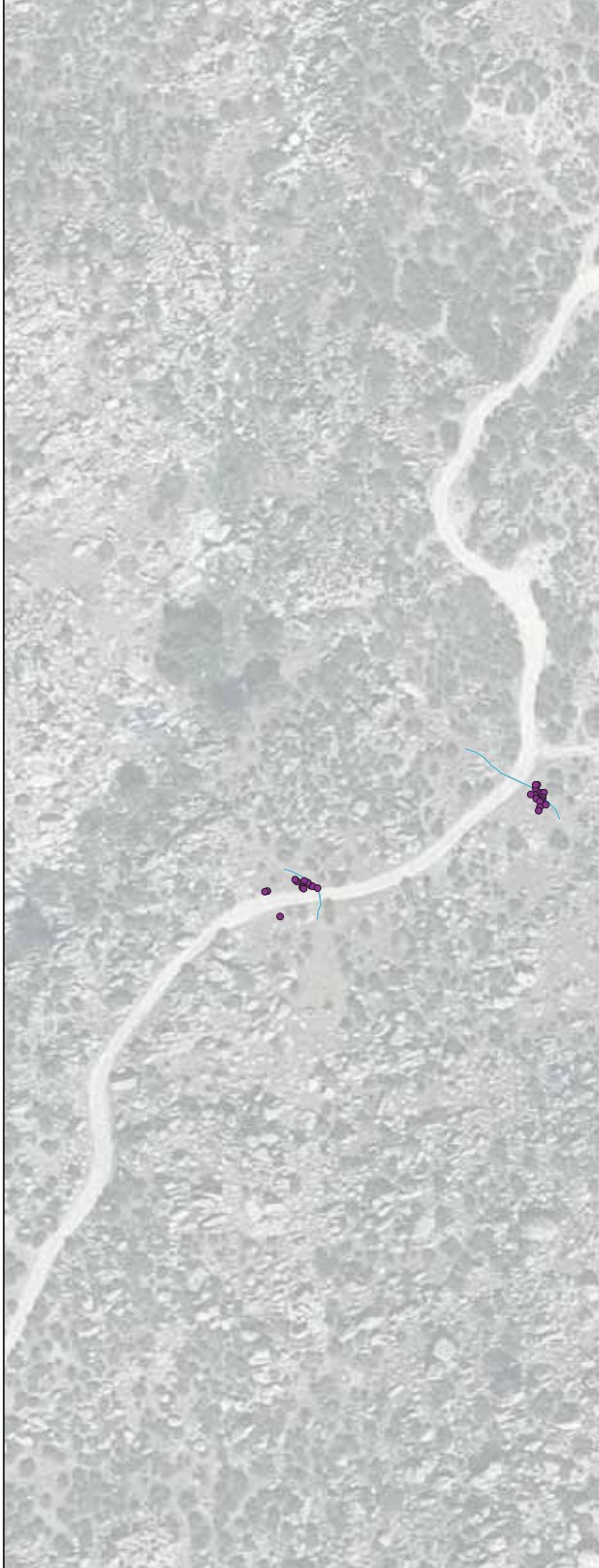
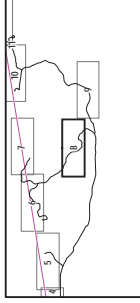
- ◆ 138 kV Pole Location
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
- Construction Yard
- Guard Structure Site/Access (GS)
- Full Site (FS)
- Staging Area
- Workspace
- Permanent
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Resources
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 8 of 37
East County Substation Project**

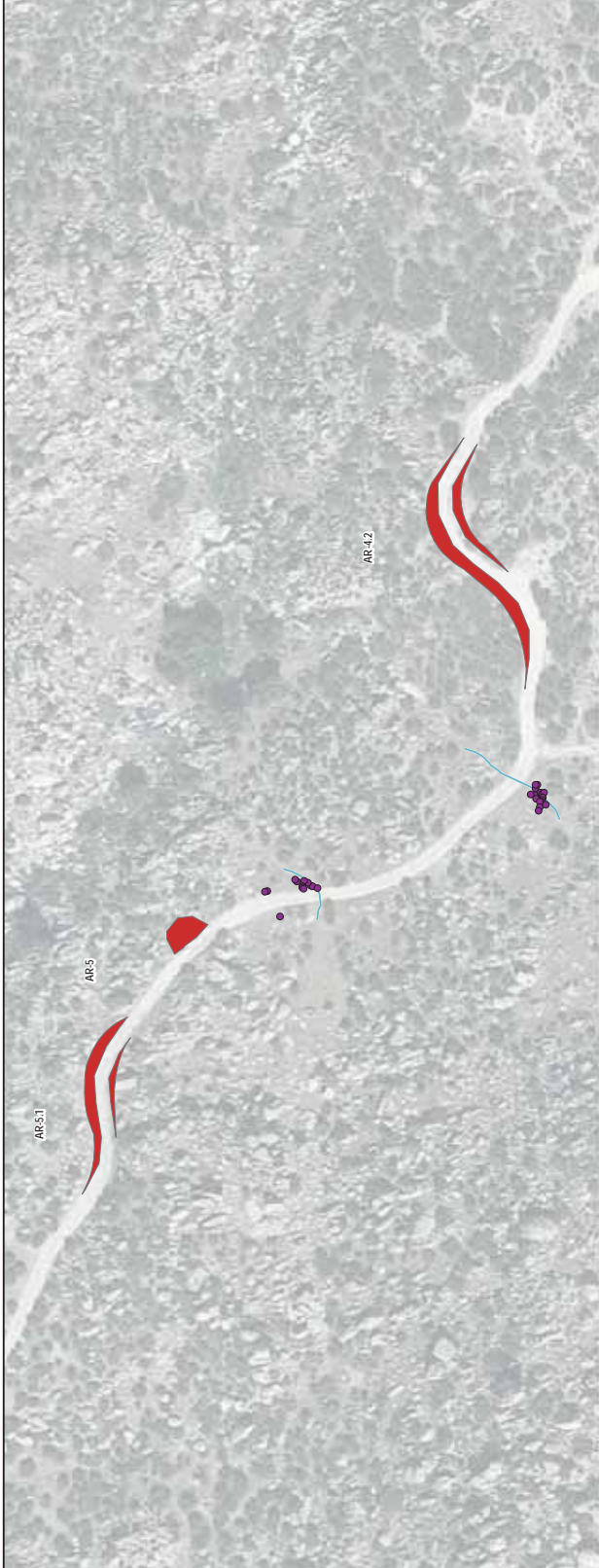
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

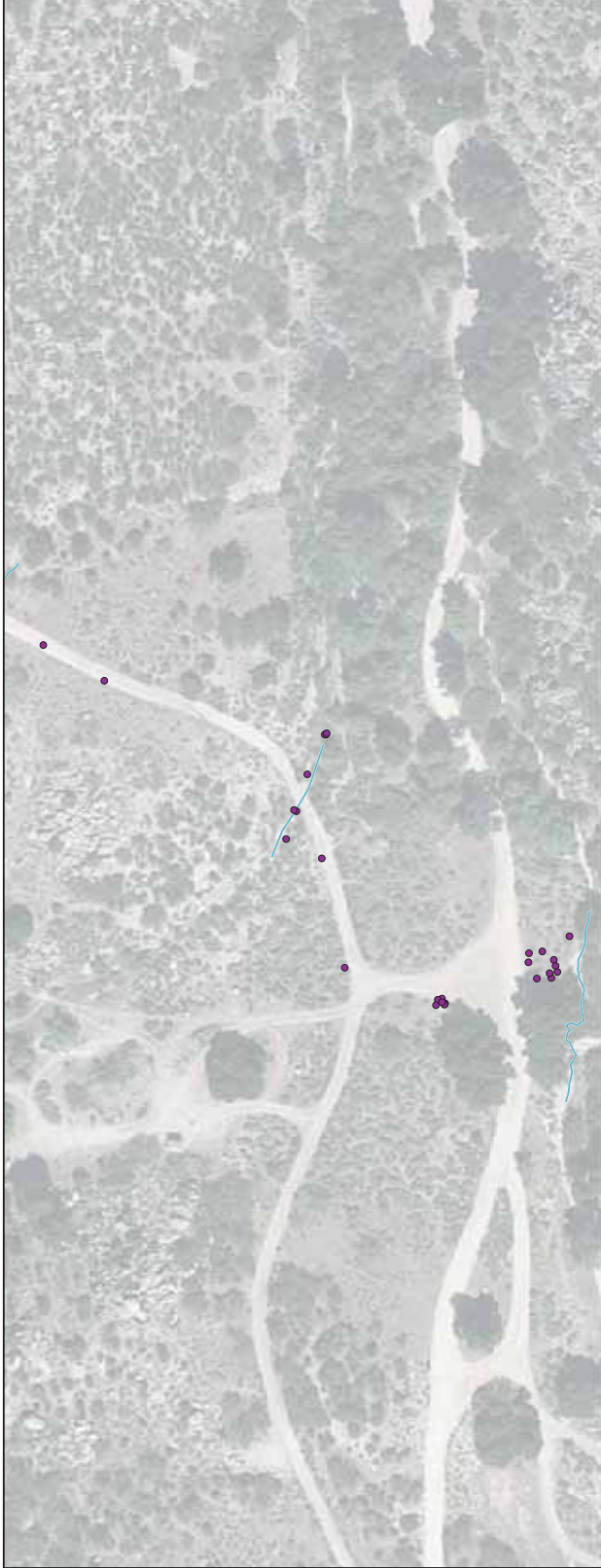
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (P-S)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Resources**
- Drainage
- Rare Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 9 of 37
East County Substation Project**

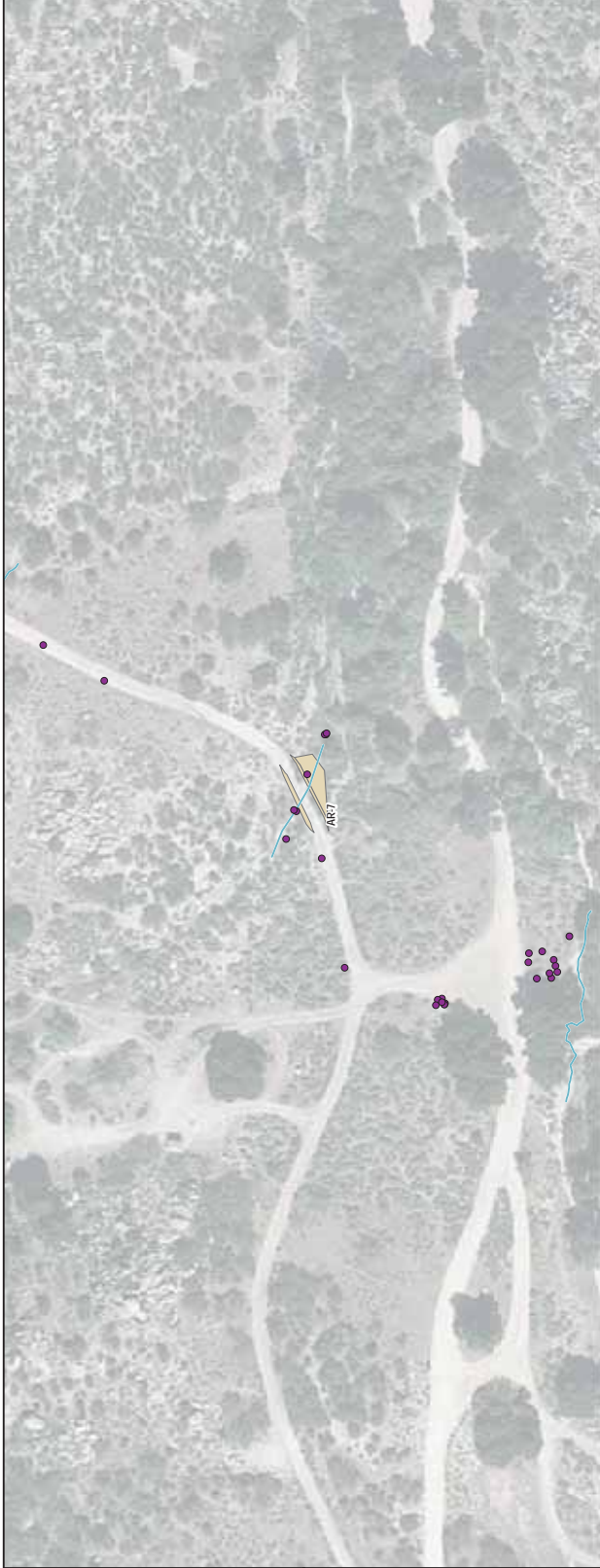
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

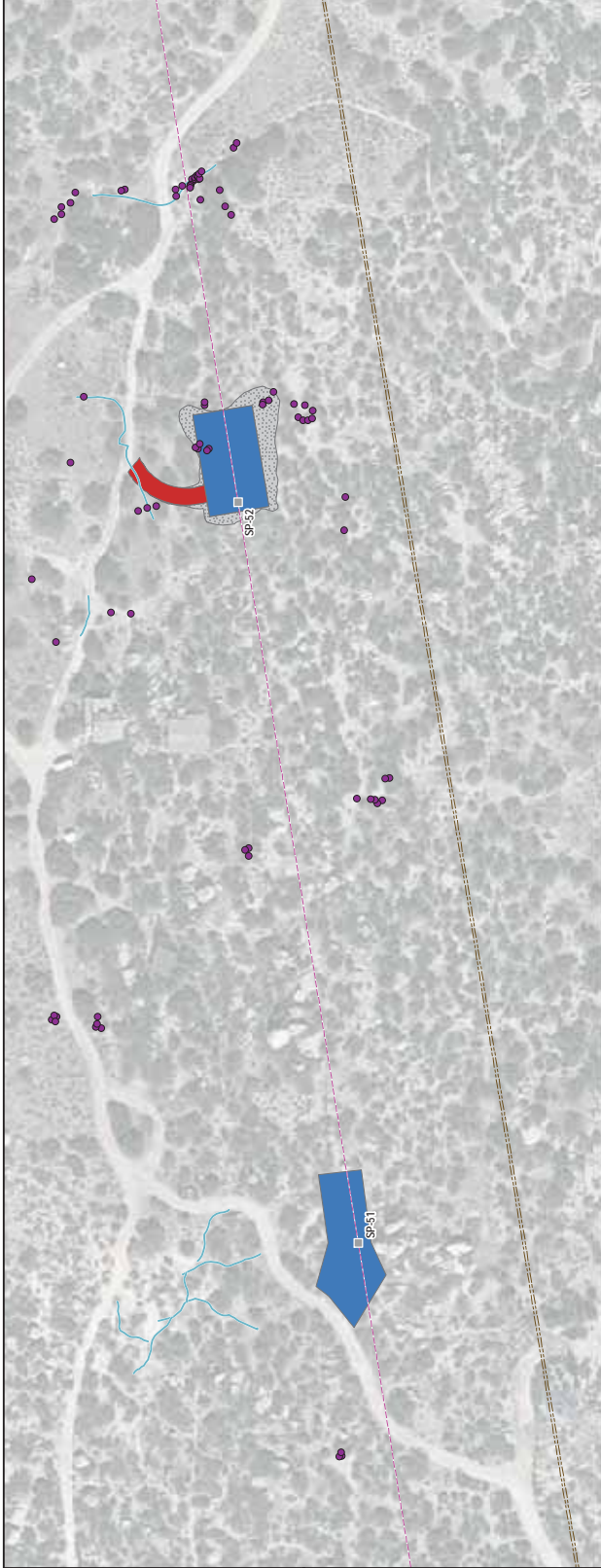
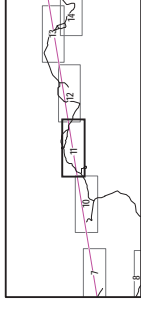
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Paved/New Access Road
- Rock Removal Workspace
- Resources**
- Drainage
- Rare Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 11 of 37
East County Substation Project**

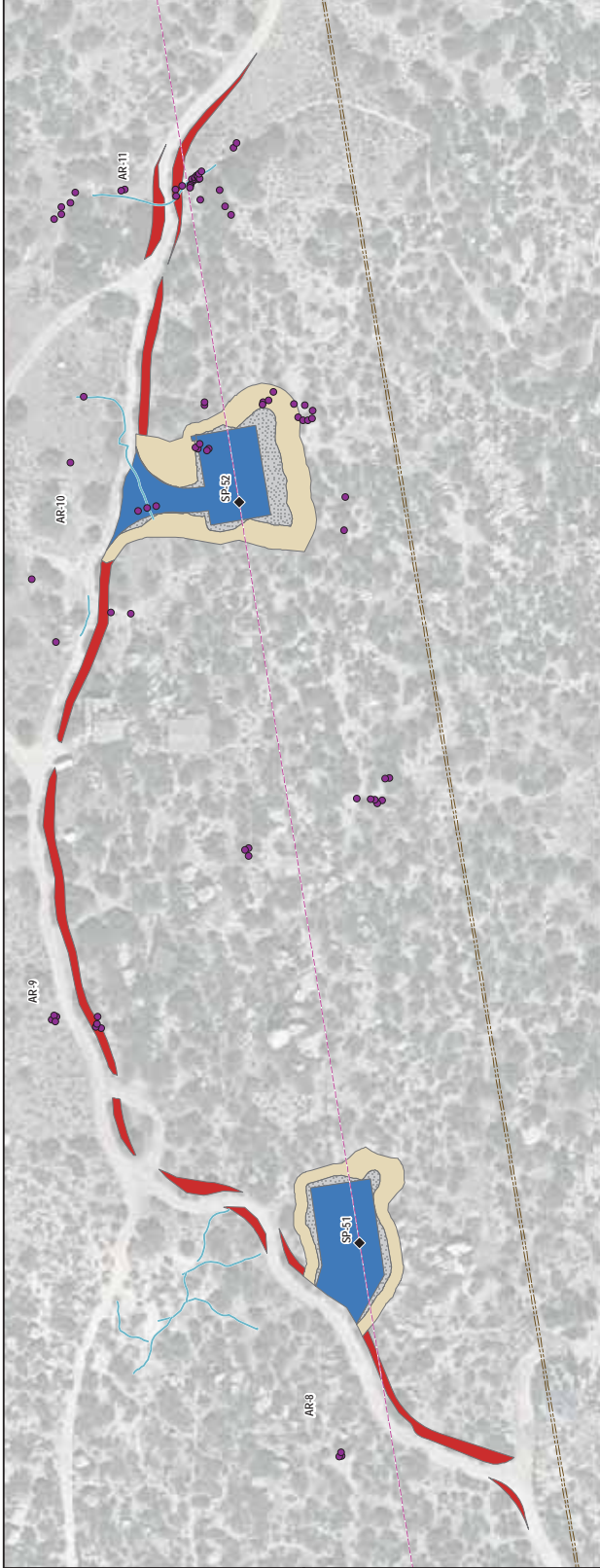
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

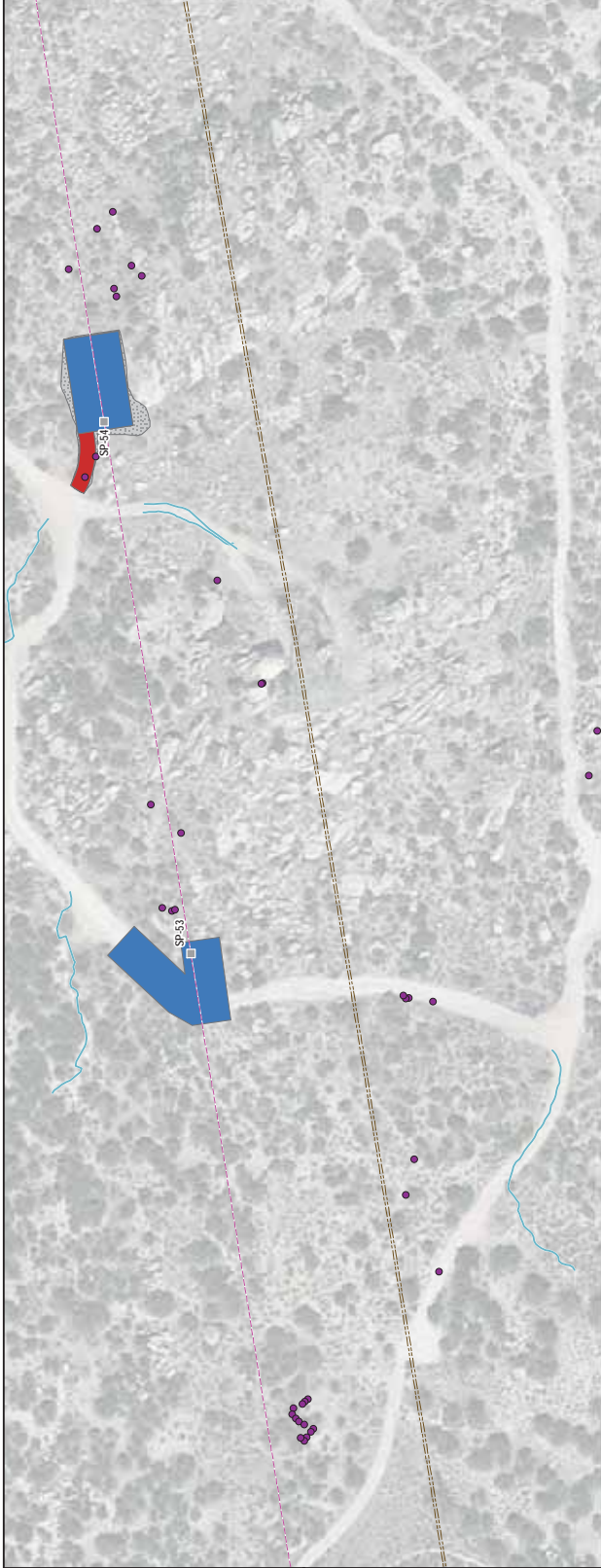
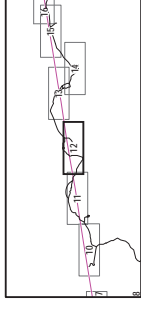
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
- Construction Yard
- Guard Structure Site/Access (GS)
- Full Site (FS)
- Staging Area
- Workspace
- Permanent
- Access Road Modifications
- Grading
- Paved/New Access Road
- Rock Removal Workspace
- Resources
- Drainage
- Rare Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 12 of 37
East County Substation Project**

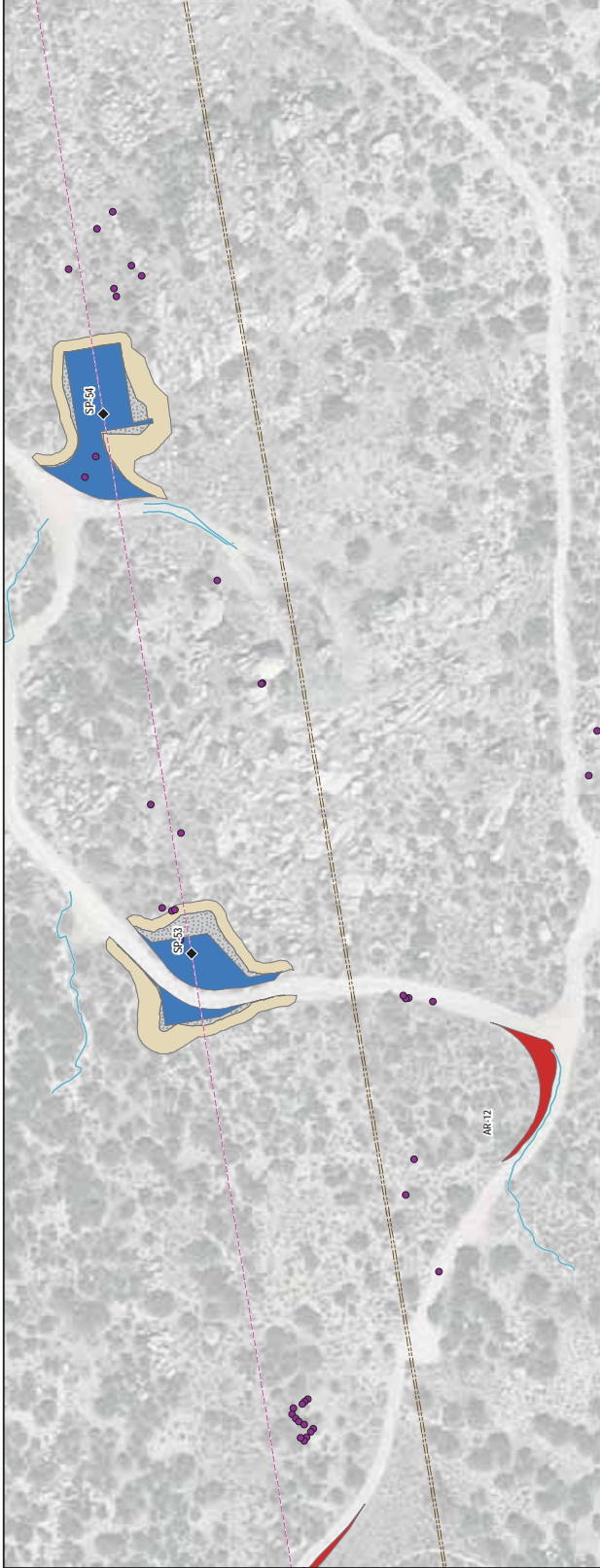
CRUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

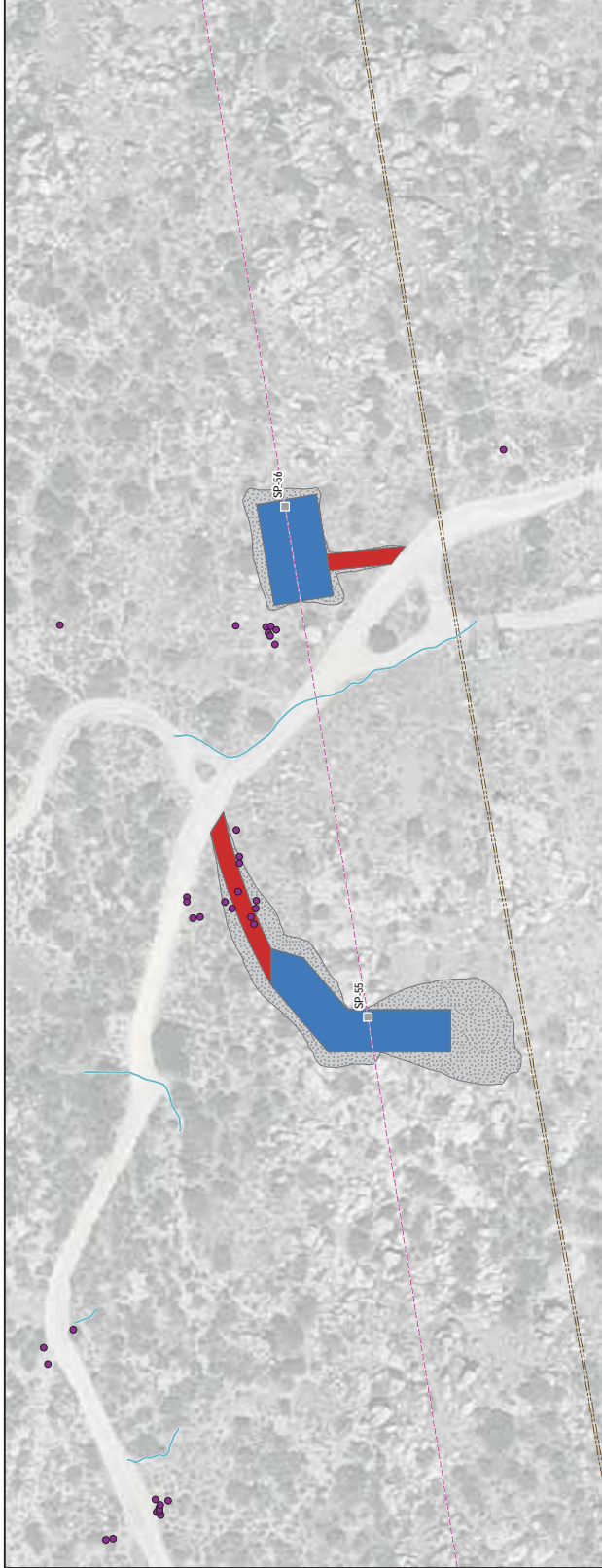
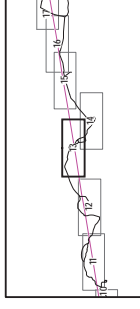
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
 - Construction Yard
 - Guard Structure Site/Access (GS)
 - Full Site (FS)
 - Staging Area
 - Workspace
- Permanent
 - Access Road Modifications
 - Grading
 - Pad/New Access Road
 - Rock Removal Workspace
- Resources
 - Drainage
 - Rare Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 13 of 37
East County Substation Project**

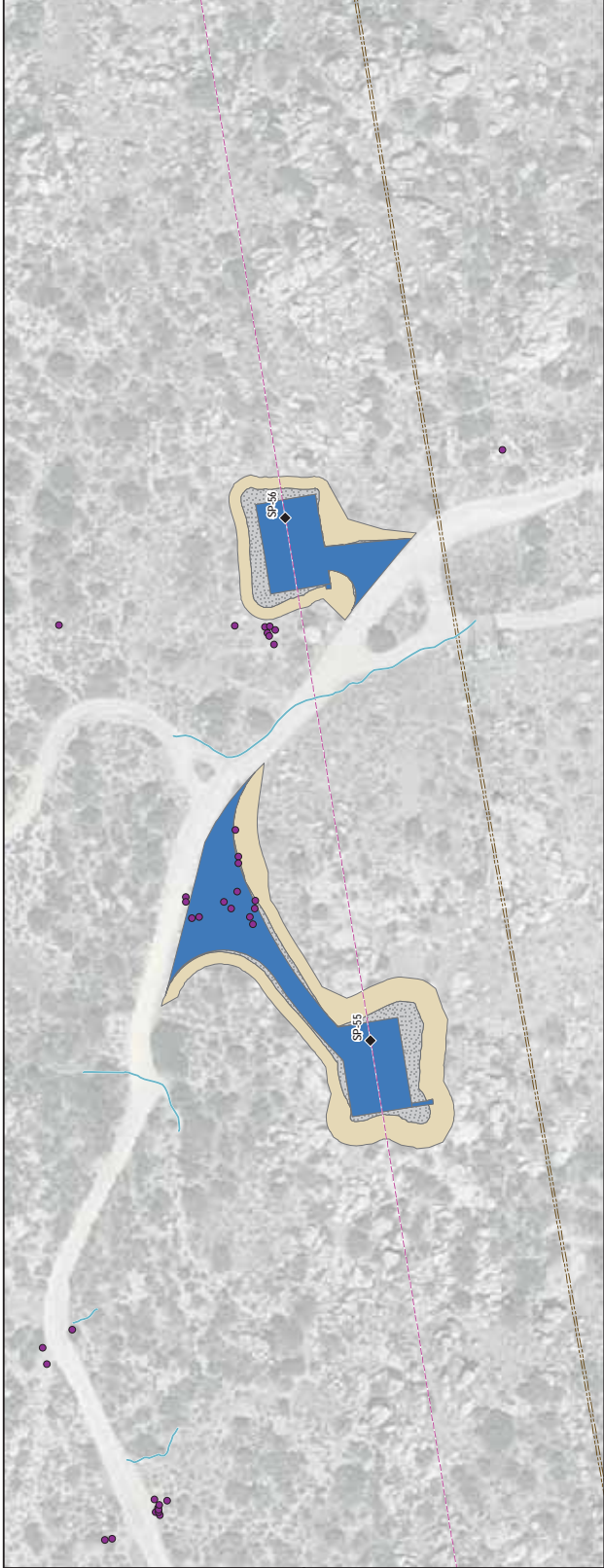
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

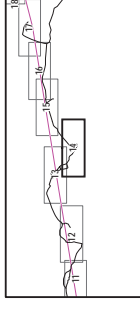
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
- Construction Yard
- Guard Structure Site/Access (GS)
- Full Site (FS)
- Staging Area
- Workspace
- Permanent
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Resources
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 14 of 37
East County Substation Project**

CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

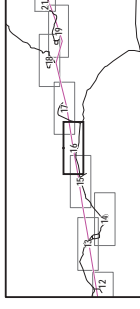
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent
- Access Road Modifications
- Grading
- Paved/New Access Road
- Rock Removal Workspace
- Resources
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 16 of 37
East County Substation Project**

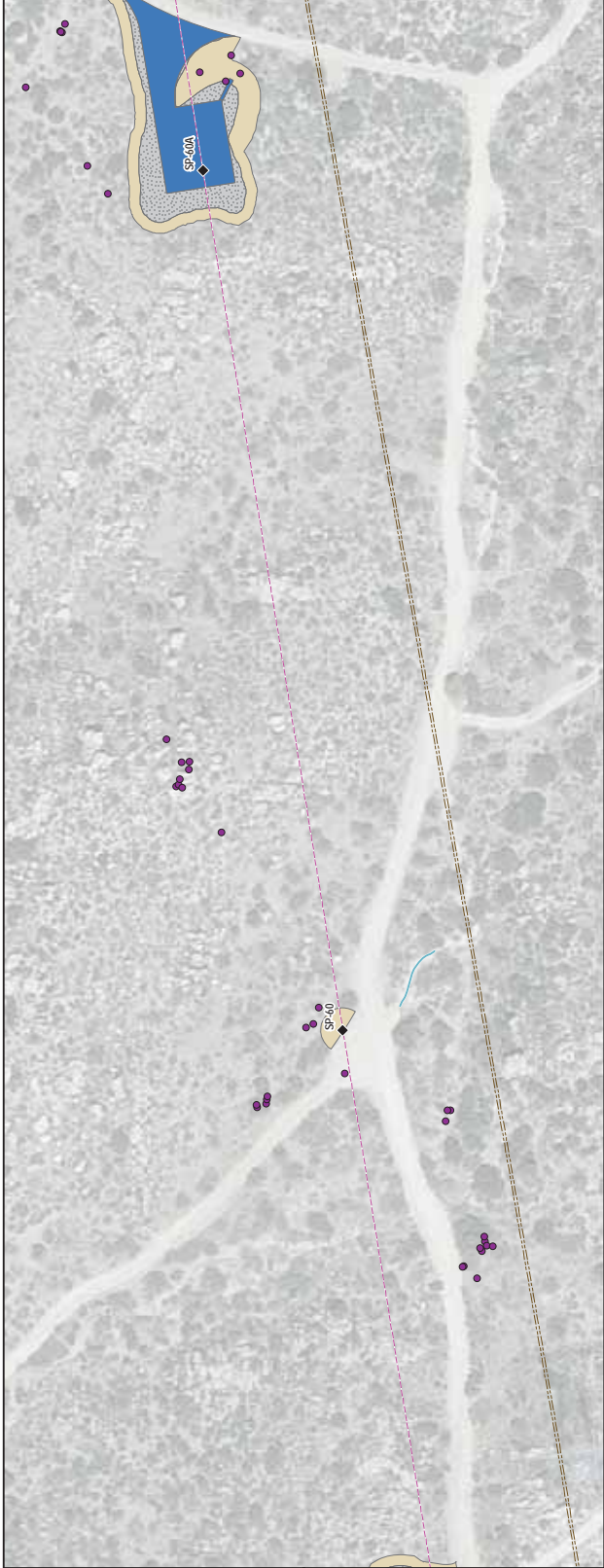
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

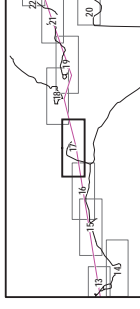
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Resources
- Drainage
- Riser Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 17 of 37
East County Substation Project**

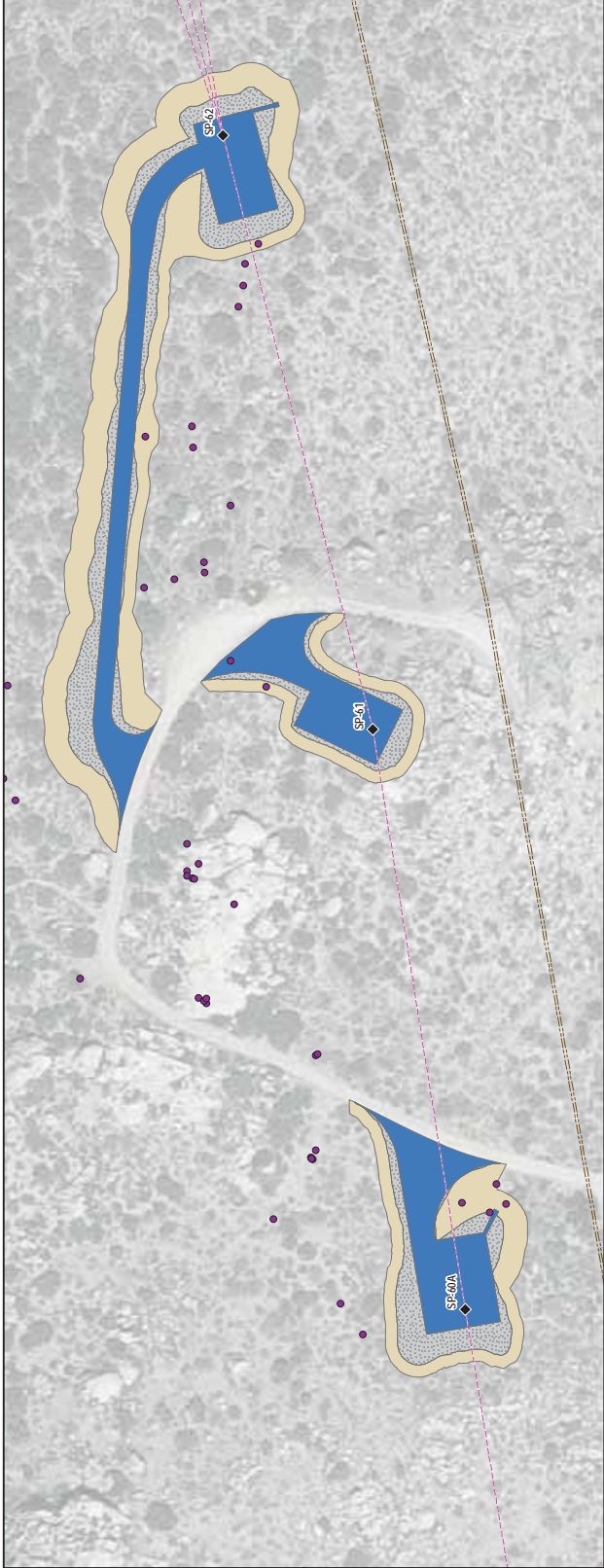
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

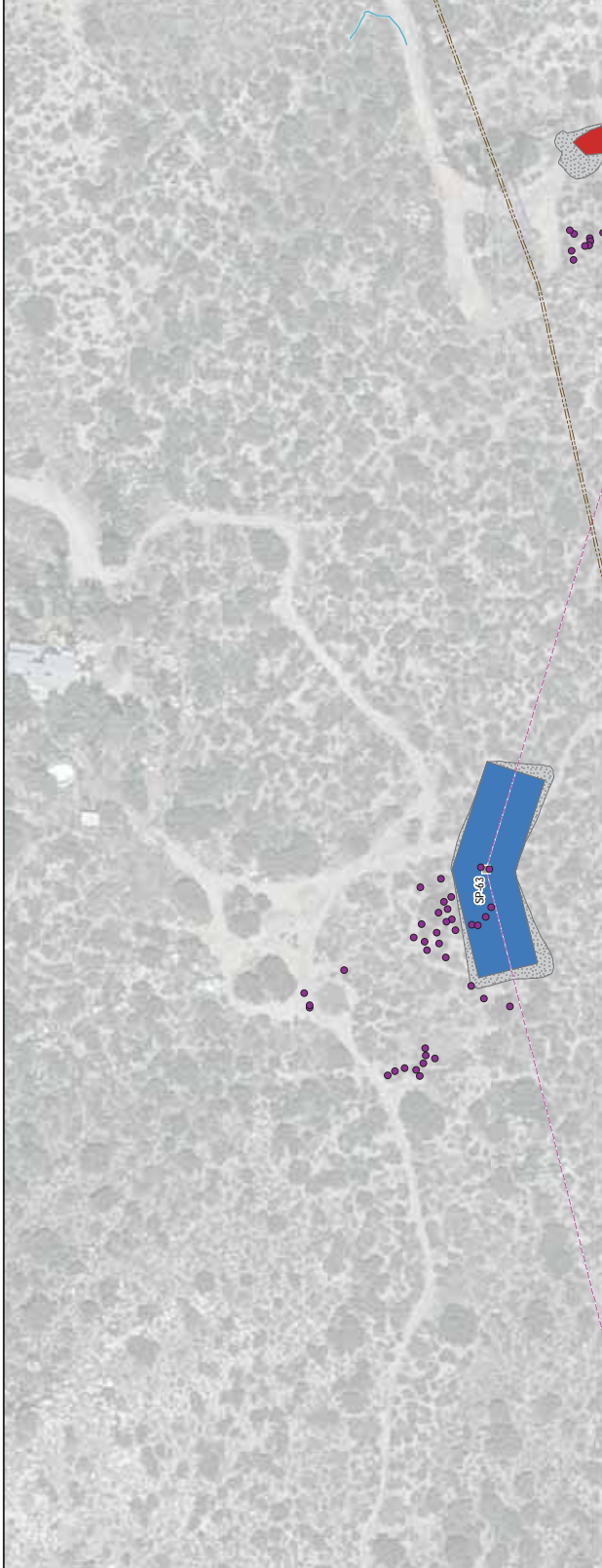
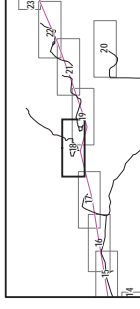
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
 - Construction Yard
 - Guard Structure Site/Access (GS)
 - Full Site (FS)
 - Staging Area
 - Workspace
- Permanent
 - Access Road Modifications
 - Grading
 - Paved/New Access Road
 - Rock Removal Workspace
- Resources
 - Drainage
 - Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 18 of 37
East County Substation Project**

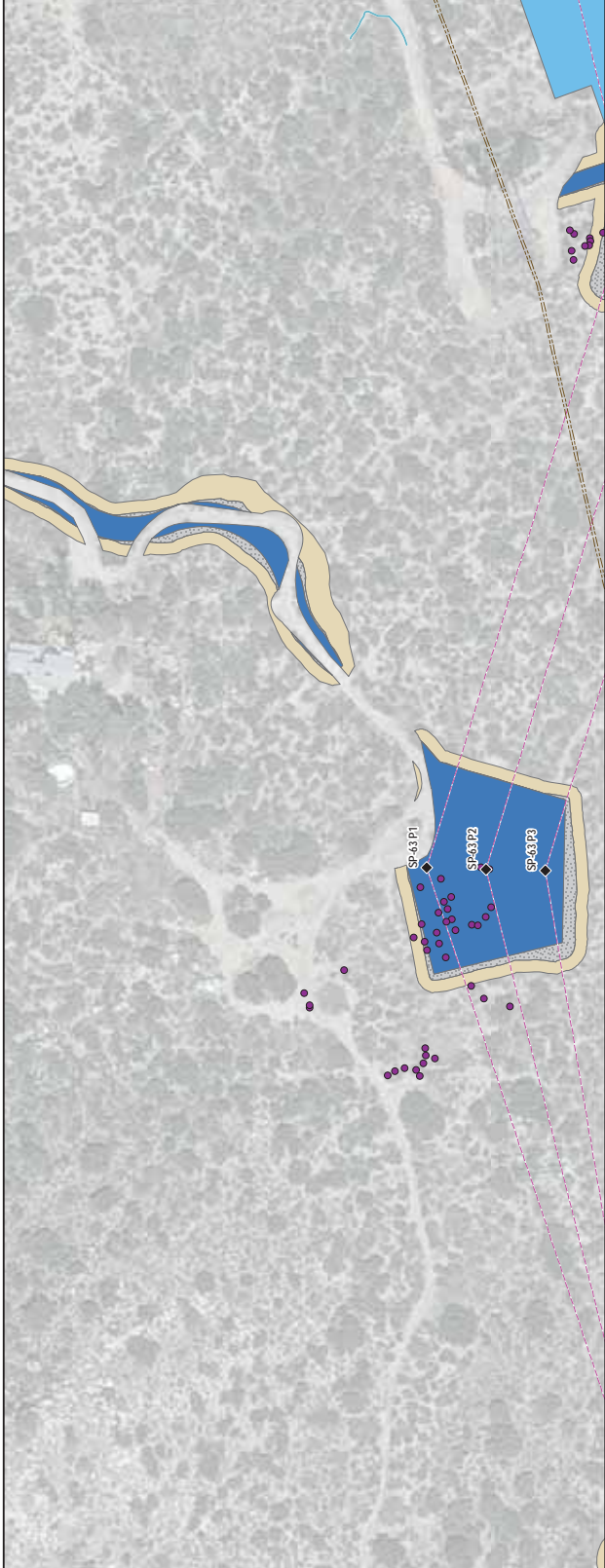
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

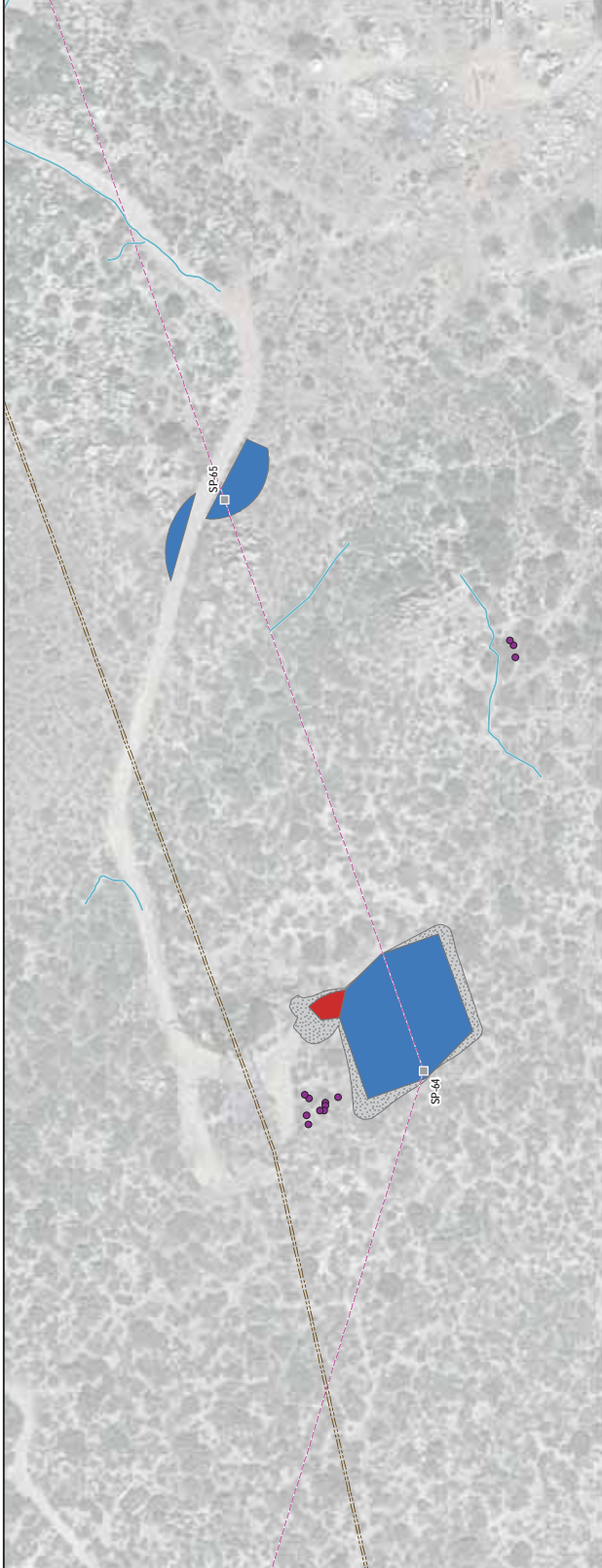
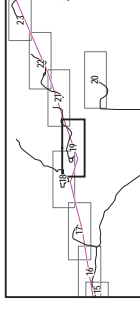
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (P-S)
- Staging Area
- Workspace
- Permanent
- Access Road Modifications
- Grading
- Paved/New Access Road
- Rock Removal Workspace
- Resources
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 19 of 37
East County Substation Project**

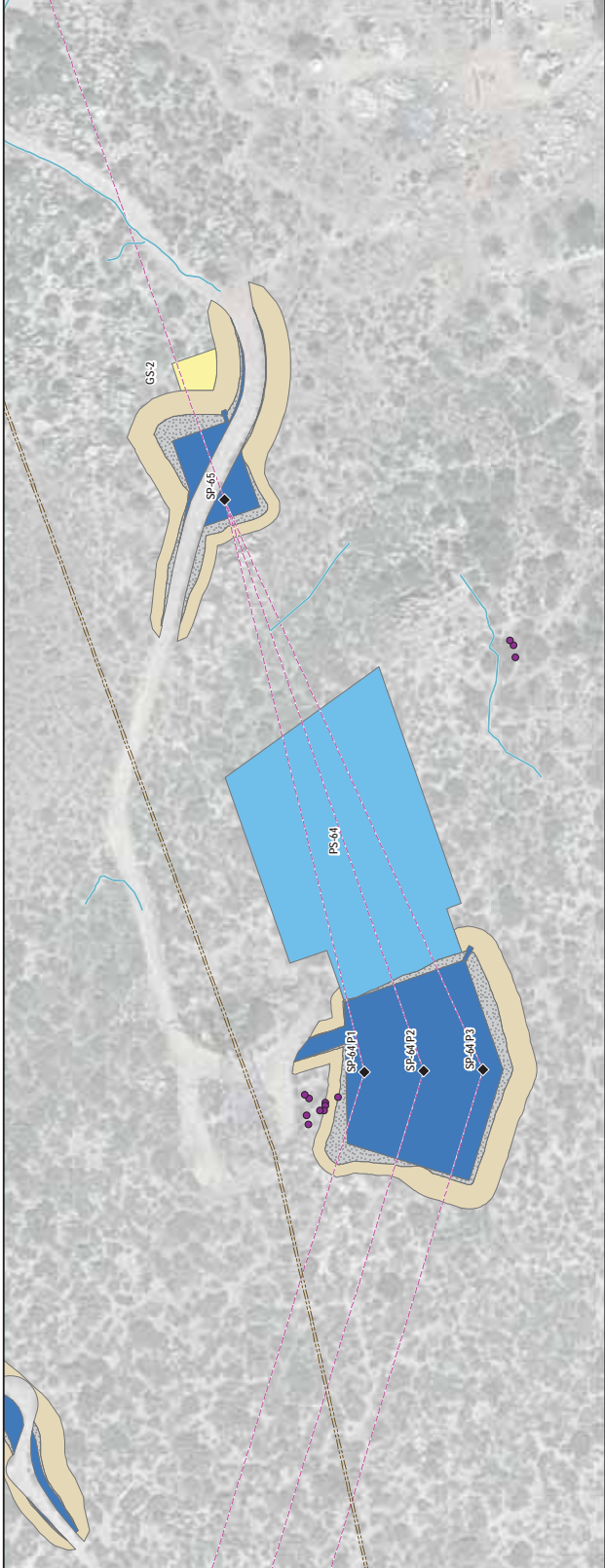
CRUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
 - Construction Yard
 - Guard Structure Site/Access (GS)
 - Full Site (FS)
 - Staging Area
 - Workspace
- Permanent
 - Access Road Modifications
 - Grading
 - Pad/New Access Road
 - Rock Removal Workspace
- Resources
 - Drainage
 - Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 20 of 37
East County Substation Project**

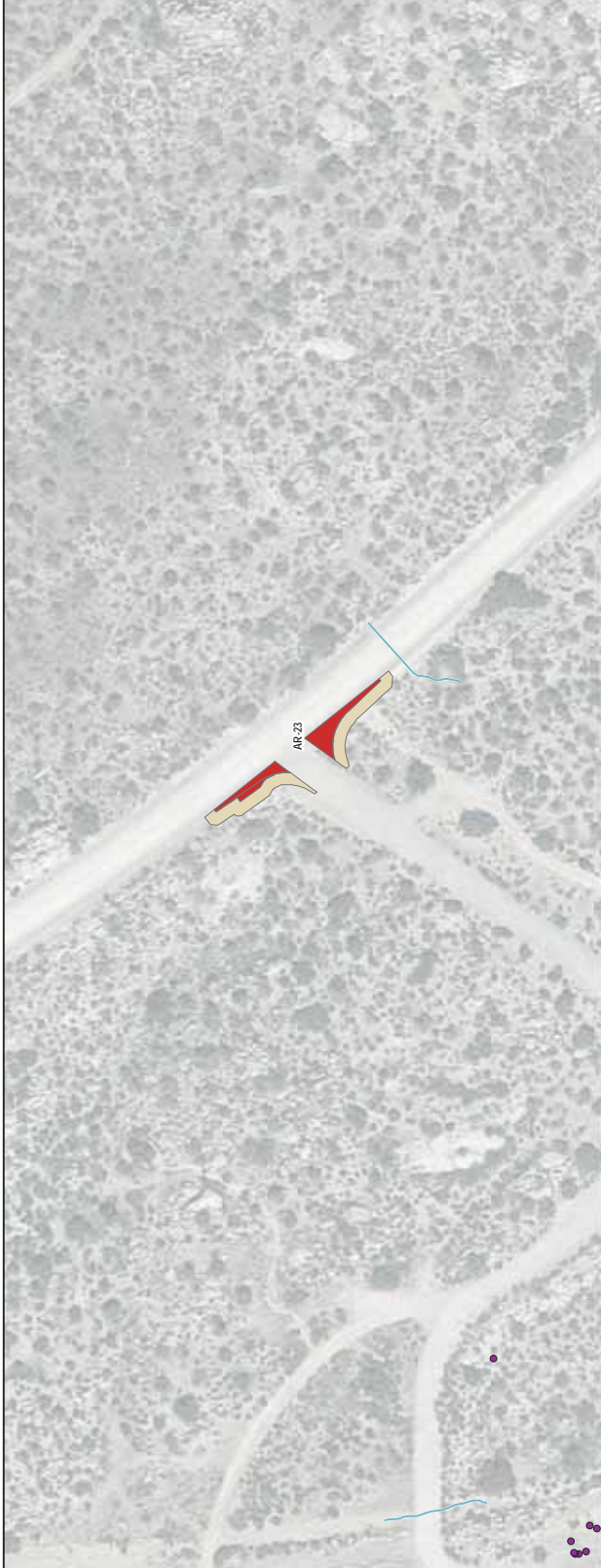
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



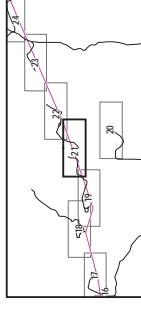
Final Design

- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Full Site (FS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Resources**
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 21 of 37
East County Substation Project**

- CPUC-Approved Project**
- Riser Pole
 - 138 kV Pole
 - - - 138 kV Overhead
 - Access Road
 - Construction Yard
 - Grading
 - Pole Work Area
 - Pull Site
 - Staging Area
 - Temporary Access Road
 - Vault
 - - - Existing Transmission Line



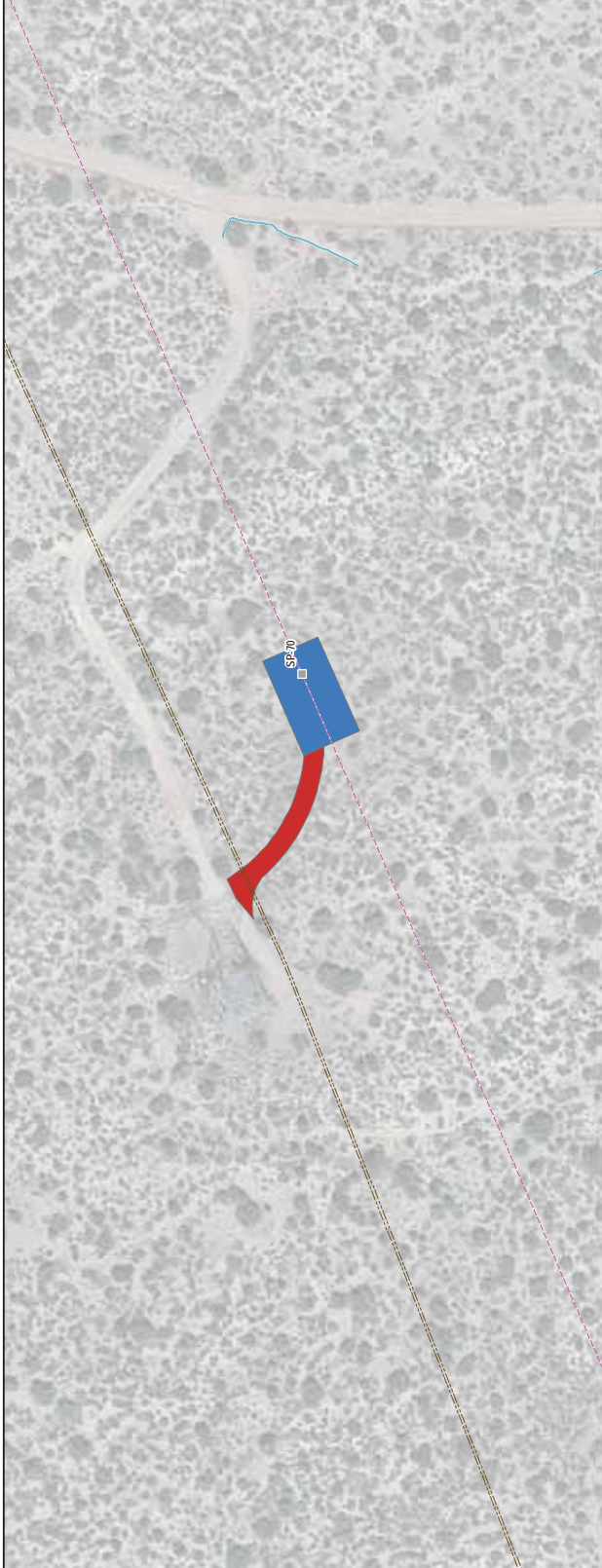
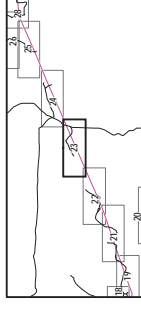
- Final Design**
- ◆ 138 kV Pole Location
 - Riser Pole
 - - - 138 kV Overhead
 - - - 138 kV Underground
 - Vault
 - Temporary
 - Construction Yard
 - Guard Structure Site/Access (GS)
 - Pull Site (P-S)
 - Staging Area
 - Workspace
 - Permanent
 - Access Road Modifications
 - Grading
 - Pad/New Access Road
 - Rock Removal Workspace
 - Resources
 - Drainage
 - Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 23 of 37
East County Substation Project**

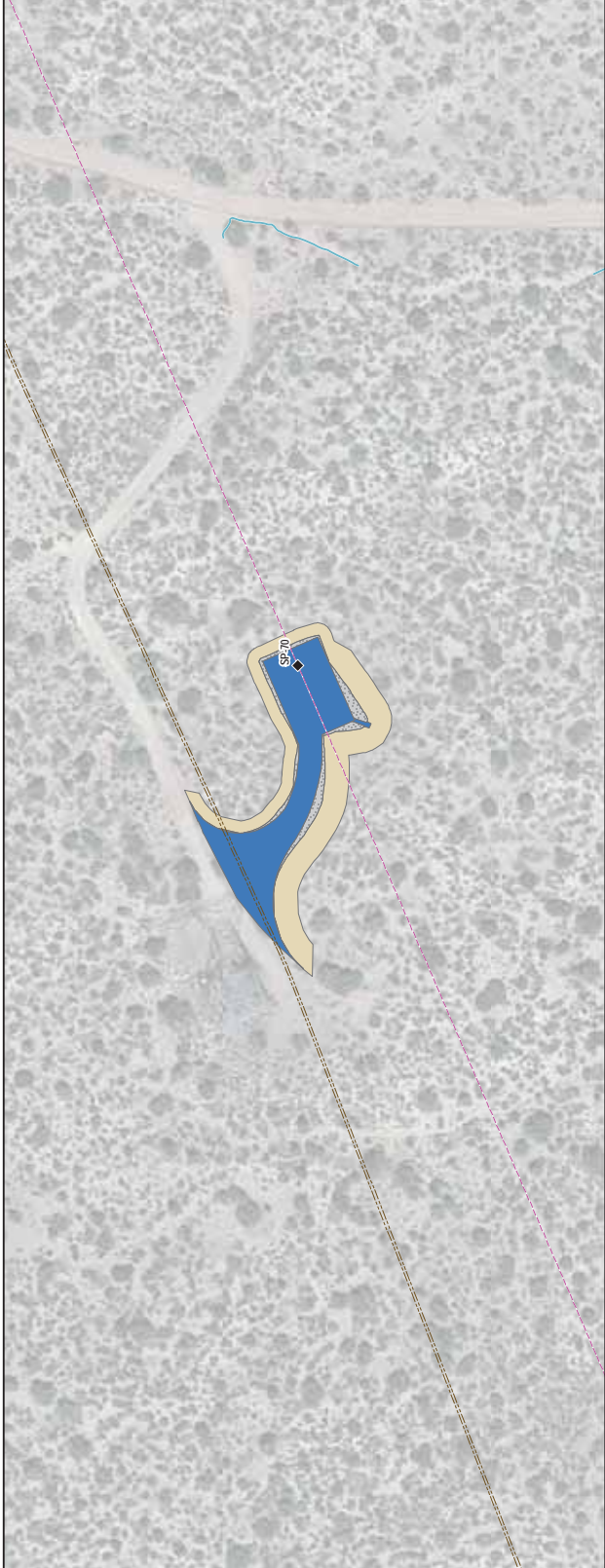
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

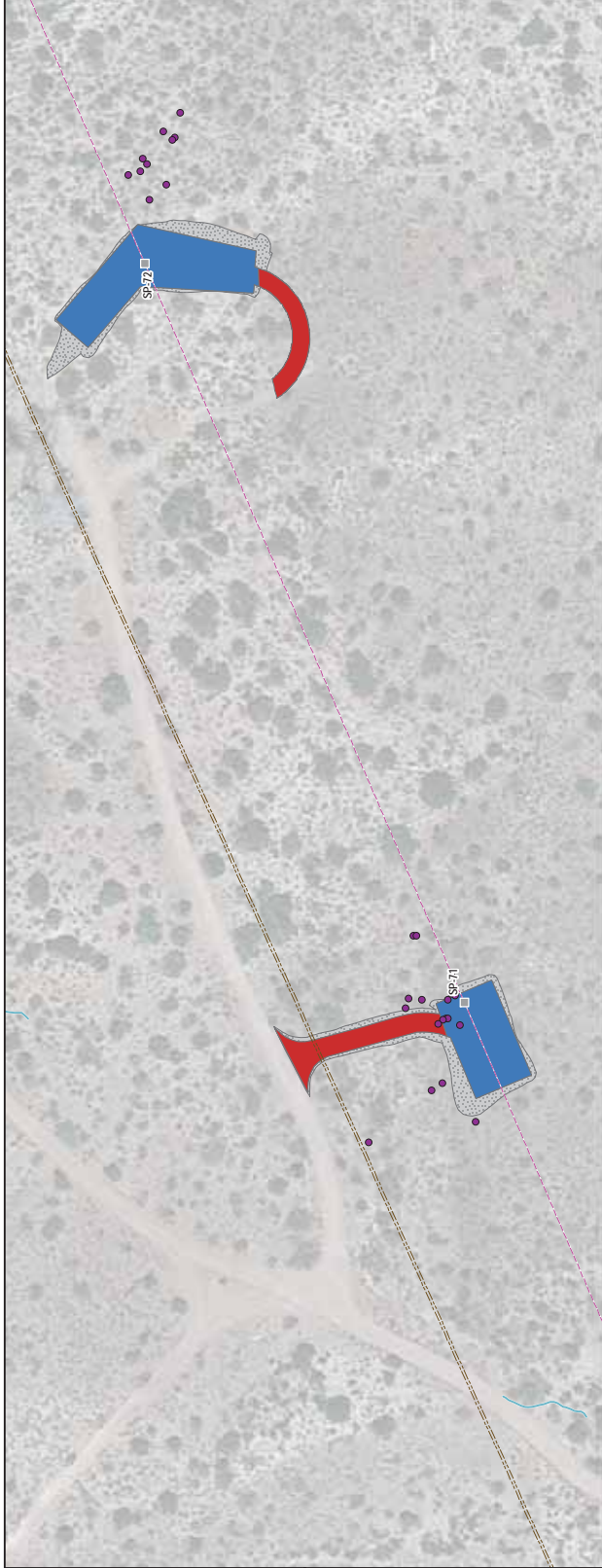
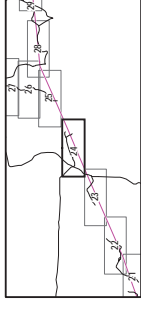
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (P-S)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Resources**
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 24 of 37
East County Substation Project**

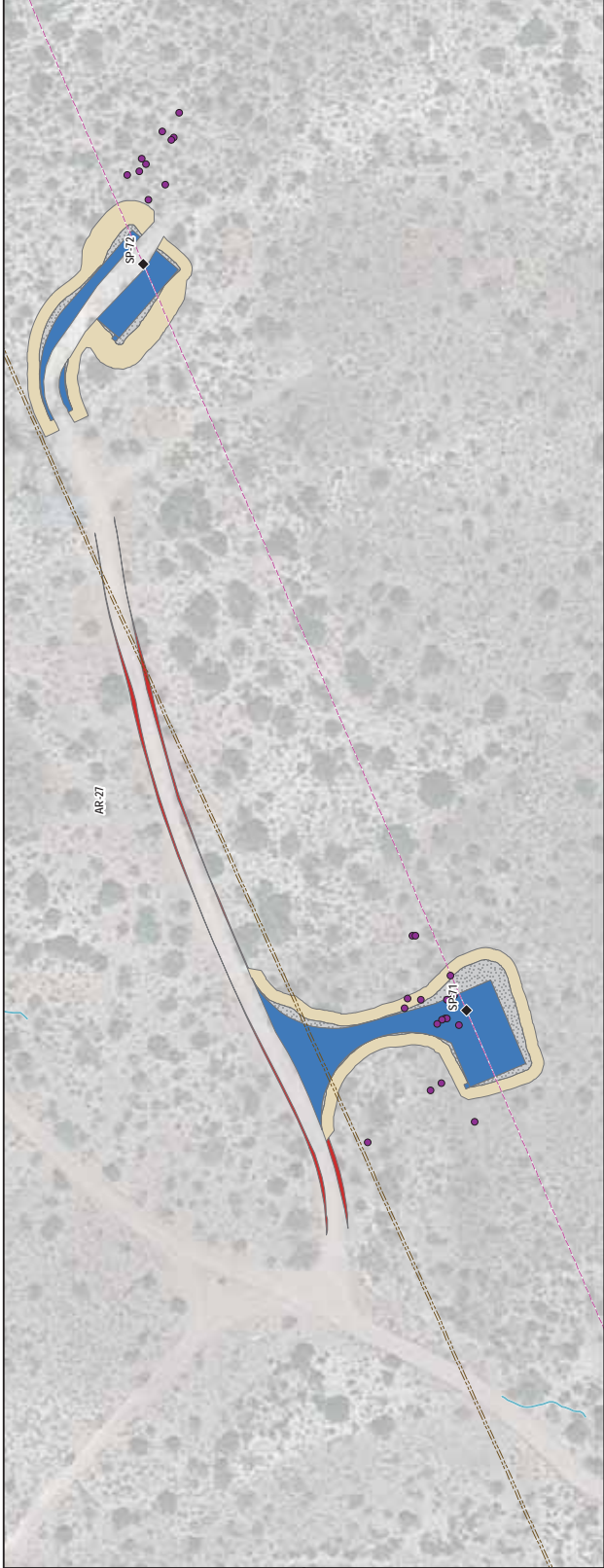
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

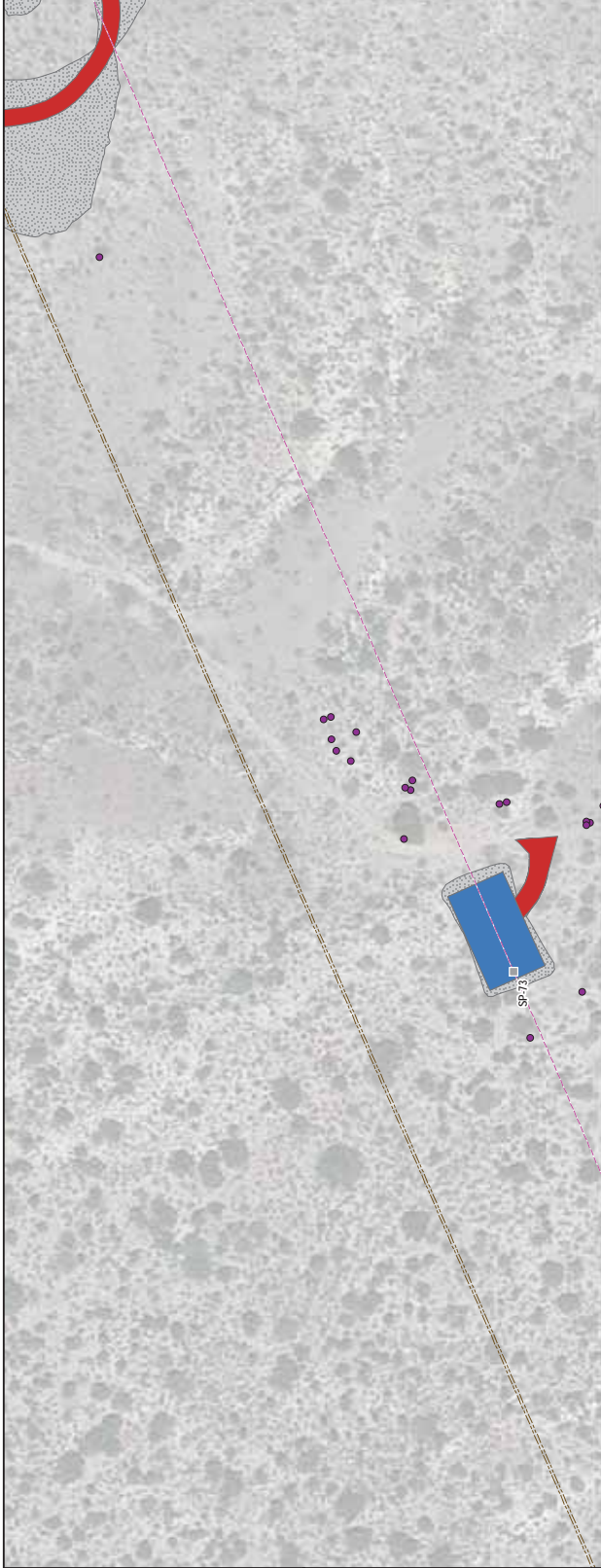
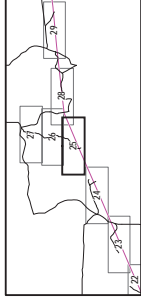
- ◆ 138 kV Pole Location
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (P-S)
- Staging Area
- Workspace
- Permanent
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Resources
- Drainage
- Rare Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 25 of 37
East County Substation Project**

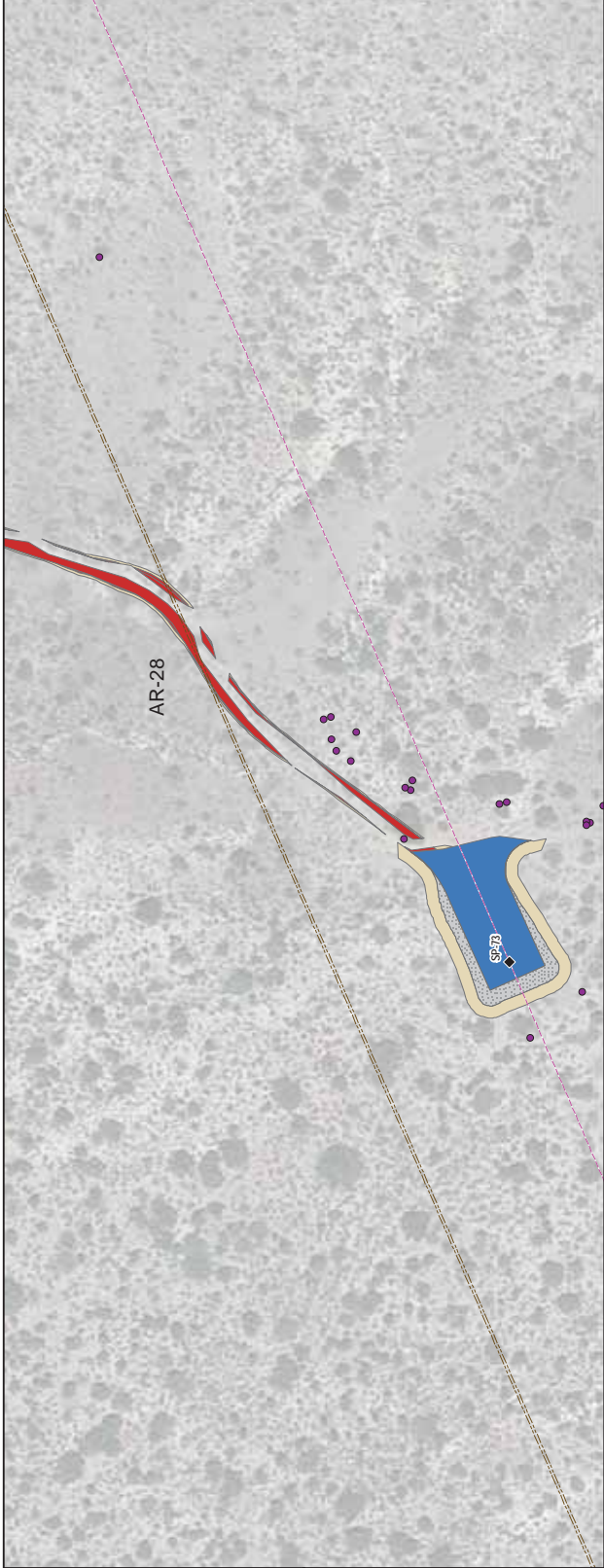
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

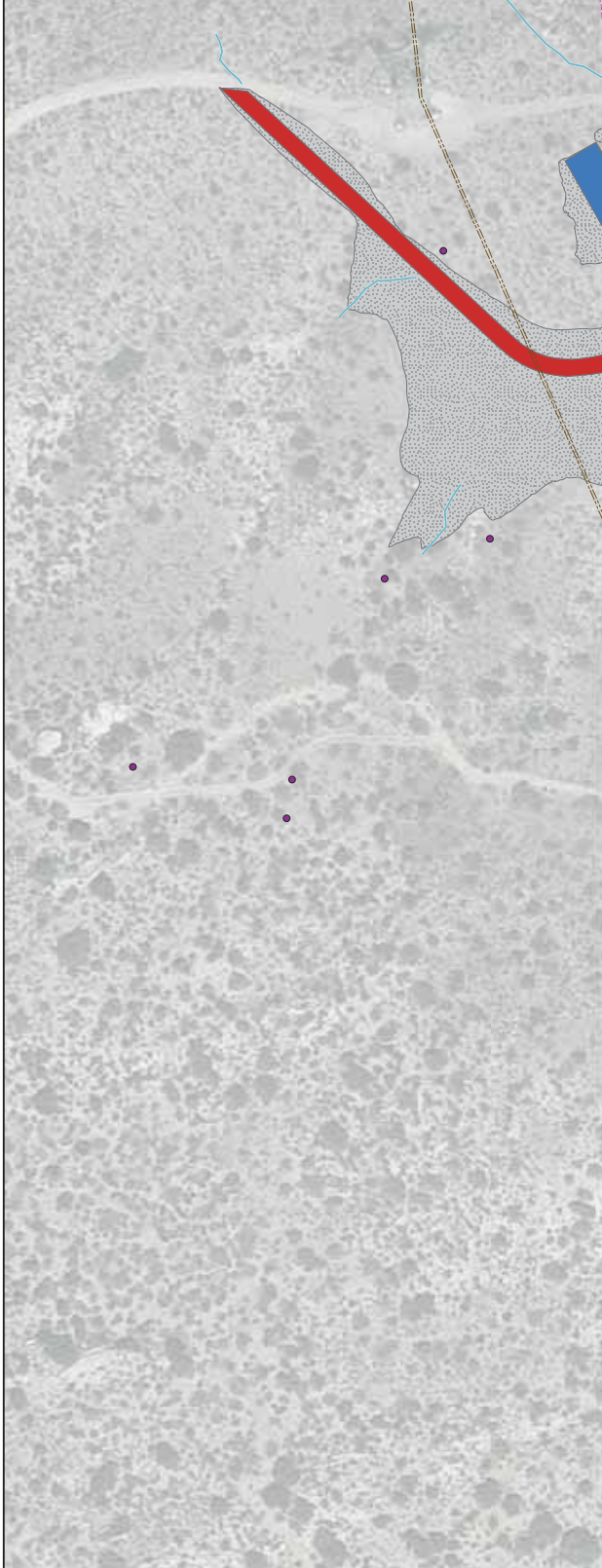
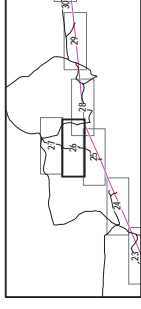
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
 - Construction Yard
 - Guard Structure Site/Access (GS)
 - Pull Site (PS)
 - Staging Area
 - Workspace
- Permanent
 - Access Road Modifications
 - Grading
 - Pad/New Access Road
 - Rock Removal Workspace
- Resources
 - Drainage
 - Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 26 of 37
East County Substation Project**

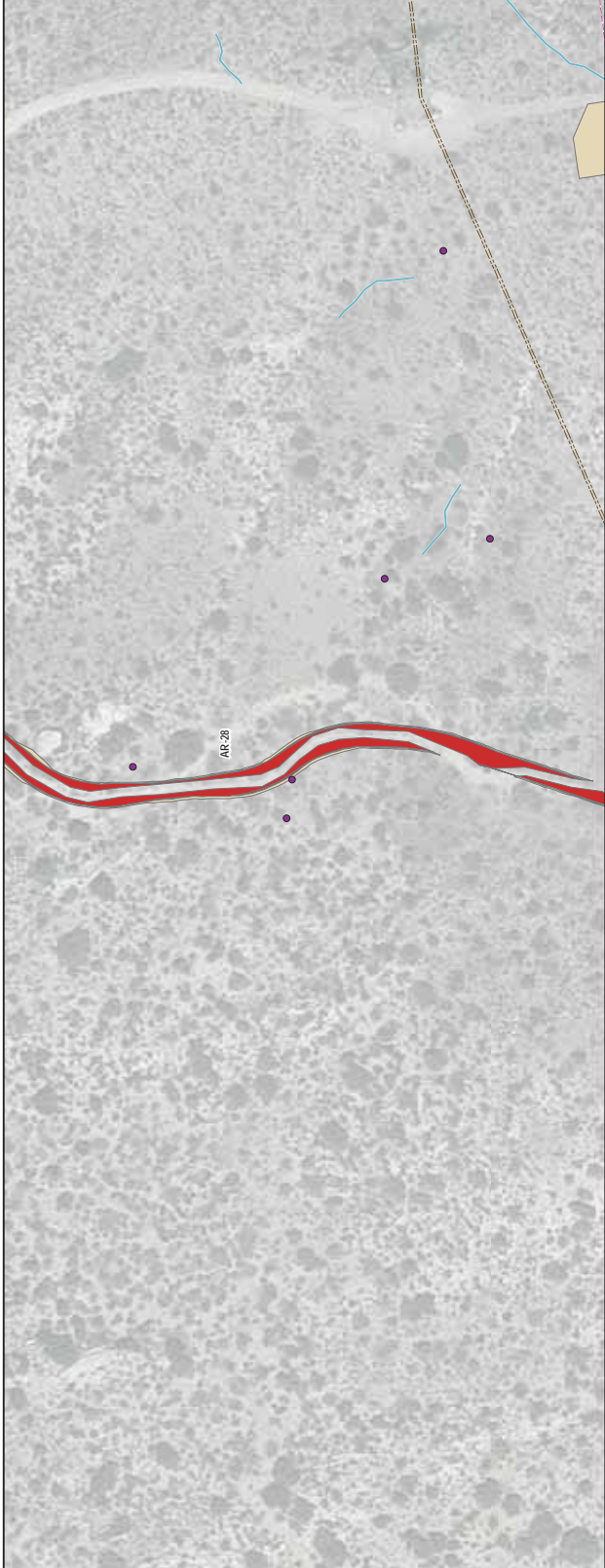
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

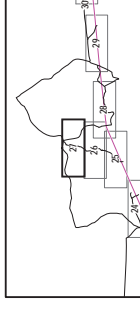
- ◆ 138 kV Pole Location
- Riser Pole
- 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (P-S)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Resources**
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 27 of 37
East County Substation Project**

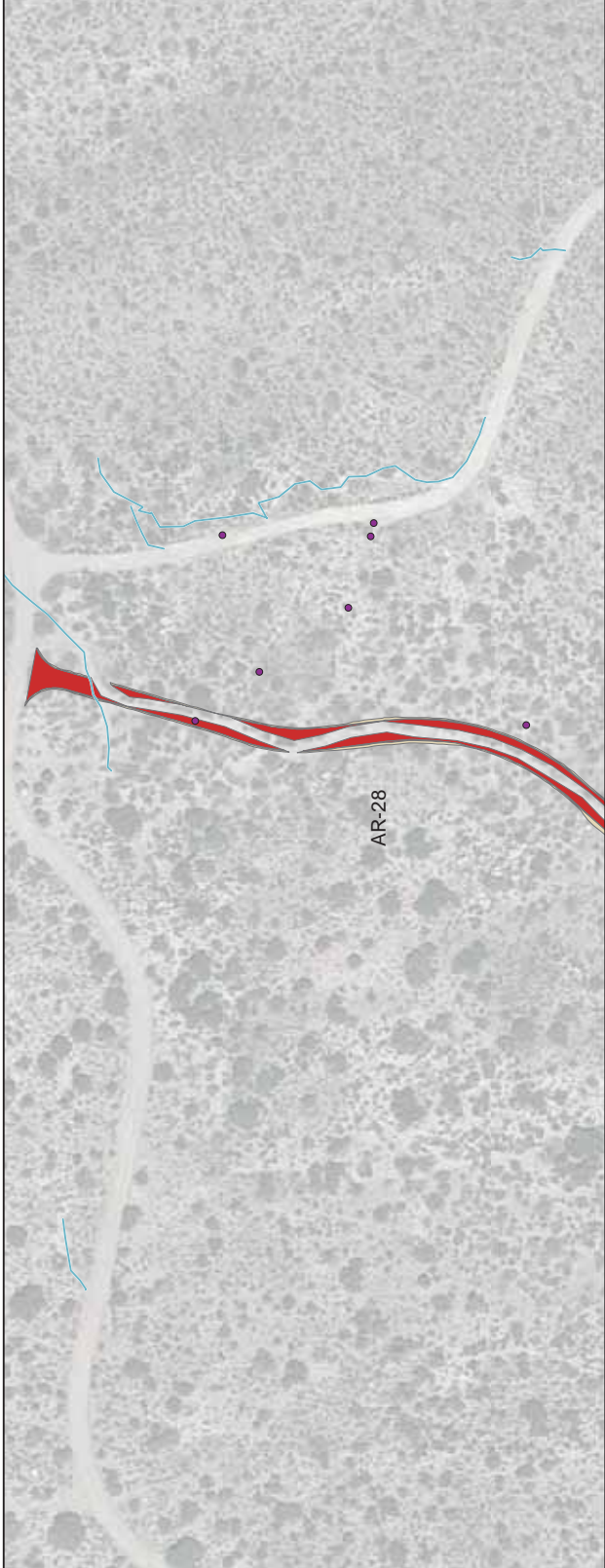
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

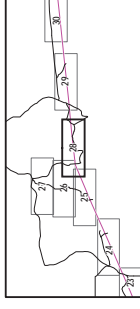
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (P-S)
- Staging Area
- Workspace
- Permanent
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Resources
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 28 of 37
East County Substation Project**

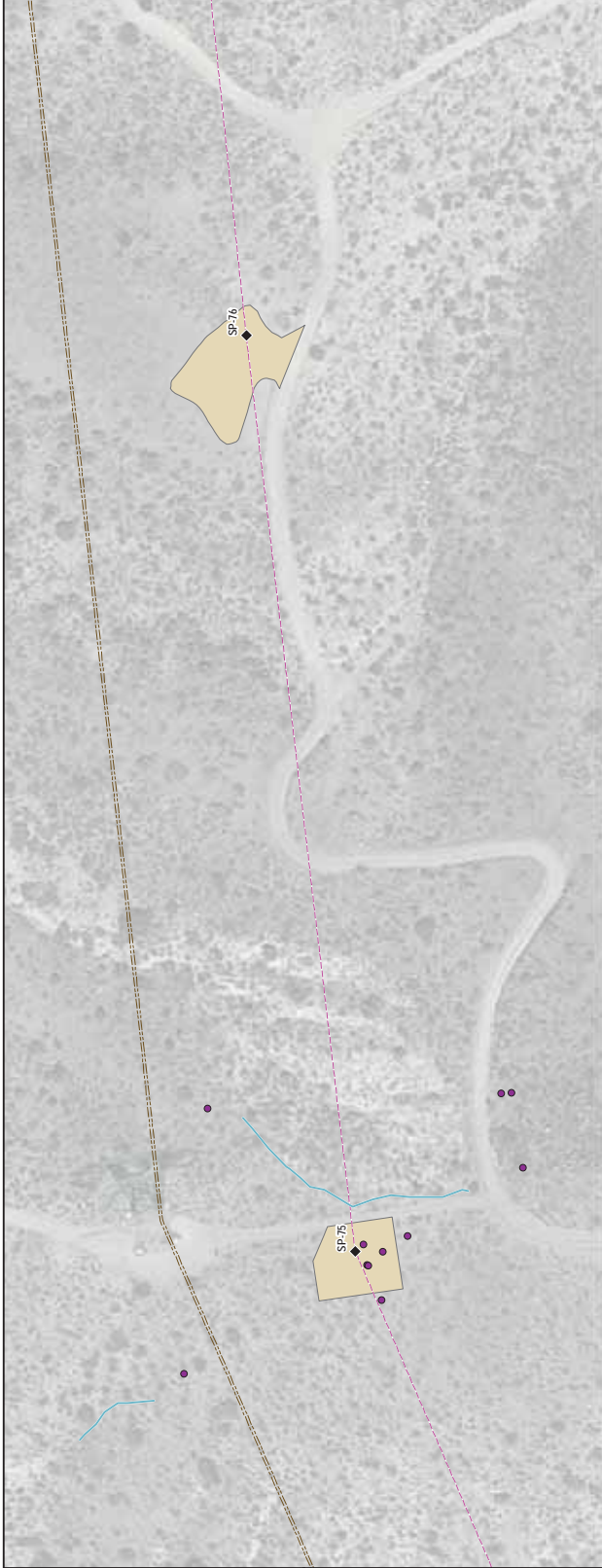
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

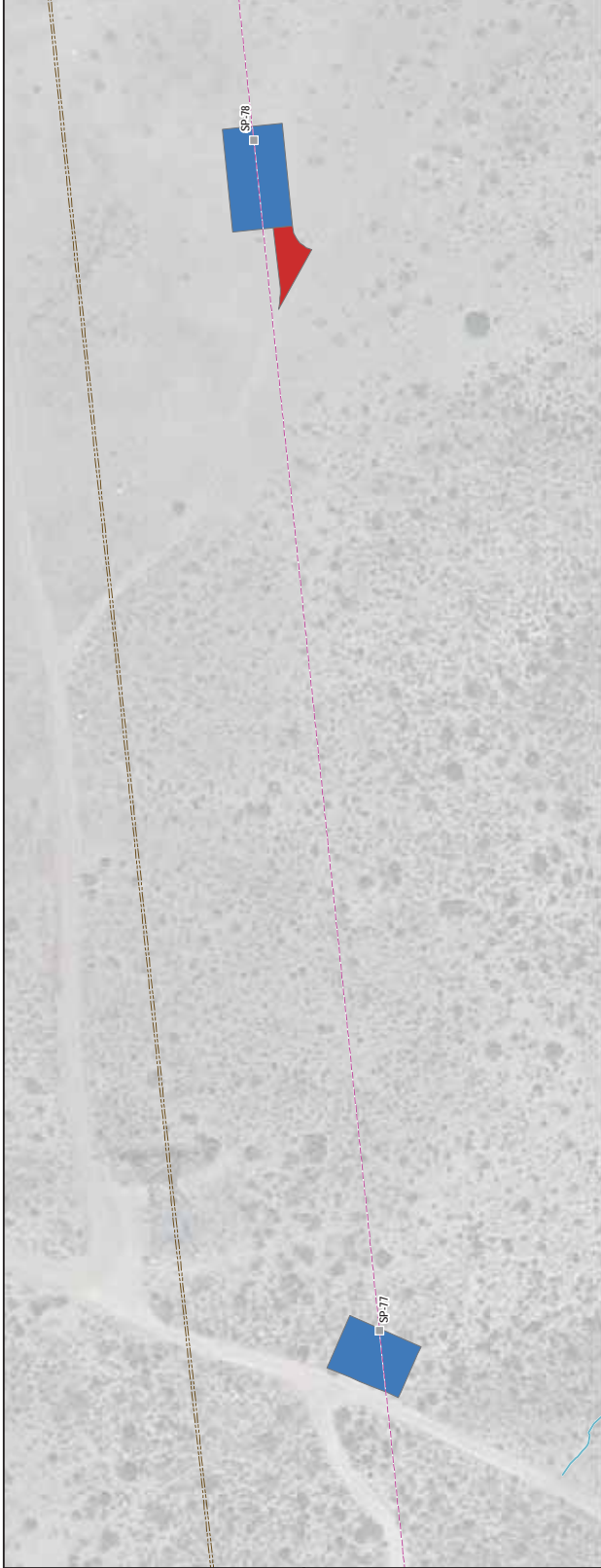
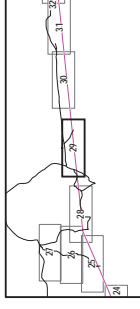
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Full Site (FS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Paved/New Access Road
- Rock Removal Workspace
- Resources**
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 29 of 37
East County Substation Project**

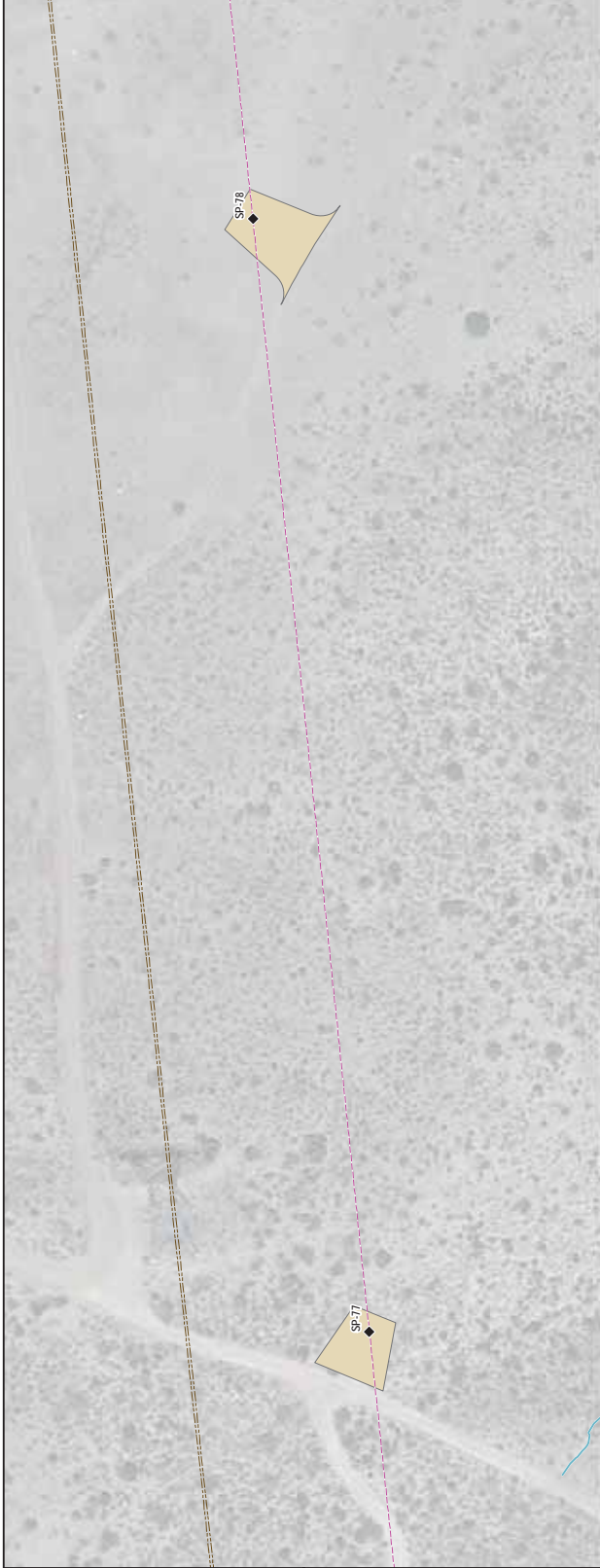
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

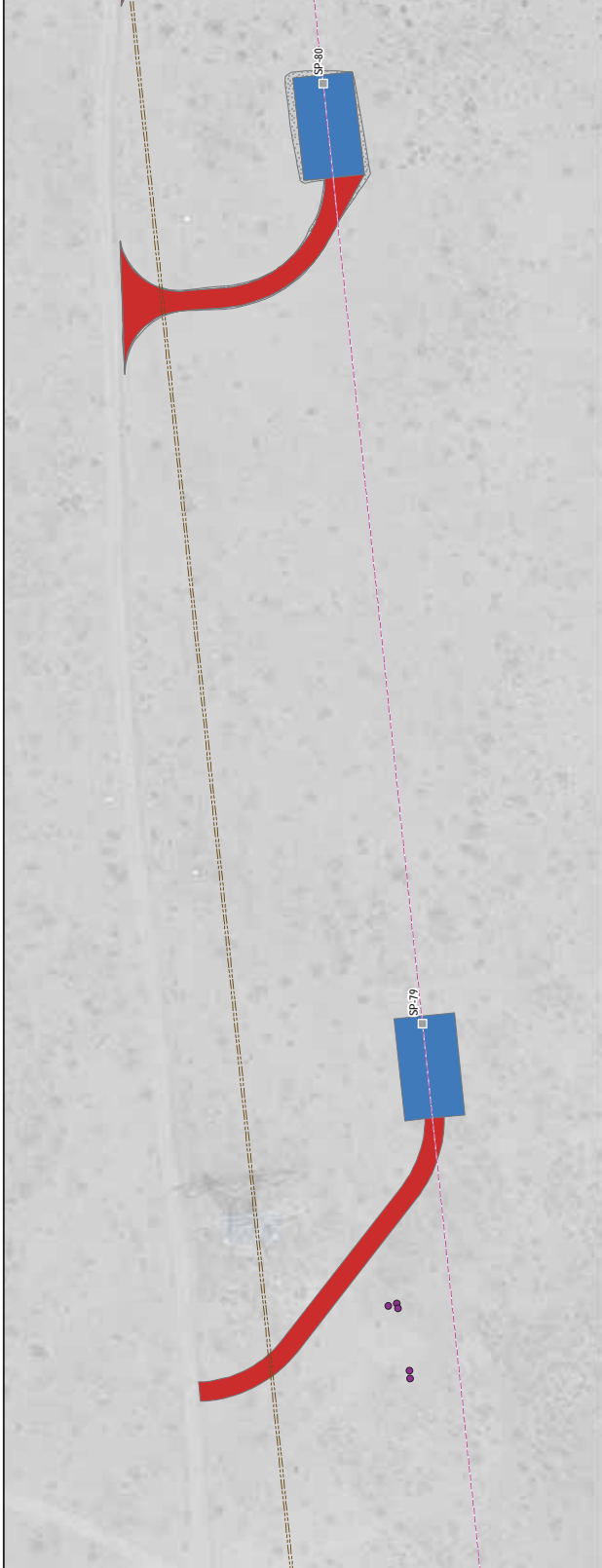
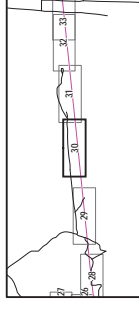
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
- Construction Yard
- Guard Structure Site/Access (GS)
- Full Site (FS)
- Staging Area
- Workspace
- Permanent
- Access Road Modifications
- Grading
- Paved/New Access Road
- Rock Removal Workspace
- Resources
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 30 of 37
East County Substation Project**

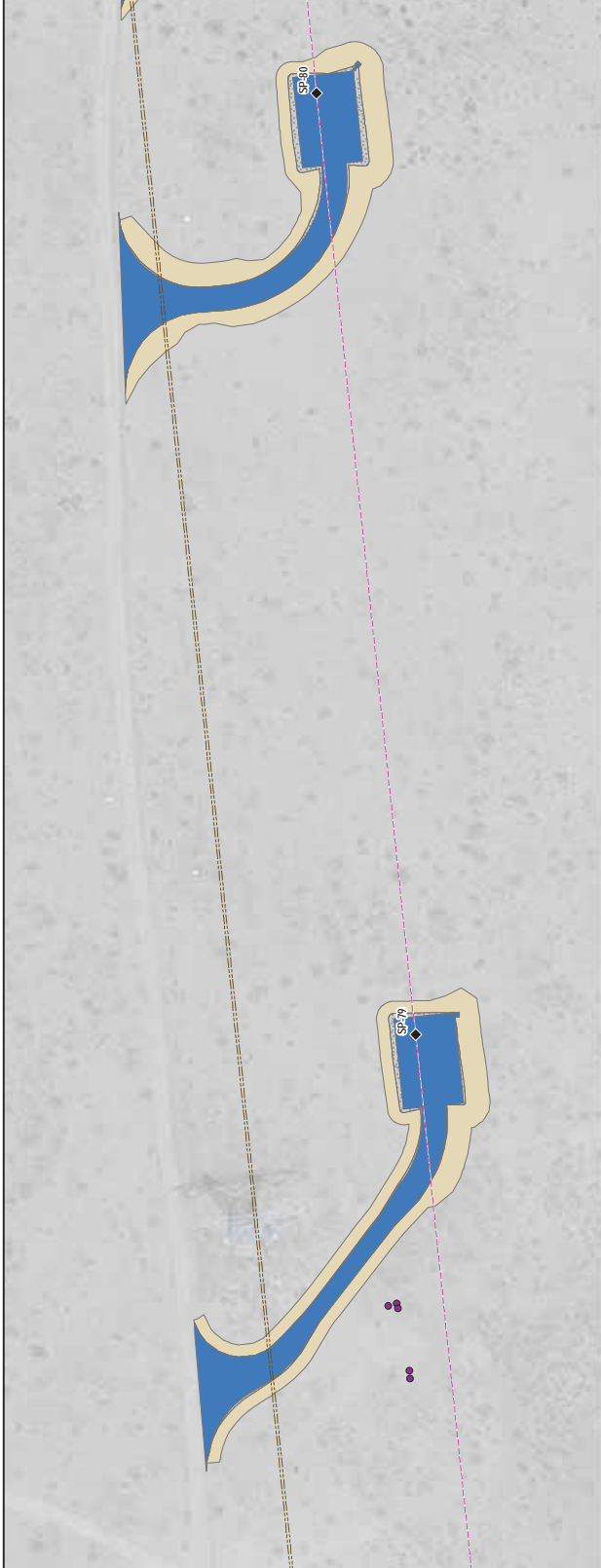
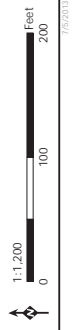
CRUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

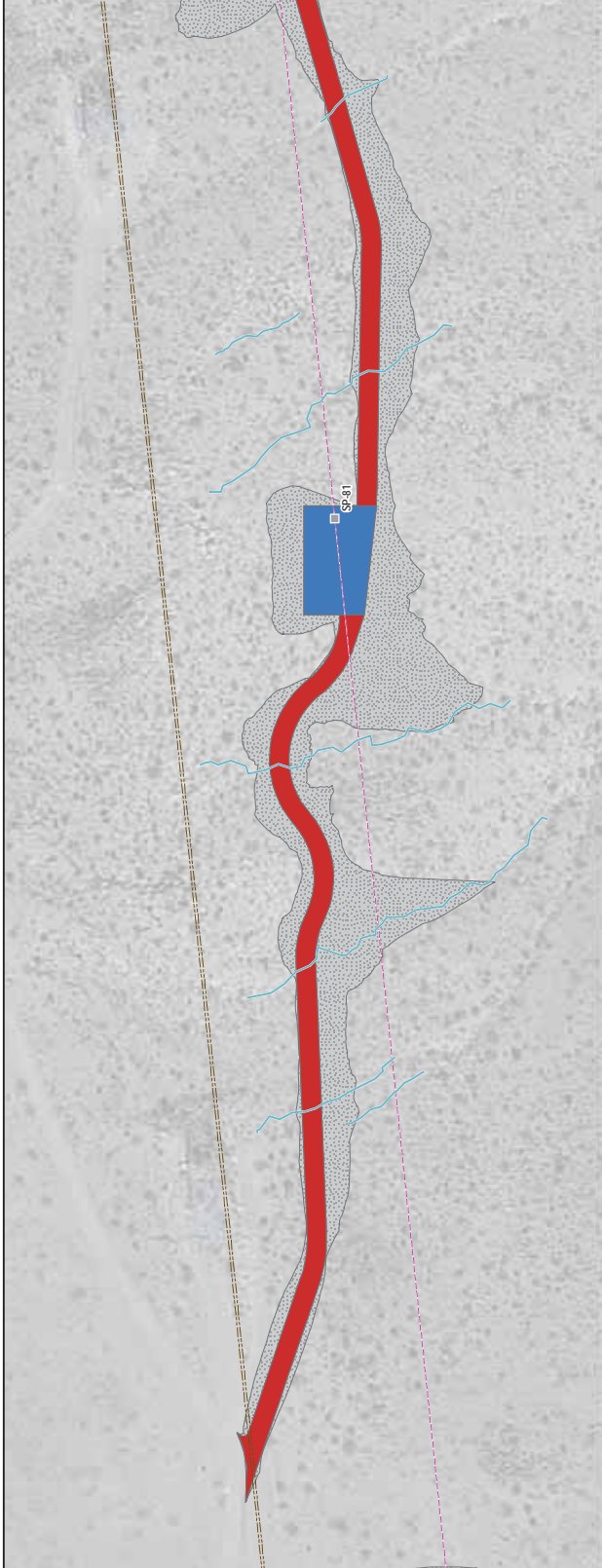
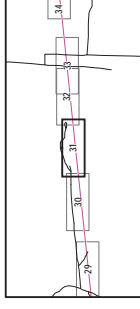
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Resources**
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 31 of 37
East County Substation Project**

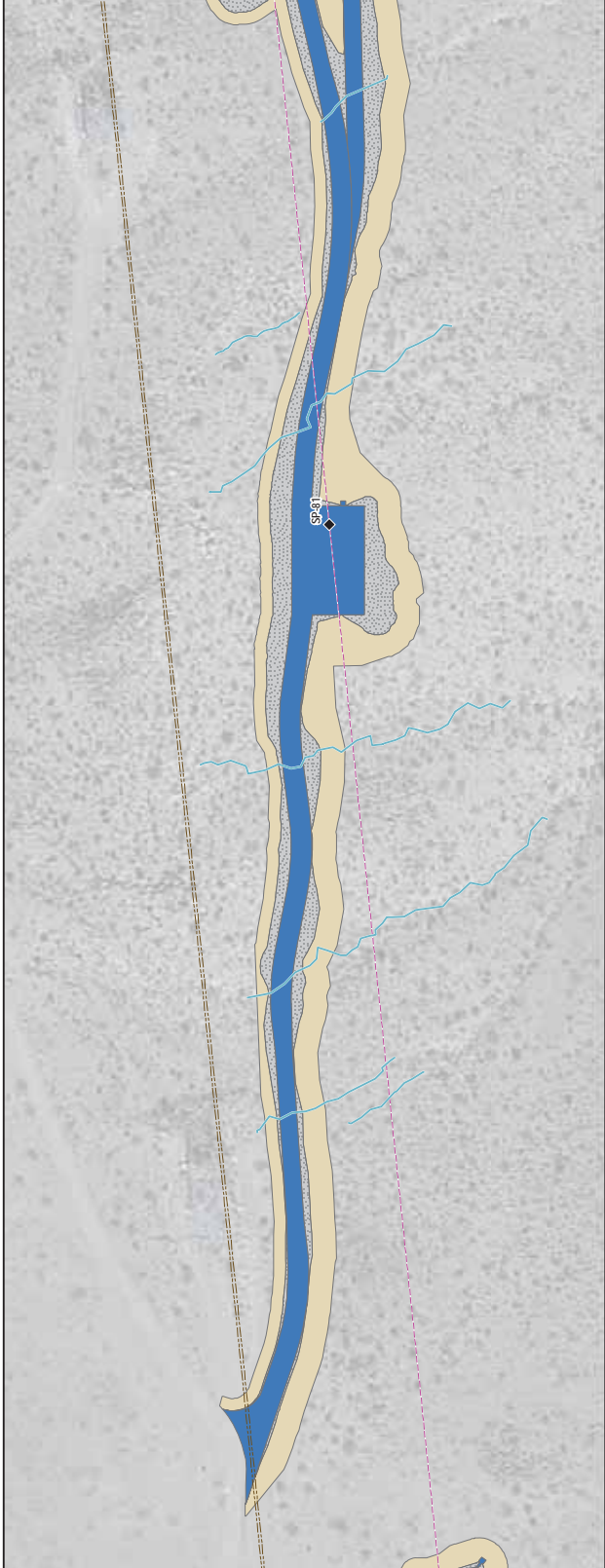
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
 - Construction Yard
 - Guard Structure Site/Access (GS)
 - Pull Site (P-S)
 - Staging Area
 - Workspace
- Permanent
 - Access Road Modifications
 - Grading
 - Pad/New Access Road
 - Rock Removal Workspace
- Resources
 - Drainage
 - Rate Plant



1:1,200
0 100 200 Feet

SDGE
SOUTHERN CALIFORNIA GAS & ELECTRIC COMPANY

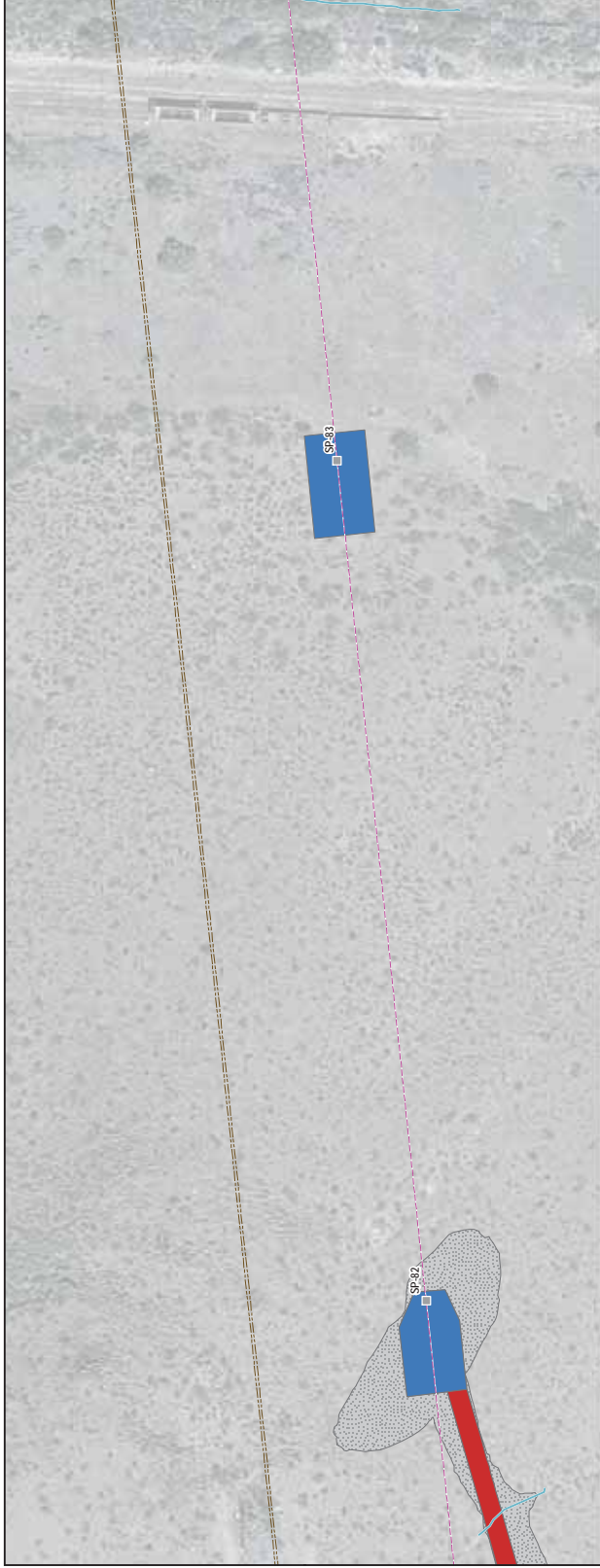
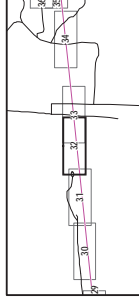
INSIGNIONIA
INSIGNIONIA CONSULTANTS

7/25/2013

**Attachment E:
Approved Project Versus Final
Design Comparison Map 32 of 37
East County Substation Project**

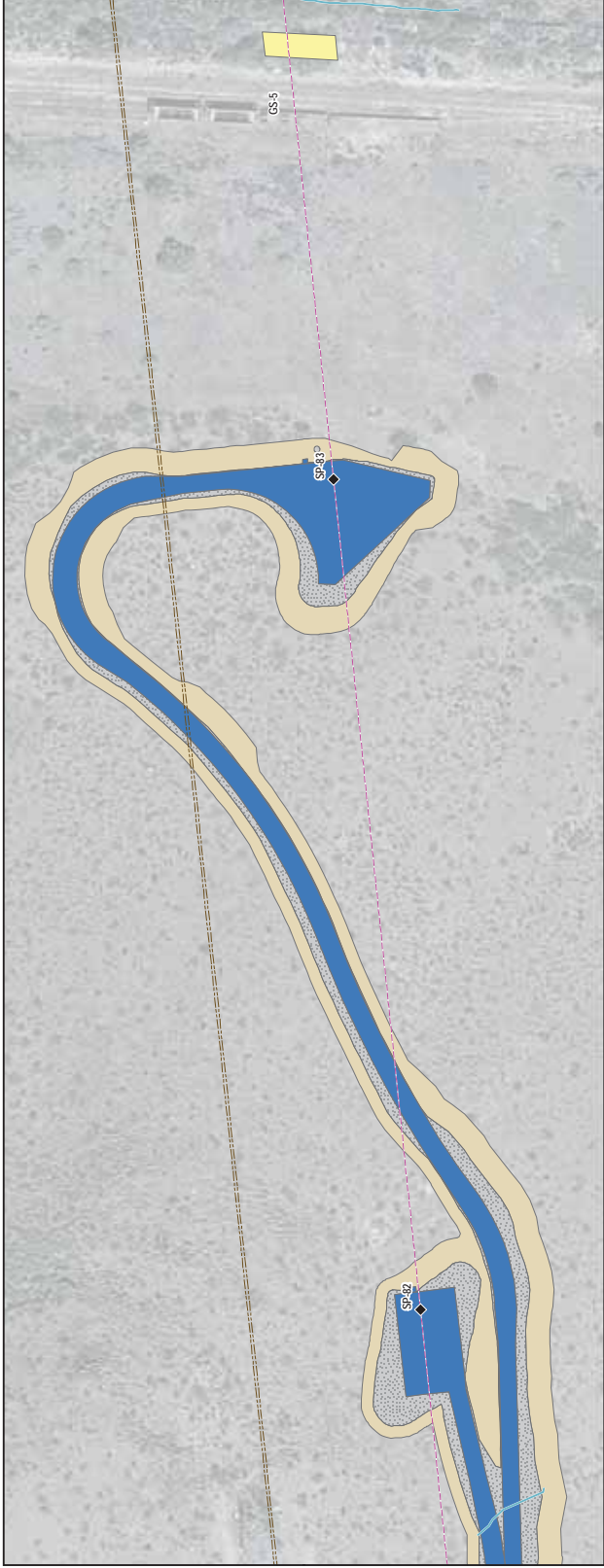
CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

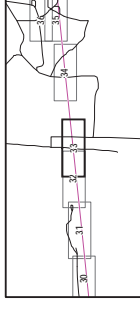
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (P-S)
- Staging Area
- Workspace
- Permanent
- Access Road Modifications
- Grading
- Paved/New Access Road
- Rock Removal Workspace
- Resources
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 33 of 37
East County Substation Project**

CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

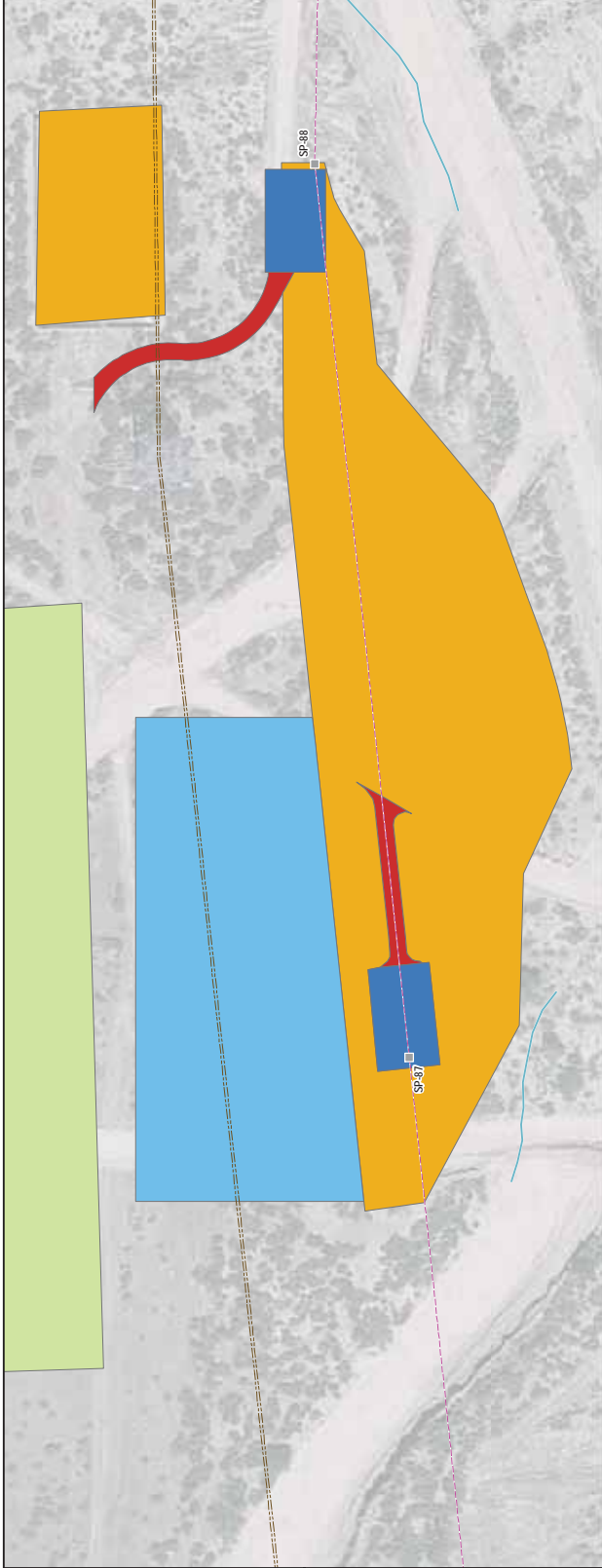
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
- Construction Yard
- Guard Structure Site/Access (GS)
- Full Site (FS)
- Staging Area
- Workspace
- Permanent
- Access Road Modifications
- Grading
- Pad/New Access Road
- Rock Removal Workspace
- Resources
- Drainage
- Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 35 of 37
East County Substation Project**

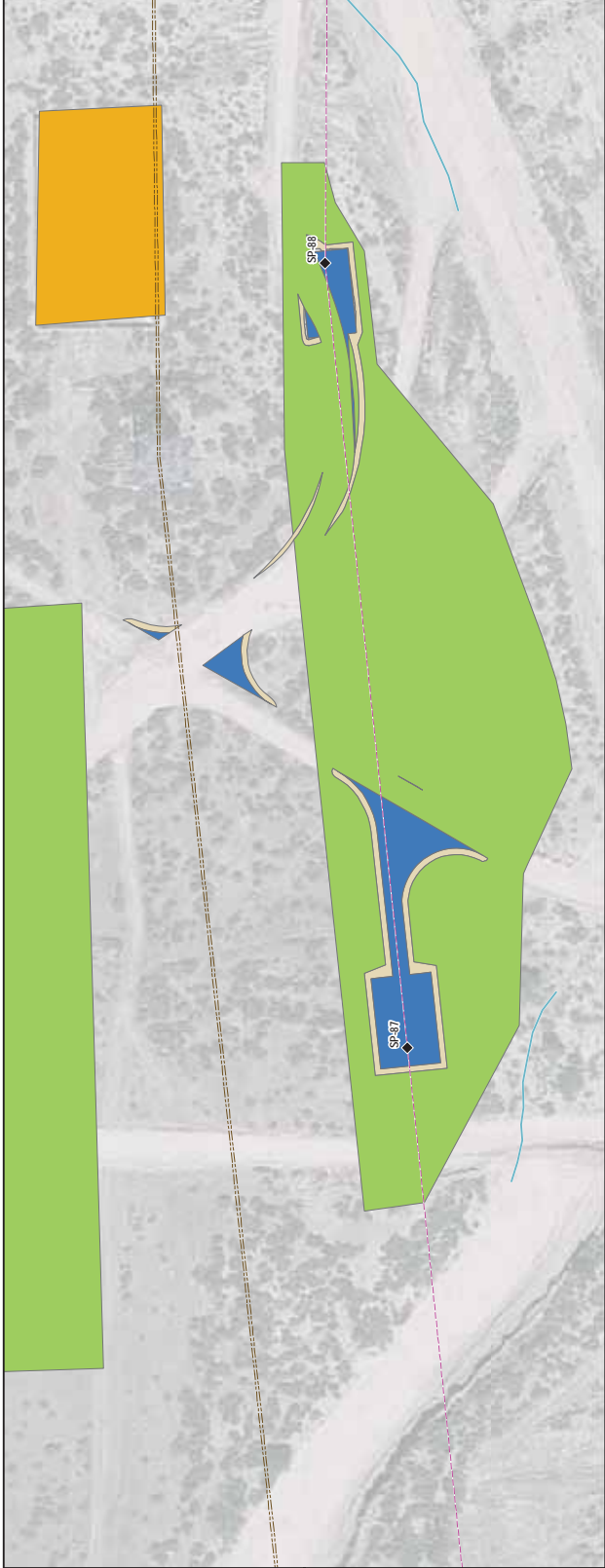
CRUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



Final Design

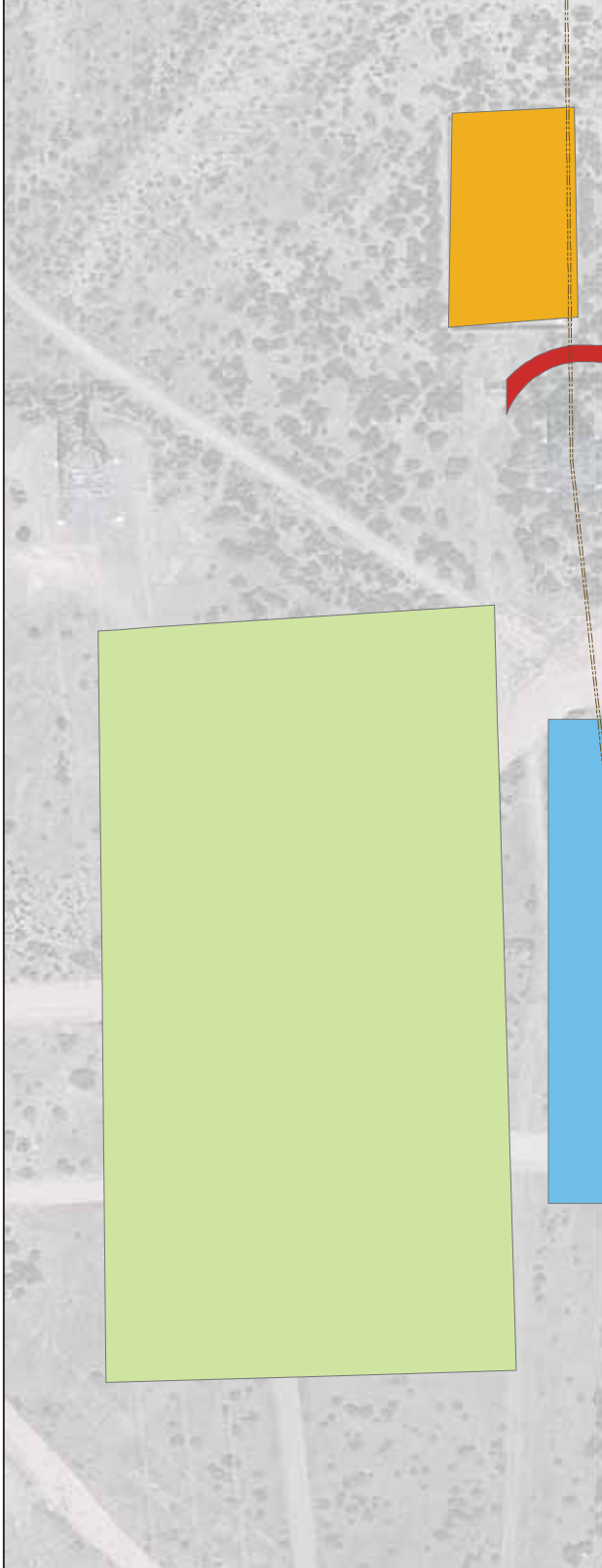
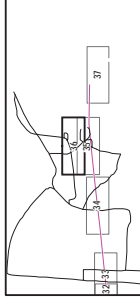
- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary
 - Construction Yard
 - Guard Structure Site/Access (GS)
 - Pull Site (P-S)
 - Staging Area
 - Workspace
- Permanent
 - Access Road Modifications
 - Grading
 - Pad/New Access Road
 - Rock Removal Workspace
- Resources
 - Drainage
 - Rate Plant



**Attachment E:
Approved Project Versus Final
Design Comparison Map 36 of 37
East County Substation Project**

CPUC-Approved Project

- Riser Pole
- 138 kV Pole
- - - 138 kV Overhead
- Access Road
- Construction Yard
- Grading
- Pole Work Area
- Pull Site
- Staging Area
- Temporary Access Road
- Vault
- - - Existing Transmission Line



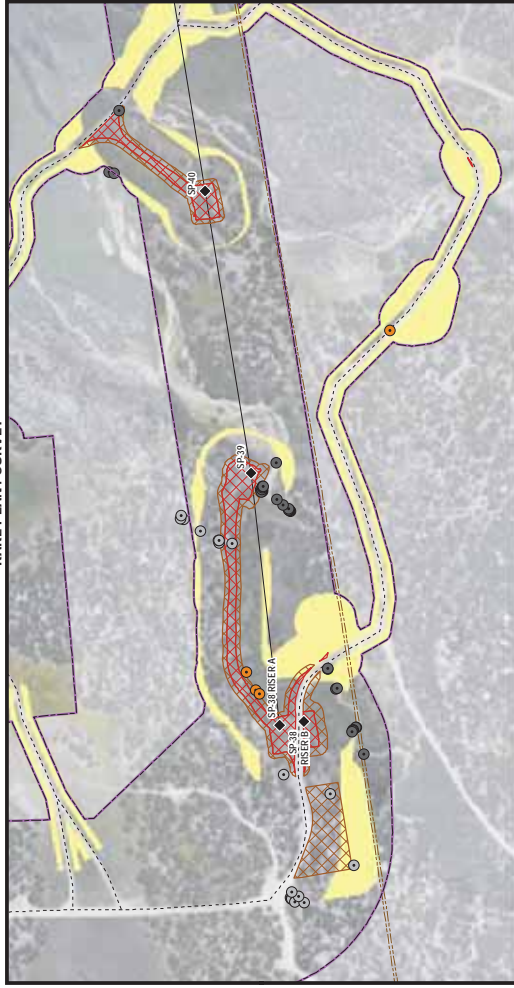
Final Design

- ◆ 138 kV Pole Location
- Riser Pole
- - - 138 kV Overhead
- - - 138 kV Underground
- Vault
- Temporary**
- Construction Yard
- Guard Structure Site/Access (GS)
- Pull Site (PS)
- Staging Area
- Workspace
- Permanent**
- Access Road Modifications
- Grading
- Paved/New Access Road
- Rock Removal Workspace
- Resources**
- Drainage
- Rate Plant

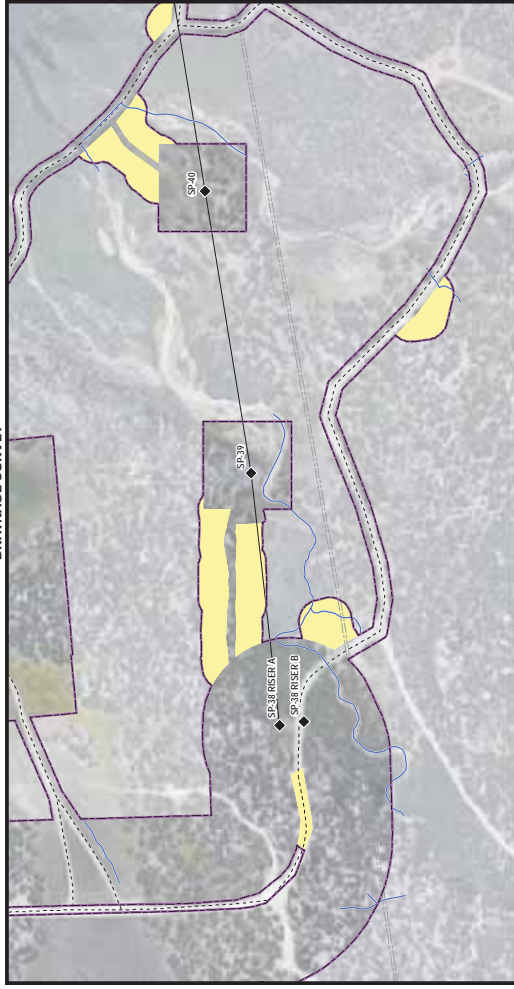


ATTACHMENT F: SURVEY MAPS

RARE PLANT SURVEY



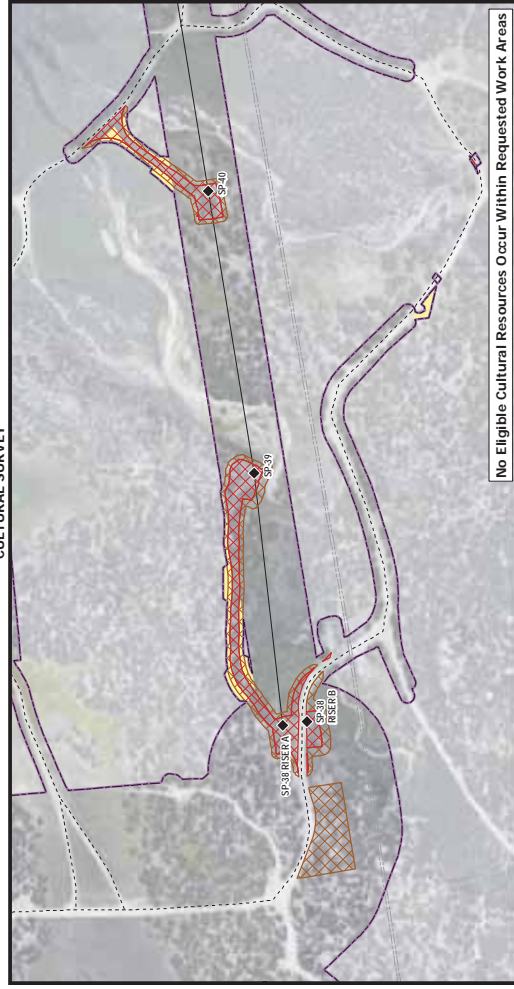
DRAINAGE SURVEY



GENERAL VEGETATION SURVEY



CULTURAL SURVEY



No Eligible Cultural Resources Occur Within Requested Work Areas

Attachment F: Survey Map 1 of 21

<ul style="list-style-type: none"> Survey Area April 2013 Survey (vegetation shown hatched) Final Design Permanent Temporary 138 kV Pole 138 kV Overhead Line 	<ul style="list-style-type: none"> Jacumba milk-vetch Oceanblue larkspur Palmer's grapplinghook Stickier gerarea Tecate tarplant Jacumba Monkey Flower 	<ul style="list-style-type: none"> Mixed Desert Scrub Oak Woodland Riparian Scrub Developed/Road Shadscale Scrub Existing Transmission Line Existing Access Road Centerline 	<ul style="list-style-type: none"> Vegetation Type Agriculture Chamise-Redshank Chaparral Disturbed Grassland Fresh Emergent Wetland Juniper Woodland 	<ul style="list-style-type: none"> Survey Data Drainage Rare Plants Campo pea Desert beauty Jacumba Monkey Flower
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*The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. In some instances, drainages were followed to their extent, resulting in the mapping of areas outside the survey corridor. Rare plants outside of the survey corridor that were observed incidentally are also mapped.

Scale: 1:3,400

0 100 200 400 600 Feet

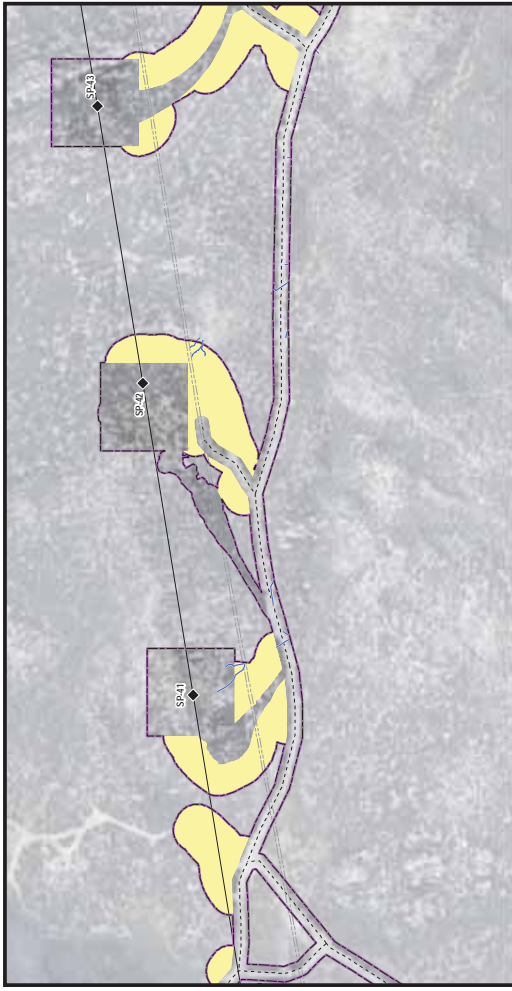
North Arrow

Logos: SDBE, ANSIGENIA

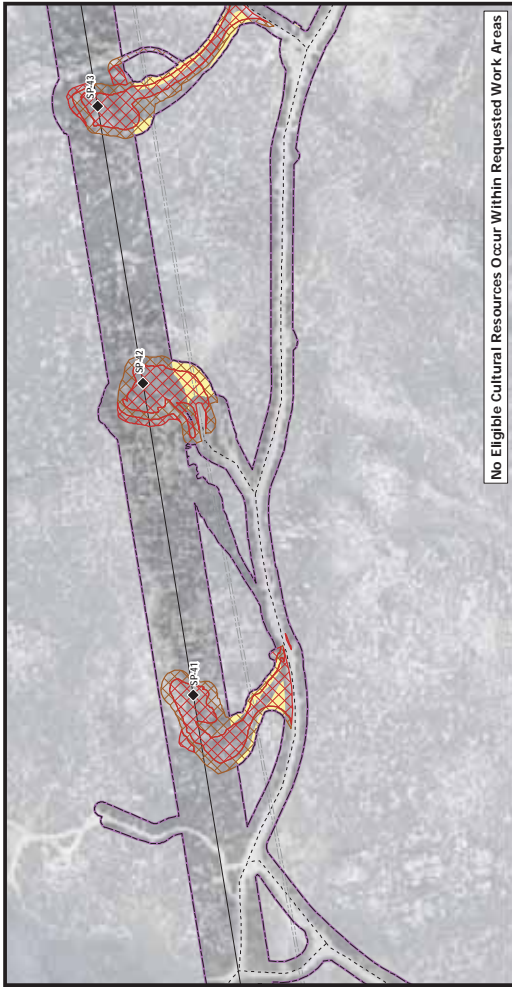
7/25/2013

Z:\Projects\SDBE_ECOWD\MP\PS\Sector2\Sector2_Survey_k_1_V2.mxd

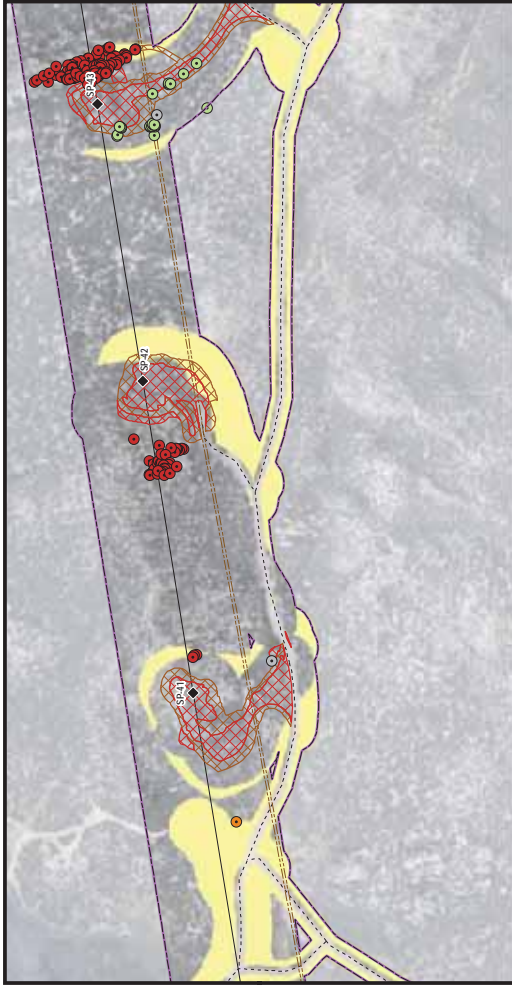
DRAINAGE SURVEY



CULTURAL SURVEY



RARE PLANT SURVEY

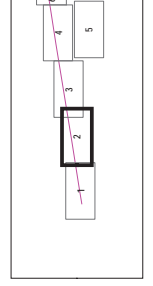


GENERAL VEGETATION SURVEY



No Eligible Cultural Resources Occur Within Requested Work Areas

East County Substation Project



The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. In some instances, drainages were followed to their extent, resulting in the mapping of areas outside the survey corridor. Rare plants outside of the survey corridor that were observed incidentally are also mapped.

- Mixed Desert Scrub
- Oak Woodland
- Riparian Scrub
- Developed/Road
- Shadscale Scrub
- Existing Transmission Line
- Existing Access Road Centerline

- Jacumba milk-witch
- Oceanblue larkspur
- Palmer's grapplegrook
- Sticky gerarea
- Tecate tarplant
- Jacumba Monkey Flower
- 138 kV Pole
- 138 kV Overhead Line

Attachment F: Survey Map 2 of 21

- Survey Area
- April 2013 Survey (vegetation shown hatched)
- Final Design
- Permanent
- Temporary
- 138 kV Pole
- 138 kV Overhead Line
- Survey Data
- Drainage
- Rare Plants
- Campo pea
- Desert beauty
- Jacumba Monkey Flower
- Vegetation Type
- Agriculture
- Chamise-Redshank Chaparral
- Disturbed Grassland
- Fresh Emergent Wetland
- Juniper Woodland

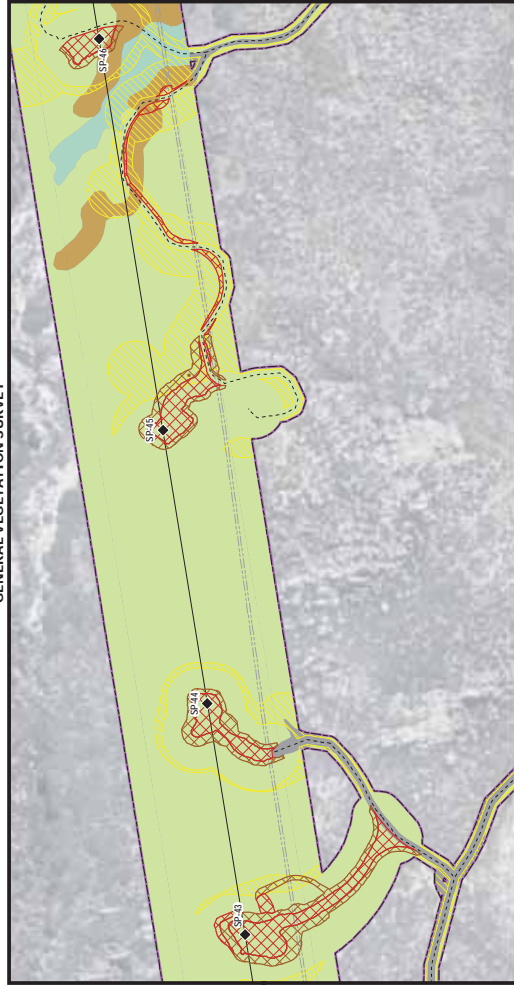
RARE PLANT SURVEY



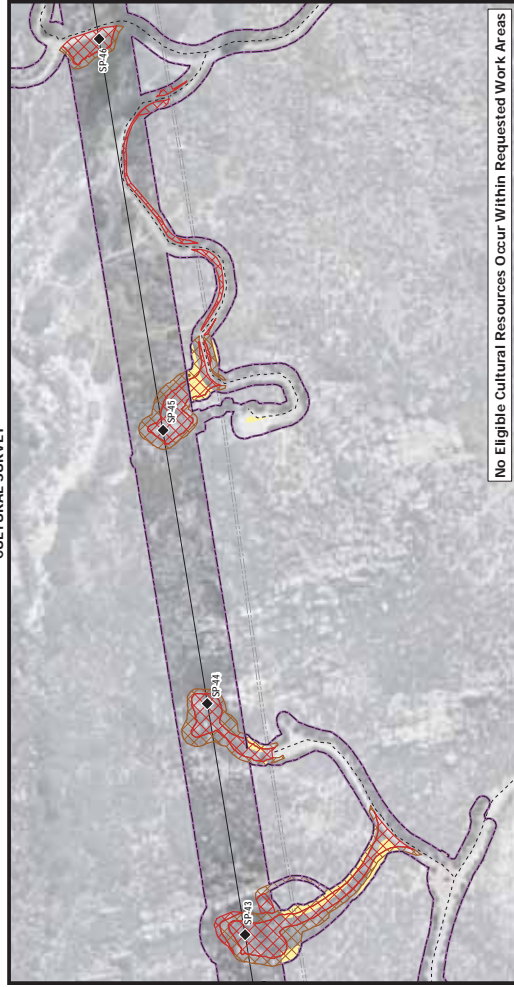
DRAINAGE SURVEY



GENERAL VEGETATION SURVEY



CULTURAL SURVEY



No Eligible Cultural Resources Occur Within Requested Work Areas

Attachment F: Survey Map 3 of 21

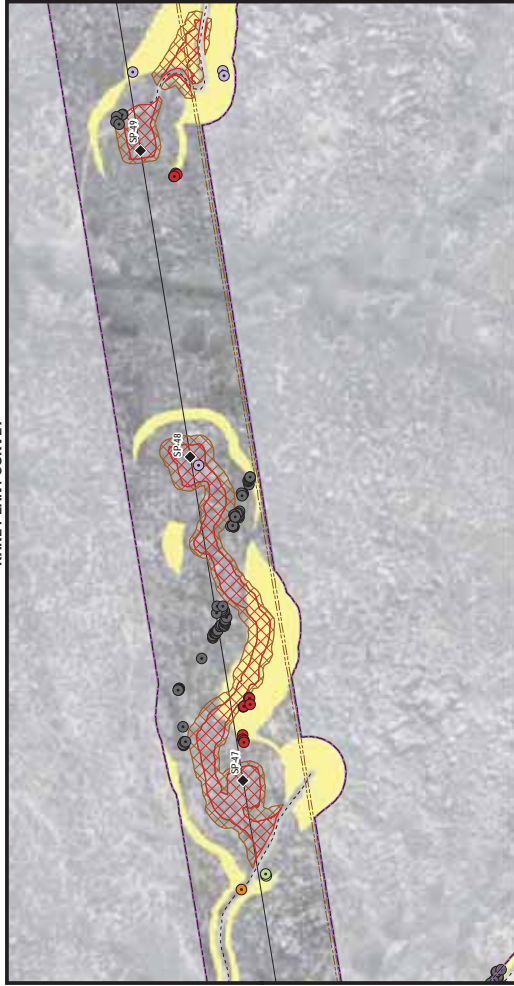
<ul style="list-style-type: none"> Survey Area April 2013 Survey (vegetation shown hatched) Final Design Permanent Temporary 138 kV Pole 138 kV Overhead Line 	<ul style="list-style-type: none"> Jacumba milk-wetch Oceanblue larkspur Palmer's grappleshook Stickey gerarea Tecate tarplant Jacumba Monkey Flower 	<ul style="list-style-type: none"> Mixed Desert Scrub Oak Woodland Riparian Scrub Developed/Road Shedscale Scrub Existing Transmission Line Existing Access Road Centerline 	<ul style="list-style-type: none"> Vegetation Type Agriculture Chamise-Redshank Chaparral Disturbed Grassland Fresh Emergent Wetland Juniper Woodland 	<ul style="list-style-type: none"> Survey Data Drainage Rare Plants Campo pea Desert beauty Jacumba Monkey Flower
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The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. In some instances, drainages were followed to their extent, resulting in the mapping of areas outside of the survey corridor. Rare plants outside of the survey corridor that were observed incidentally are also mapped.

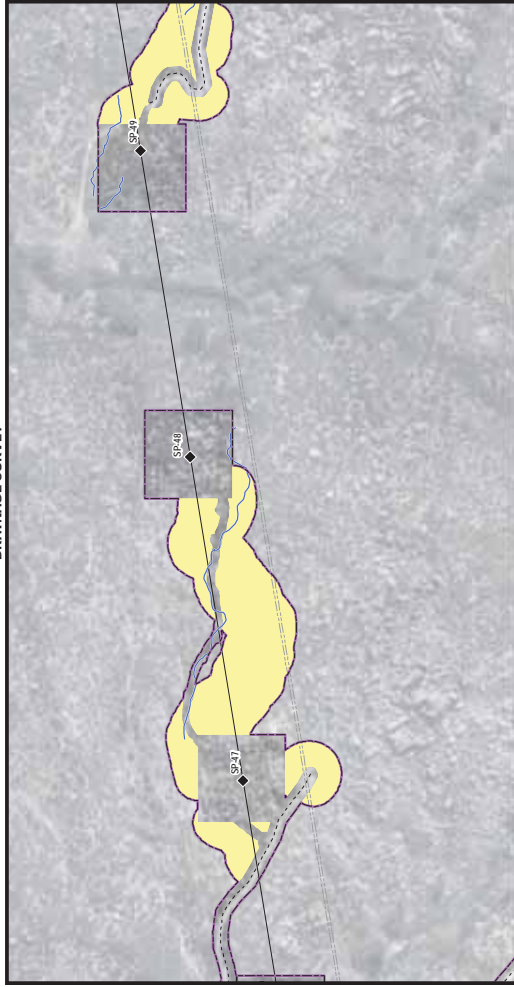
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0 100 200 400 600 Feet

Logos: SDBE, ANISIGNIA

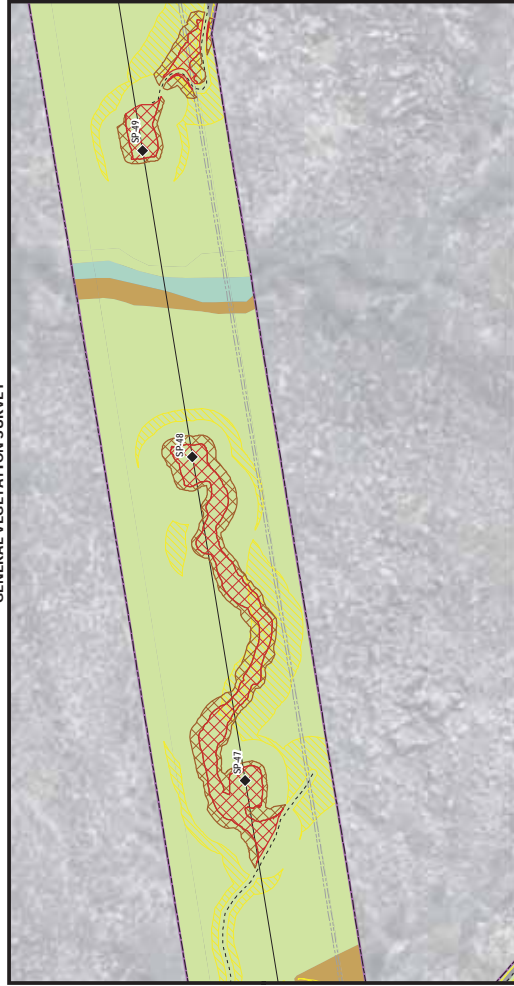
RARE PLANT SURVEY



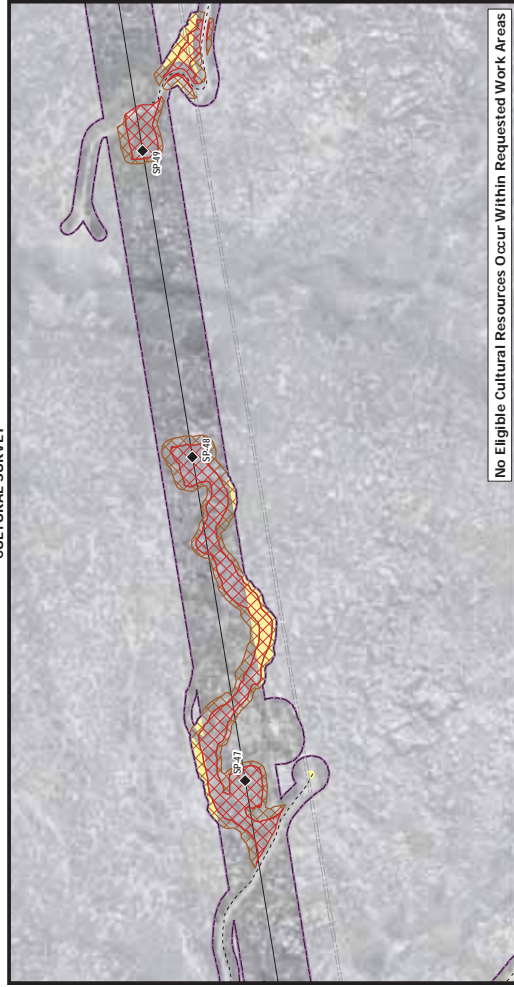
DRAINAGE SURVEY



GENERAL VEGETATION SURVEY



CULTURAL SURVEY

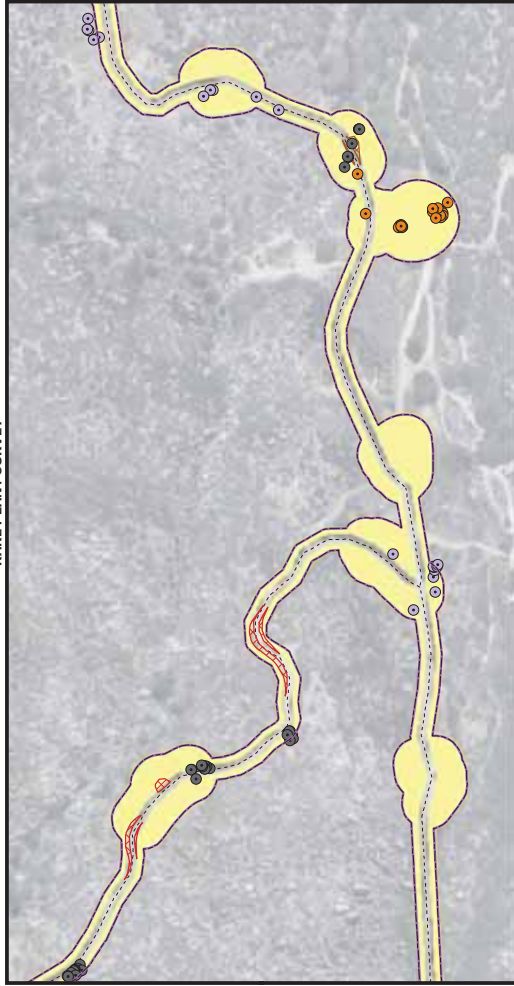


No Eligible Cultural Resources Occur Within Requested Work Areas

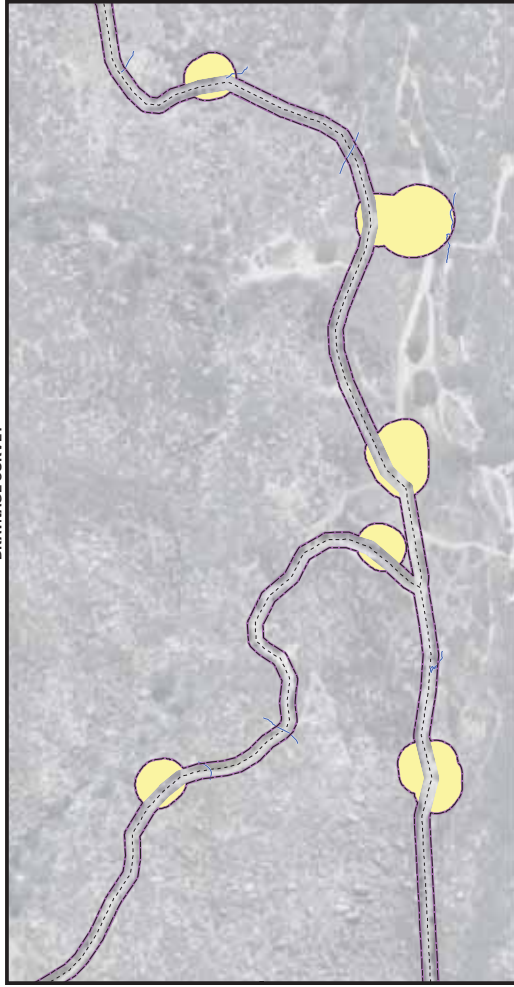
Attachment F: Survey Map 4 of 21

<ul style="list-style-type: none"> Survey Area April 2013 Survey (vegetation shown hatched) Final Design Permanent Temporary 138 kV Pole 138 kV Overhead Line 	<ul style="list-style-type: none"> Jacumba milk-vetch Oceanblue larkspur Palmer's grapplinghook Stickey gerarea Tecate tarplant Jacumba Monkey Flower 	<ul style="list-style-type: none"> Mixed Desert Scrub Oak Woodland Riparian Scrub Developed/Road Shadscale Scrub Existing Transmission Line Existing Access Road Centerline 	<ul style="list-style-type: none"> Vegetation Type Agriculture Chamise-Redshank Chaparral Disturbed Grassland Fresh Emergent Wetland Juniper Woodland 	<ul style="list-style-type: none"> Survey Data Drainage Rare Plants Campo pea Desert beauty Jacumba Monkey Flower 	<ul style="list-style-type: none"> The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. In some instances, drainages were followed to their extent, resulting in the mapping of areas outside the survey corridor. Rare plants outside of the survey corridor that were observed incidentally are also mapped. 			
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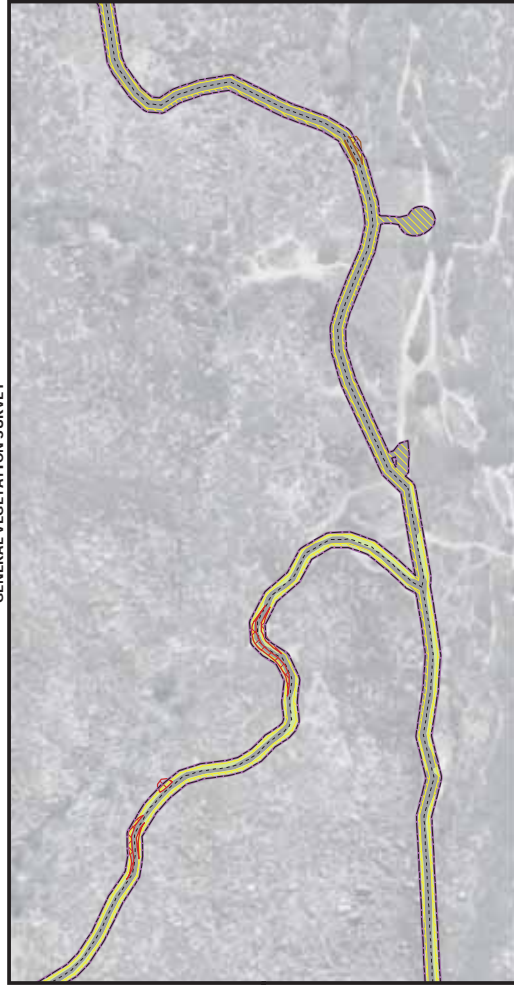
RARE PLANT SURVEY



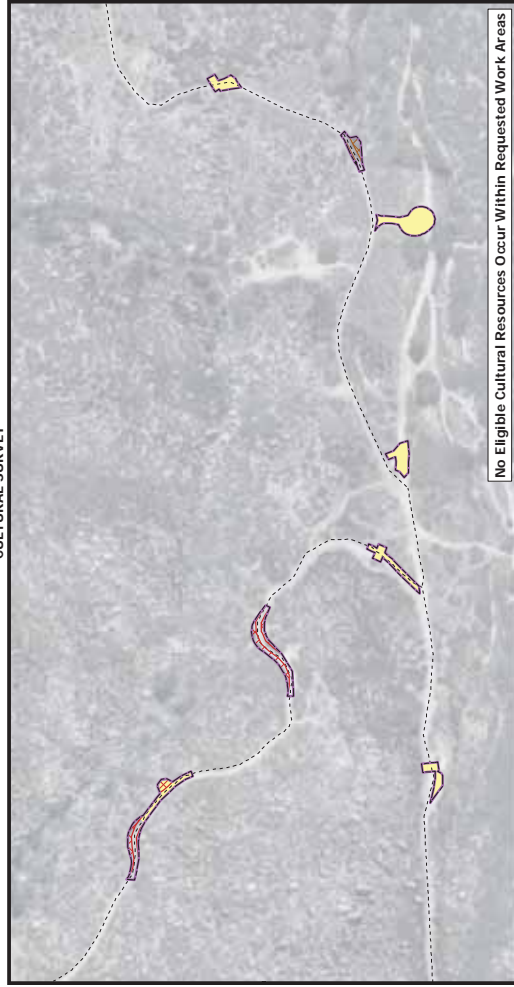
DRAINAGE SURVEY



GENERAL VEGETATION SURVEY



CULTURAL SURVEY



No Eligible Cultural Resources Occur Within Requested Work Areas

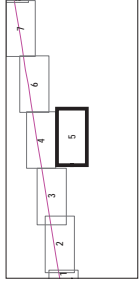
Attachment F: Survey Map 5 of 21

<ul style="list-style-type: none"> Survey Area April 2013 Survey (vegetation shown hatched) Final Design <ul style="list-style-type: none"> Permanent Temporary 138 kV Pole 138 kV Overhead Line 	<ul style="list-style-type: none"> Jacumba milk-vetch Oceanblue larkspur Palmer's grapplinghook Stickley gerarea Tecate tarplant Jacumba Monkey Flower 	<ul style="list-style-type: none"> Mixed Desert Scrub Oak Woodland Riparian Scrub Developed/Road Shadscale Scrub Existing Transmission Line Existing Access Road Centerline 	<ul style="list-style-type: none"> Vegetation Type Agriculture Chamise-Redshank Chaparral Disturbed Grassland Fresh Emergent Wetland Juniper Woodland 	<ul style="list-style-type: none"> Rare Plants*** <ul style="list-style-type: none"> Campe pea Desert beauty Jacumba Monkey Flower 	<ul style="list-style-type: none"> Drainage** Rare Plants*** <ul style="list-style-type: none"> Campe pea Desert beauty Jacumba Monkey Flower
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*The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder.

**In some instances, drainages were followed to their extent, resulting in the mapping of areas outside of the survey corridor.

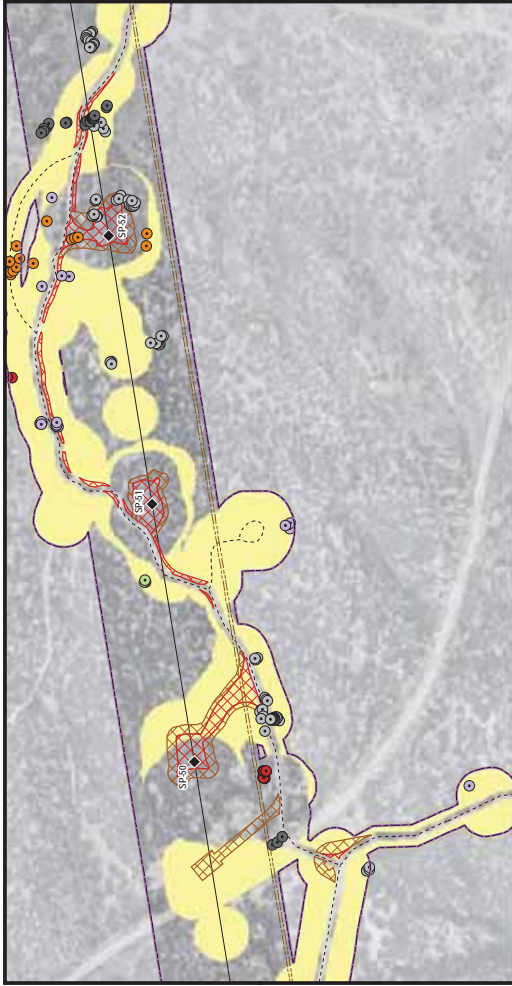
***Rare plants outside of the survey corridor that were observed incidentally are also mapped.



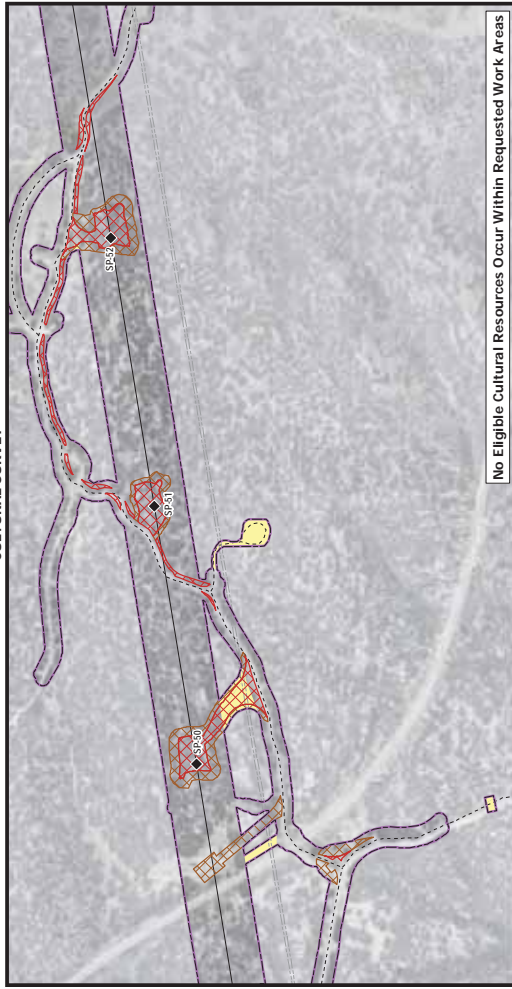
DRAINAGE SURVEY



RARE PLANT SURVEY



CULTURAL SURVEY

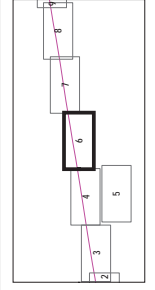


GENERAL VEGETATION SURVEY



No Eligible Cultural Resources Occur Within Requested Work Areas

East County Substation Project



The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. In some instances, drainages were followed to their extent, resulting in the mapping of areas outside the survey corridor. Rare plants outside of the survey corridor that were observed incidentally are also mapped.

- Mixed Desert Scrub
- Oak Woodland
- Riparian Scrub
- Developed/Road
- Shadscale Scrub
- Existing Transmission Line
- Existing Access Road Centerline

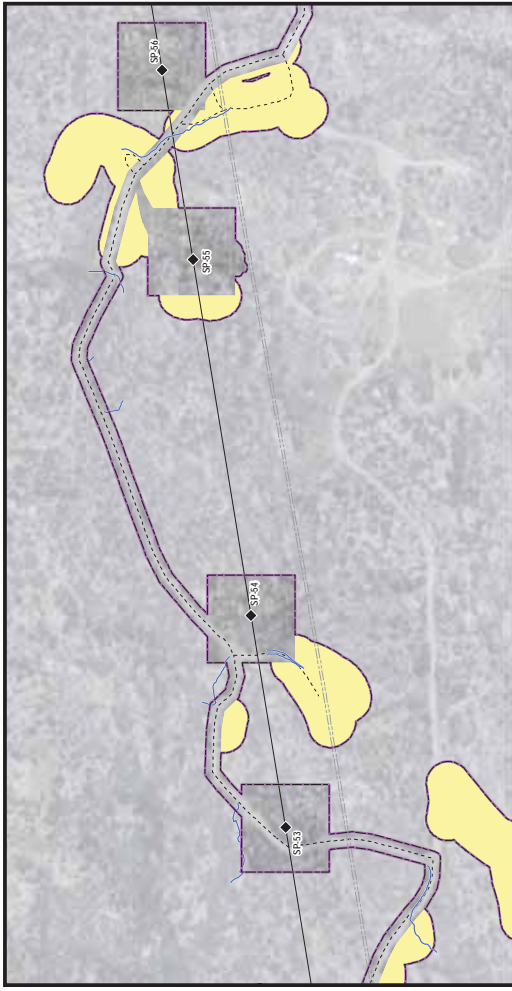
- Vegetation Type
- Chaparral
- Disturbed Grassland
- Fresh Emergent Wetland
- Juniper Woodland

- Survey Data
- Drainage
- Rare Plants
- Chaparral
- Disturbed Grassland
- Fresh Emergent Wetland
- Juniper Woodland

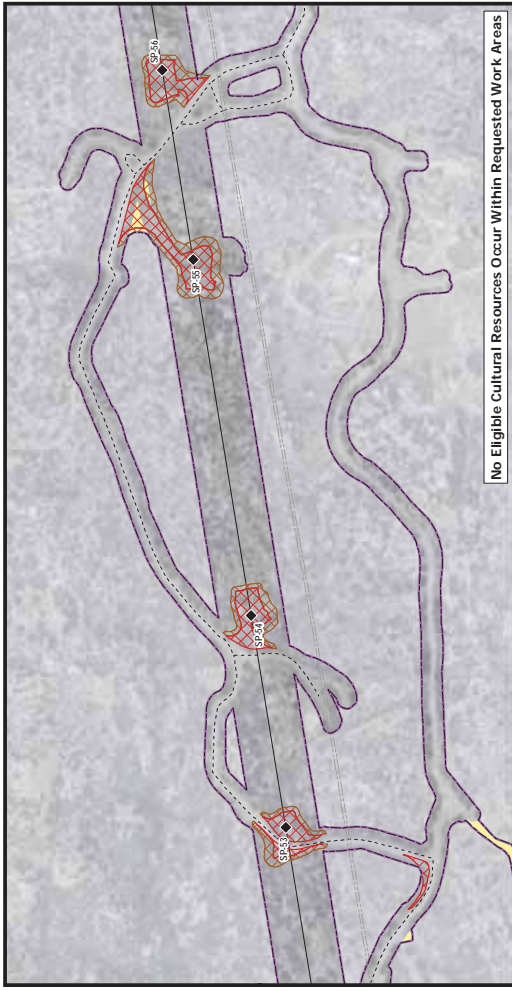
- Survey Area
- April 2013 Survey (vegetation shown hatched)
- Final Design
- Permanent
- Temporary
- 138 kV Pole
- 138 kV Overhead Line

Attachment F: Survey Map 6 of 21

DRAINAGE SURVEY

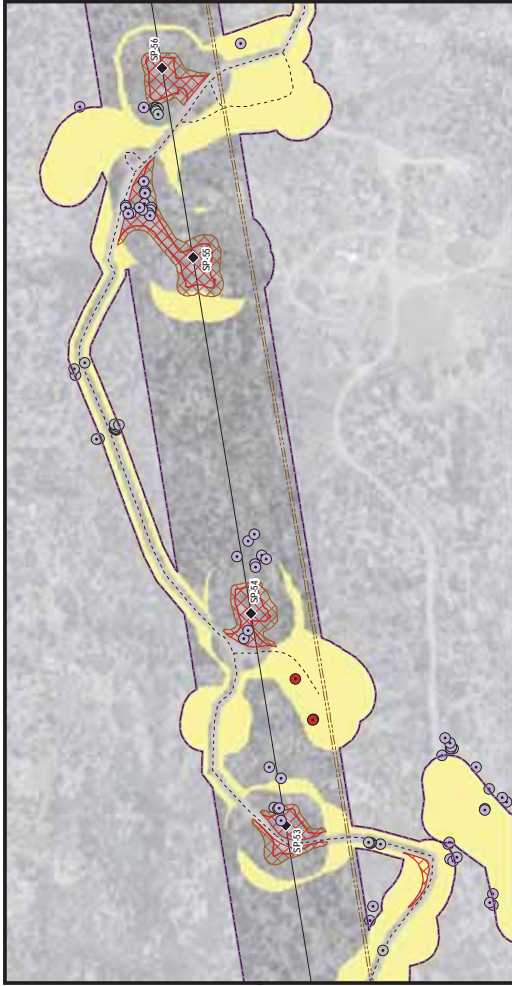


CULTURAL SURVEY

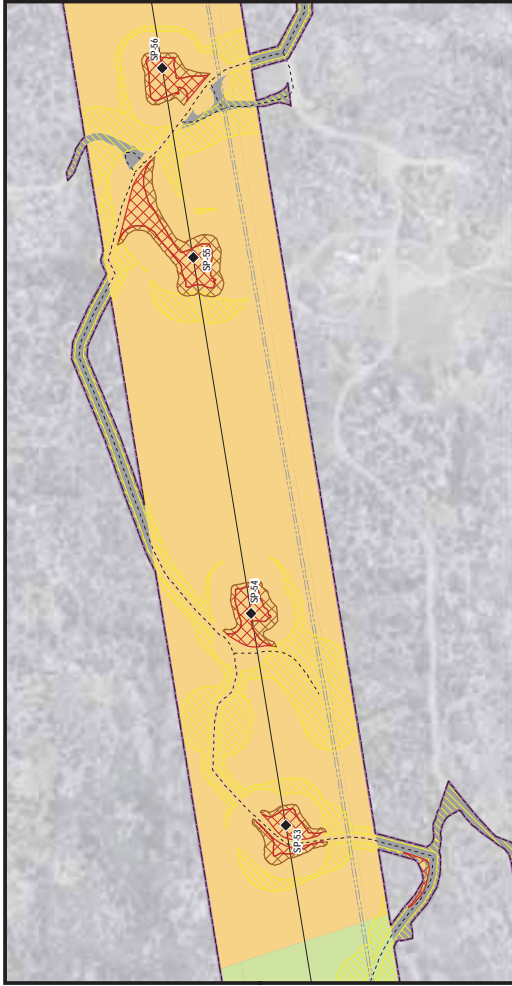


No Eligible Cultural Resources Occur Within Requested Work Areas

RARE PLANT SURVEY



GENERAL VEGETATION SURVEY



Attachment F: Survey Map 7 of 21

<ul style="list-style-type: none"> Survey Area April 2013 Survey (vegetation shown hatched) Final Design Permanent Temporary 138 kV Pole 138 kV Overhead Line 	<ul style="list-style-type: none"> Jacumba milk-vetch Oceanblue larkspur Palmer's grapplinghook Stickley gerarea Tecate tarplant Jacumba Monkey Flower 	<ul style="list-style-type: none"> Mixed Desert Scrub Oak Woodland Riparian Scrub Developed/Road Shadscale Scrub Existing Transmission Line Existing Access Road Centerline 	<ul style="list-style-type: none"> Vegetation Type Agriculture Chamise-Redshank Chaparral Disturbed Grassland Fresh Emergent Wetland Juniper Woodland 	<ul style="list-style-type: none"> Survey Data Drainage Rare Plants Campo pea Desert beauty Jacumba Monkey Flower
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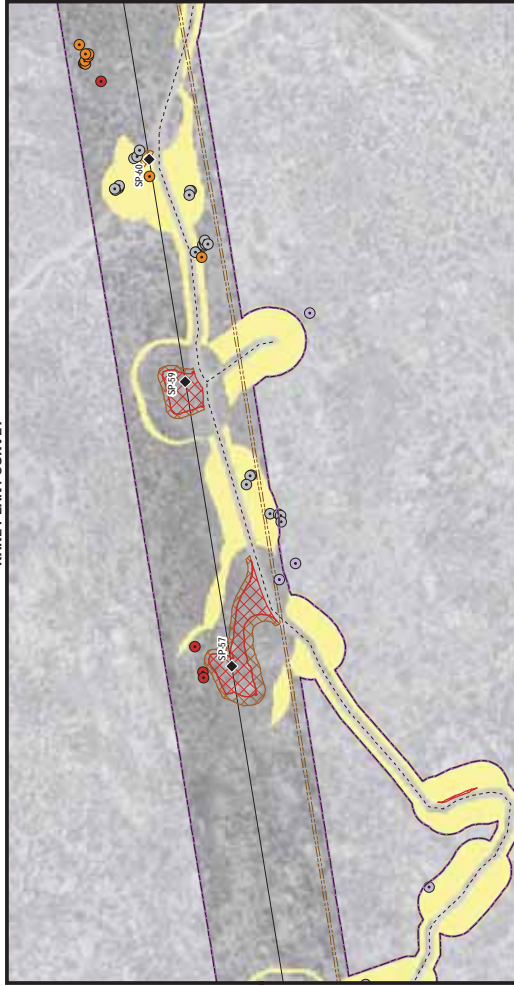
*The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. In some instances, drainages were followed to their extent, resulting in the mapping of areas outside of the survey corridor.

**Rare plants outside of the survey corridor that were observed incidentally are also mapped.

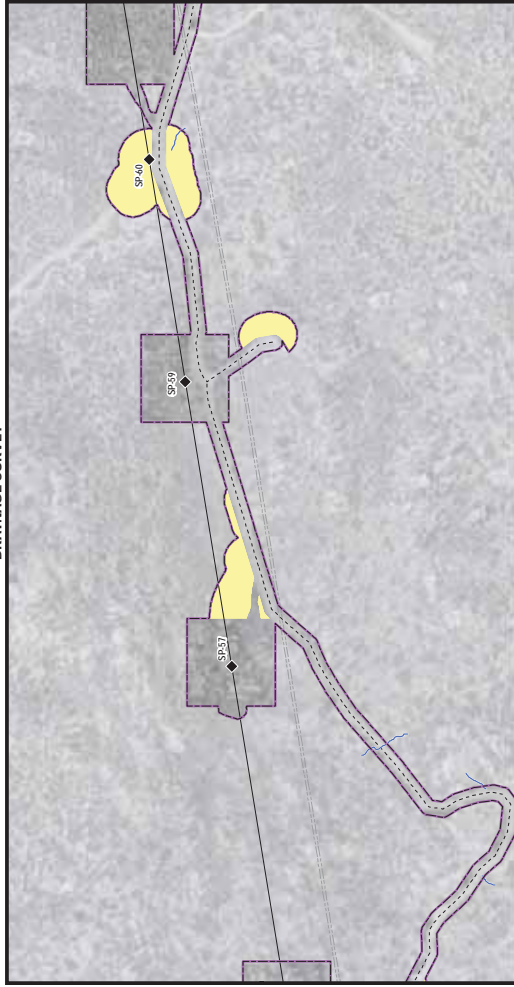
Scale: 1:3,400
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Logos: SDBE, ANISIGNIA

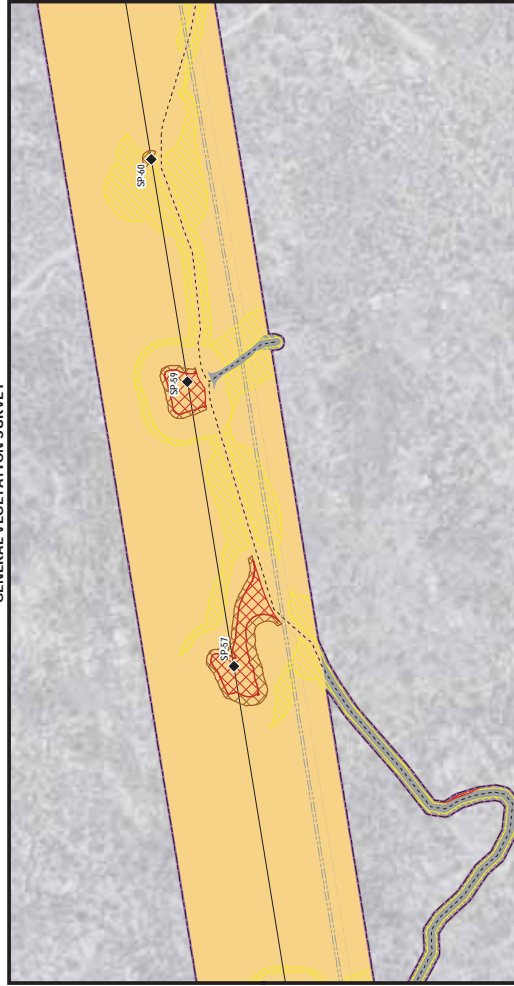
RARE PLANT SURVEY



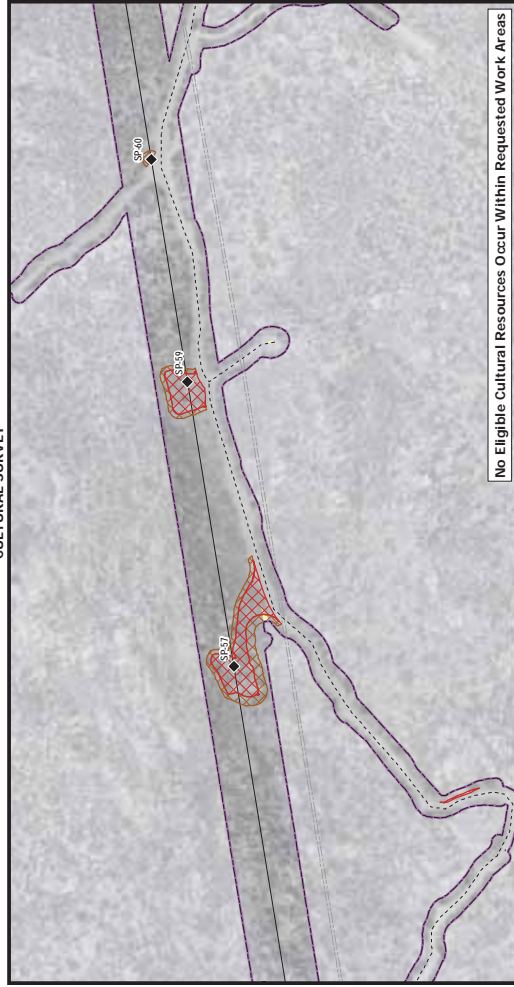
DRAINAGE SURVEY



GENERAL VEGETATION SURVEY



CULTURAL SURVEY



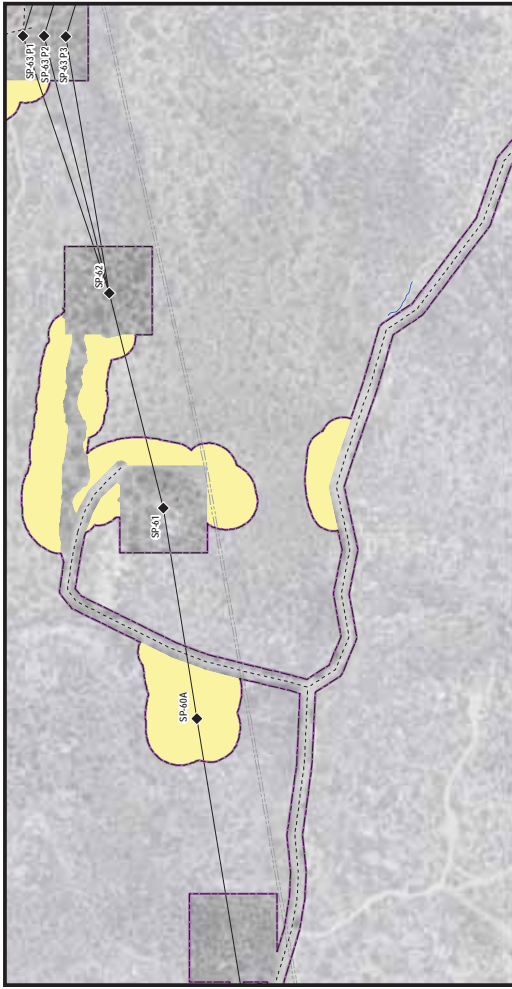
No Eligible Cultural Resources Occur Within Requested Work Areas

Attachment F: Survey Map 8 of 21

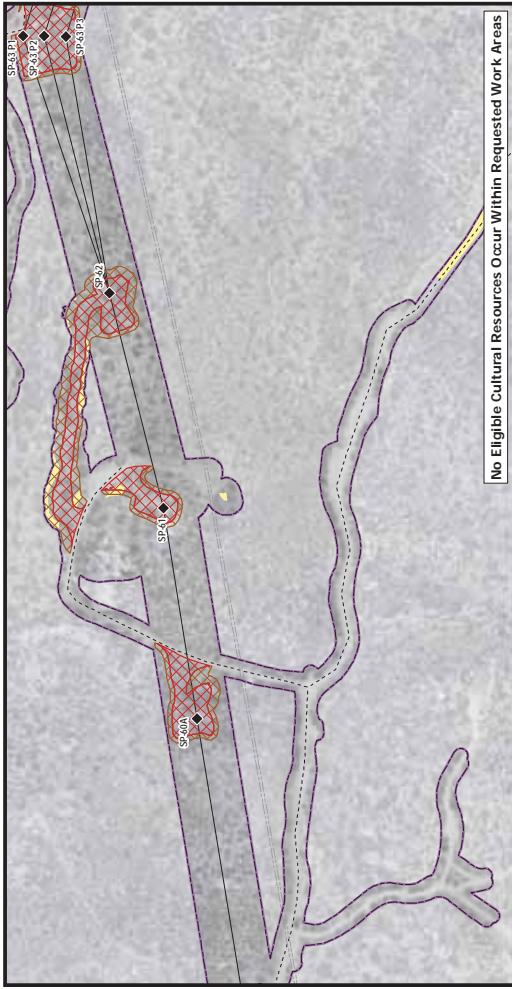
<ul style="list-style-type: none"> Survey Area April 2013 Survey (vegetation shown hatched) Final Design Permanent Temporary 138 kV Pole 138 kV Overhead Line 	<ul style="list-style-type: none"> Jacumba milk-vetch Oceanblue larkspur Palmer's grapplinghook Stickney gerarea Tecate tarplant Jacumba Monkey Flower 	<ul style="list-style-type: none"> Mixed Desert Scrub Oak Woodland Riparian Scrub Developed/Road Shadscale Scrub Existing Transmission Line Existing Access Road Centerline 	<ul style="list-style-type: none"> Vegetation Type Agriculture Chamise-Redshank Chaparral Disturbed Grassland Fresh Emergent Wetland Juniper Woodland 	<ul style="list-style-type: none"> Survey Data Drainage Rare Plants Campo pea Desert beauty Jacumba Monkey Flower
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The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. In some instances, drainages were followed to their extent, resulting in the mapping of areas outside of the survey corridor. Rare plants outside of the survey corridor that were observed incidentally are also mapped.

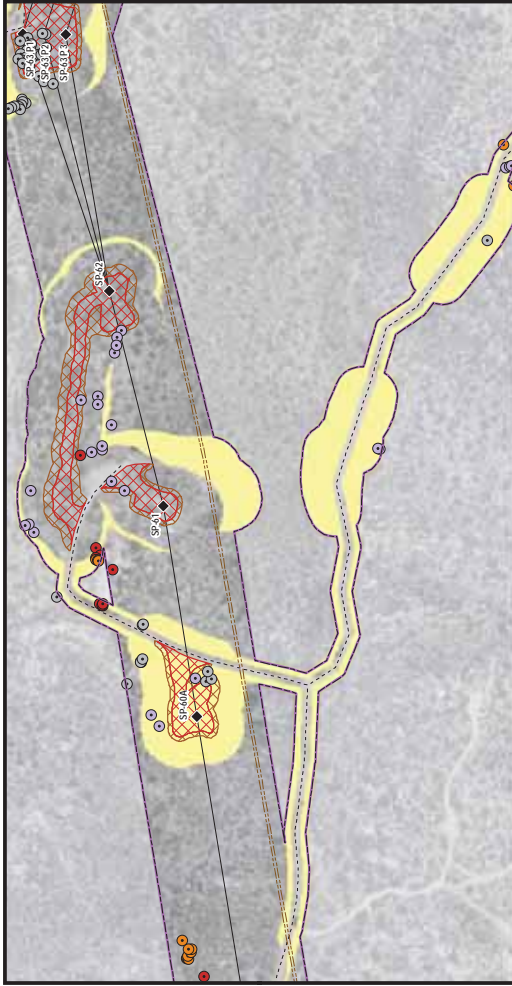
DRAINAGE SURVEY



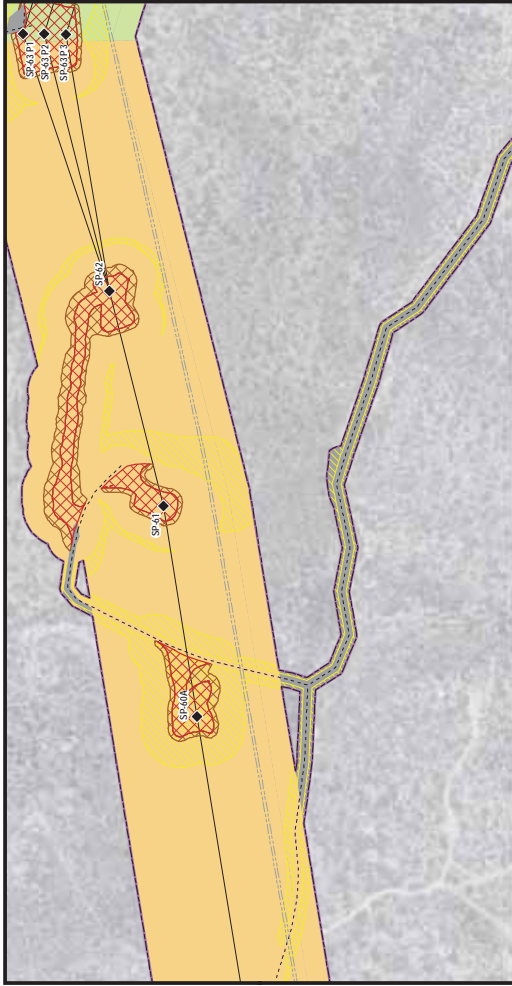
CULTURAL SURVEY



RARE PLANT SURVEY

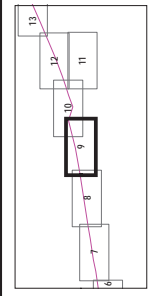


GENERAL VEGETATION SURVEY



No Eligible Cultural Resources Occur Within Requested Work Areas

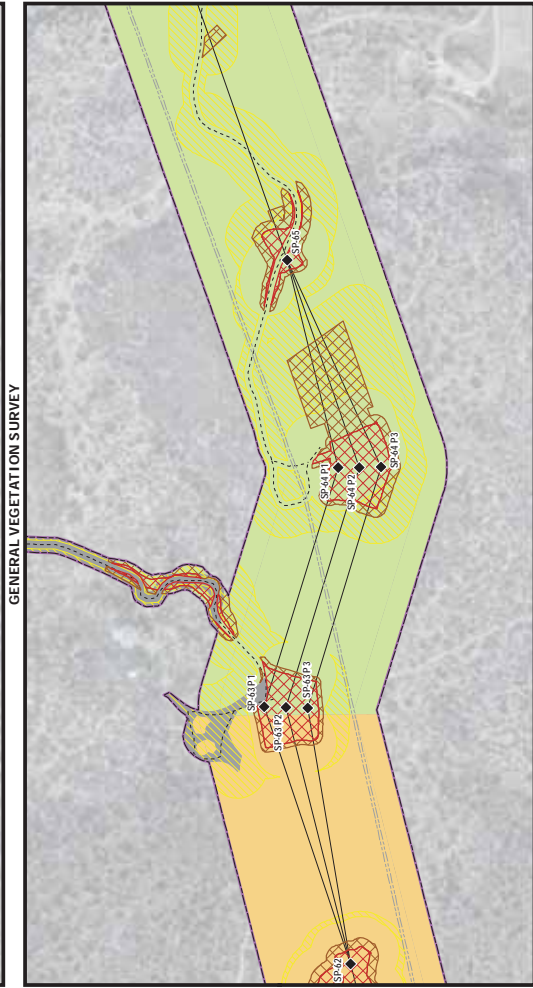
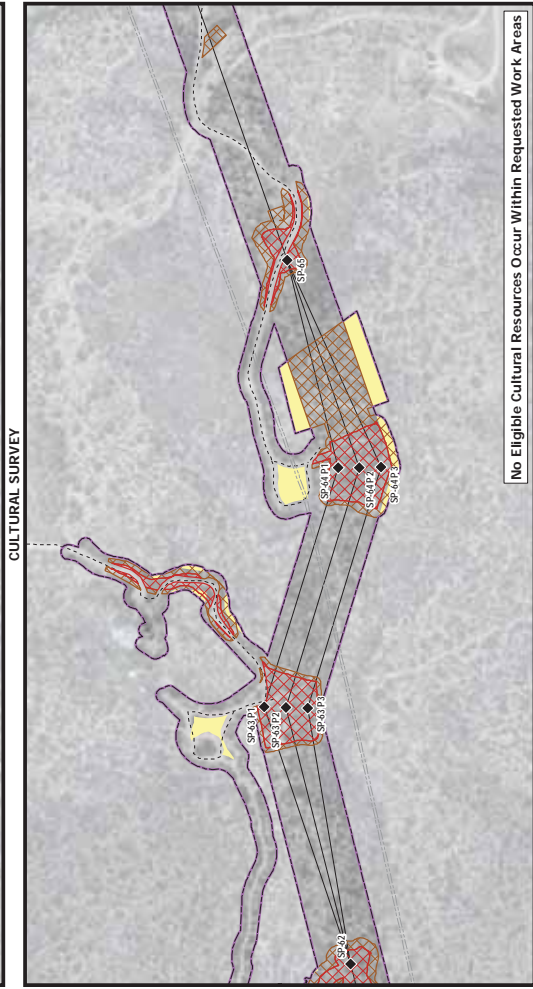
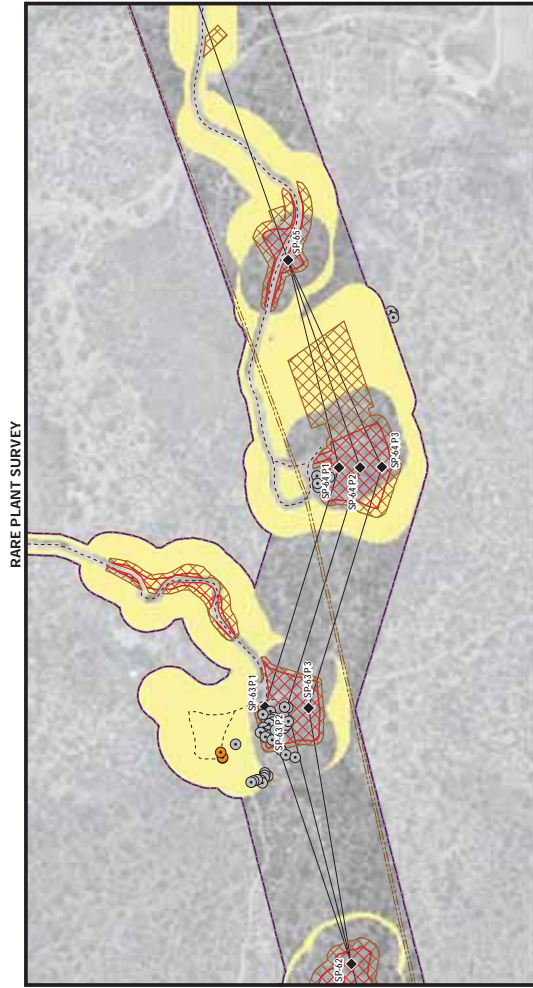
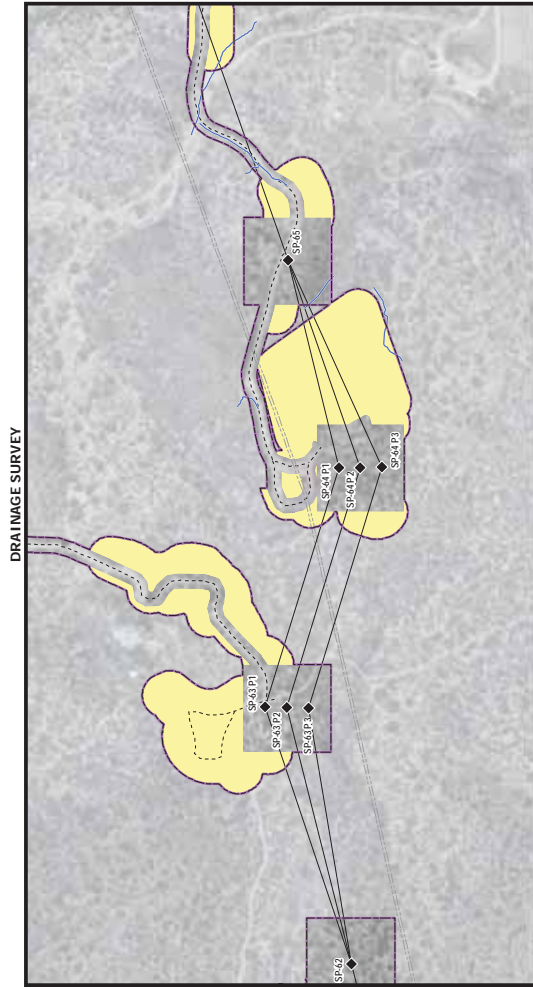
East County Substation Project



The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. In some instances, drainages were followed to their extent, resulting in the mapping of riparian corridors that extend beyond the survey corridor. Rare plants outside of the survey corridor that were observed incidentally are also mapped.

- Survey Area
- April 2013 Survey (vegetation shown hatched)
- Final Design
- Permanent
- Temporary
- 138 kV Pole
- 138 kV Overhead Line
- Jacumba milk-vetch
- Oceanblue larkspur
- Palmer's grapplegrook
- Sticky gerarea
- Tecate tarplant
- Jacumba Monkey Flower
- Mixed Desert Scrub
- Oak Woodland
- Riparian Scrub
- Developed/Road
- Shadscale Scrub
- Existing Transmission Line
- Existing Access Road Centerline
- Vegetation Type
- Agriculture
- Chamise-Redshank Chaparral
- Disturbed Grassland
- Fresh Emergent Wetland
- Juniper Woodland
- Survey Data
- Drainage
- Rare Plants
- Campo pea
- Desert beauty
- Jacumba Monkey Flower

Attachment F: Survey Map 9 of 21



No Eligible Cultural Resources Occur Within Requested Work Areas

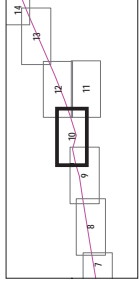
Attachment F: Survey Map 10 of 21

<ul style="list-style-type: none"> Survey Area April 2013 Survey (vegetation shown hatched) Final Design <ul style="list-style-type: none"> Permanent Temporary 138 kV Pole 138 kV Overhead Line 	<ul style="list-style-type: none"> Jacumba milk-veitch Oceanblue larkspur Palmer's grapplinghook Stickey gerarea Tecate tarplant Jacumba Monkey Flower 	<ul style="list-style-type: none"> Mixed Desert Scrub Oak Woodland Riparian Scrub Developed/Road Shadscale Scrub Existing Transmission Line Existing Access Road Centerline 	<ul style="list-style-type: none"> Vegetation Type Agriculture Chamise-Redshank Chaparral Disturbed Grassland Fresh Emergent Wetland Juniper Woodland 	<ul style="list-style-type: none"> Survey Data Drainage** Rare Plants*** Campo pea Desert beauty Jacumba Monkey Flower
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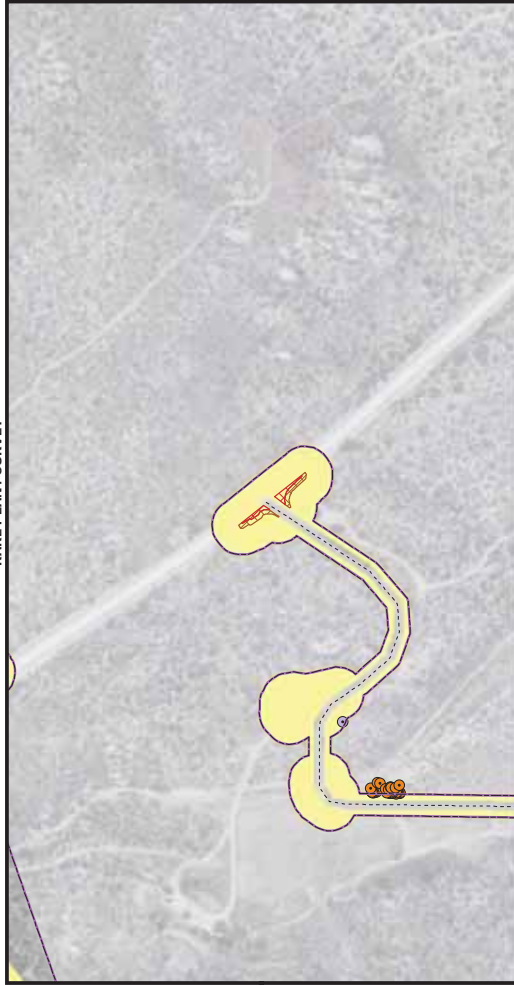
*The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder.

**In some instances, drainages were followed to their extent, resulting in the mapping of areas outside of the survey corridor.

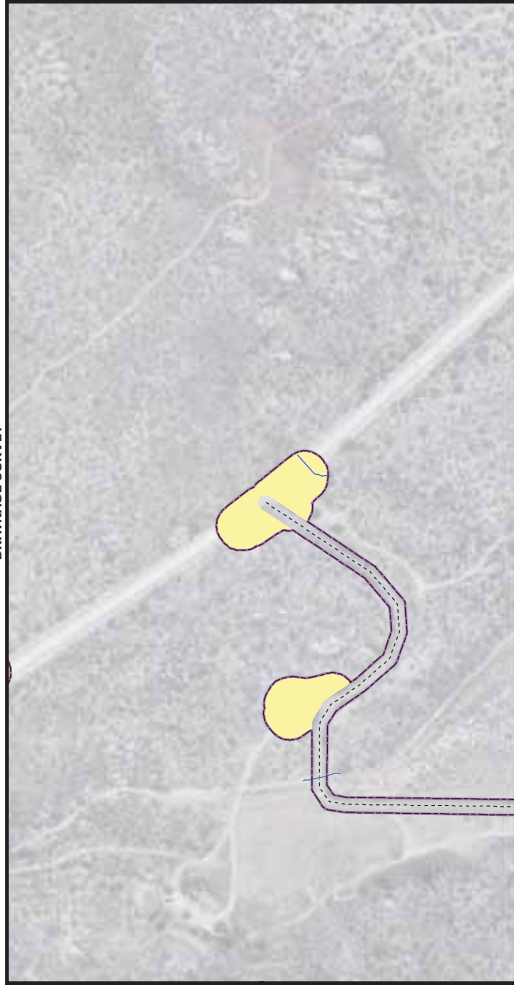
***Rare plants outside of the survey corridor that were observed incidentally are also mapped.



RARE PLANT SURVEY



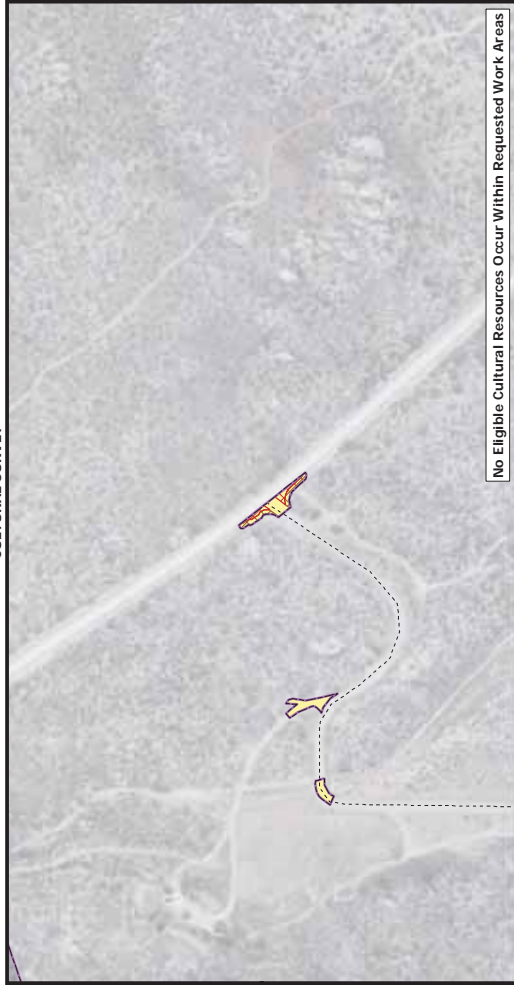
DRAINAGE SURVEY



GENERAL VEGETATION SURVEY



CULTURAL SURVEY



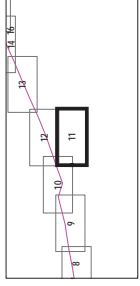
No Eligible Cultural Resources Occur Within Requested Work Areas

Attachment F: Survey Map 11 of 21

<ul style="list-style-type: none"> Survey Area April 2013 Survey (vegetation shown hatched) Final Design Permanent Temporary 138 kV Pole 138 kV Overhead Line 	<ul style="list-style-type: none"> Jacumba milk-vetch Oceanblue larkspur Palmer's grappalingbrook Stickey gerarea Tecate tarplant Jacumba Monkey Flower 138 kV Pole 138 kV Overhead Line 	<ul style="list-style-type: none"> Mixed Desert Scrub Oak Woodland Riparian Scrub Developed/Road Shedscale Scrub Existing Transmission Line Existing Access Road Centerline 	<ul style="list-style-type: none"> Vegetation Type Agriculture Chamise-Redshank Chaparral Disturbed Grassland Fresh Emergent Wetland Juniper Woodland 	<ul style="list-style-type: none"> Survey Data Drainage Rare Plants Campo pea Desert beauty Jacumba Monkey Flower
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The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. In some instances, drainages were followed to their extent, resulting in the mapping of areas outside of the survey corridor.

Rare plants outside of the survey corridor that were observed incidentally are also mapped.



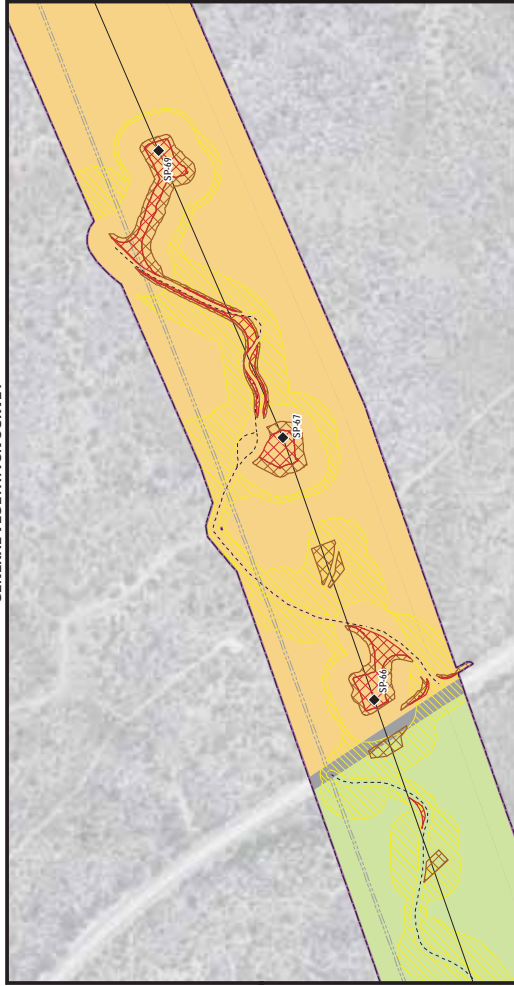
RARE PLANT SURVEY



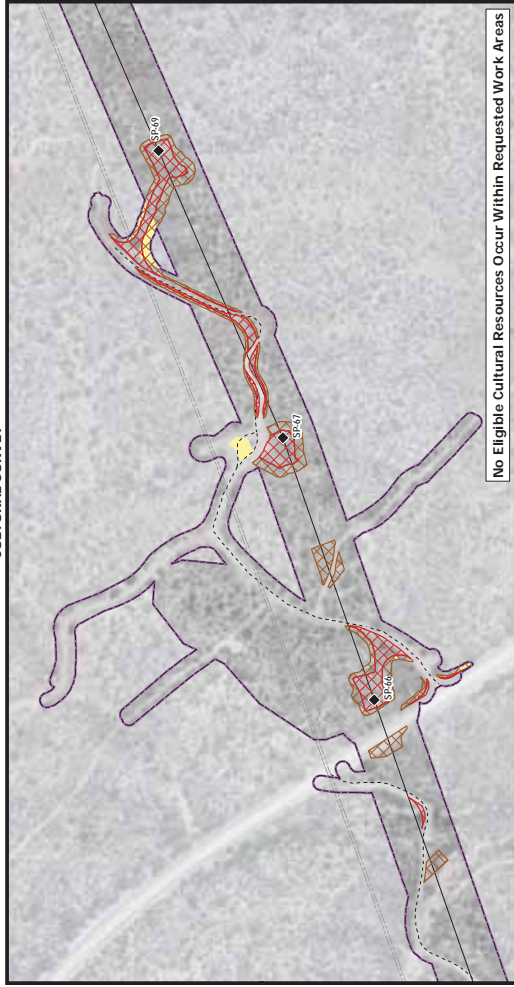
DRAINAGE SURVEY



GENERAL VEGETATION SURVEY



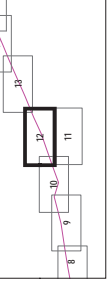
CULTURAL SURVEY

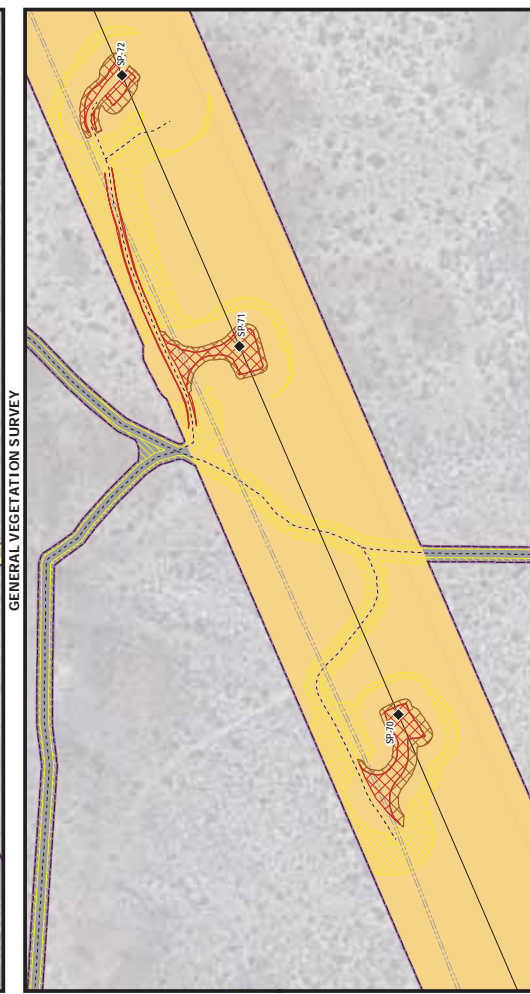
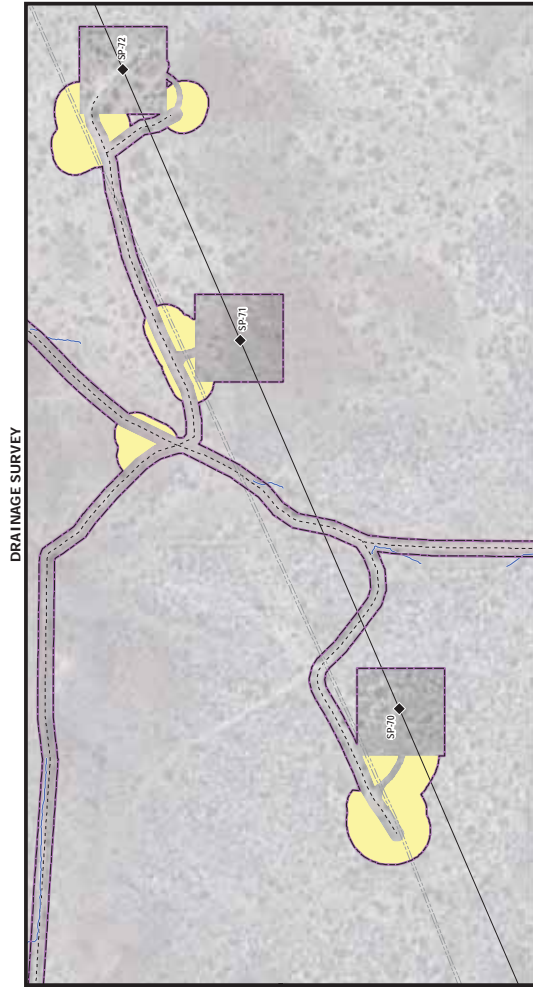


No Eligible Cultural Resources Occur Within Requested Work Areas

Attachment F: Survey Map 12 of 21

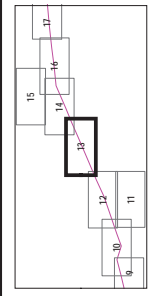
<ul style="list-style-type: none"> Survey Area April 2013 Survey (vegetation shown hatched) Final Design <ul style="list-style-type: none"> Permanent Temporary 138 kV Pole 138 kV Overhead Line 	<ul style="list-style-type: none"> Jacumba milk-vetch Oceanblue larkspur Palmer's grappalingbrook Stickkey gerarea Tecate tarplant Jacumba Monkey Flower 	<ul style="list-style-type: none"> Mixed Desert Scrub Oak Woodland Riparian Scrub Developed/Road Shedscale Scrub Existing Transmission Line Existing Access Road Centerline 	<ul style="list-style-type: none"> Vegetation Type Agriiculture Chamise-Redshank Chaparral Disturbed Grassland Fresh Emergent Wetland Juniper Woodland 	<ul style="list-style-type: none"> Survey Data Drainage** Rare Plants*** <ul style="list-style-type: none"> Campo pea Desert beauty Jacumba Monkey Flower 	<p>*The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder.</p> <p>**In some instances, drainages were followed to their extent, resulting in the mapping of areas outside of the survey corridor.</p> <p>***Rare plants outside of the survey corridor that were observed incidentally are also mapped.</p>
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No Eligible Cultural Resources Occur Within Requested Work Areas

East County Substation Project

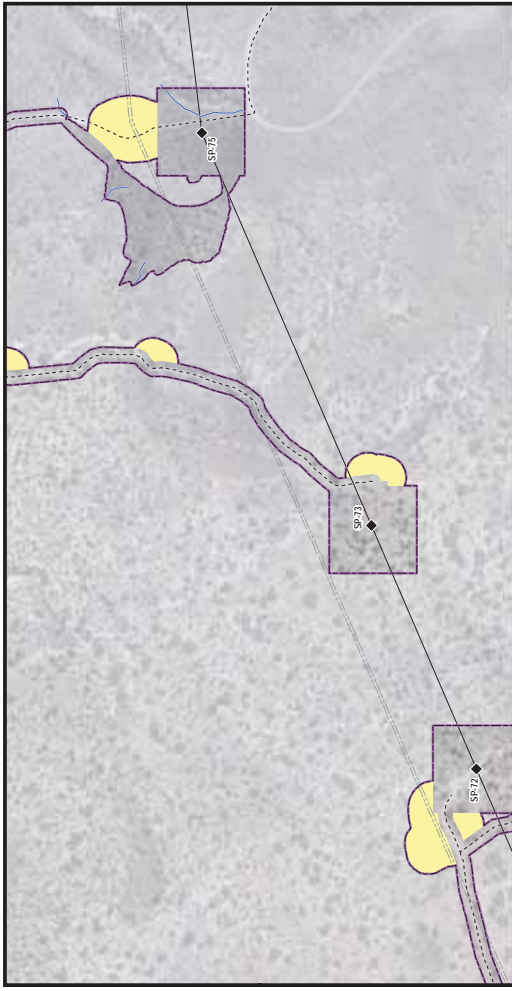


The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. In some instances, drainages were followed to their extent, resulting in the mapping of areas outside of the survey corridor. Rare plants outside of the survey corridor that were observed incidentally are also mapped.

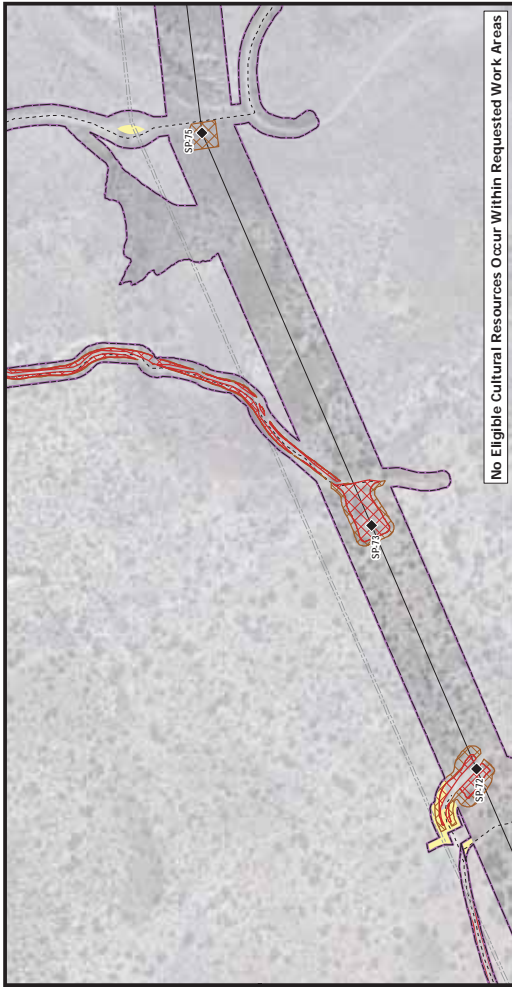
- Survey Area**
 - April 2013 Survey (vegetation shown hatched)
 - Final Design
 - Permanent
 - Temporary
 - 138 kV Pole
 - 138 kV Overhead Line
- Survey Data**
 - Drainage
 - Rare Plants
 - Campepe
 - Desert beauty
 - Jacumbia Monkey Flower
- Vegetation Type**
 - Jacumbia milk-vetch
 - Oceanblue larkspur
 - Palmer's grapplinghook
 - Stickley gerarea
 - Tecate tarplant
 - Mixed Desert Scrub
 - Oak Woodland
 - Riparian Scrub
 - Chamise-Redshank Chaparral
 - Disturbed Grassland
 - Fresh Emergent Wetland
 - Juniper Woodland
 - Developed/Road
 - Shedscale Scrub
 - Existing Transmission Line
 - Existing Access Road Centerline

Attachment F: Survey Map 13 of 21

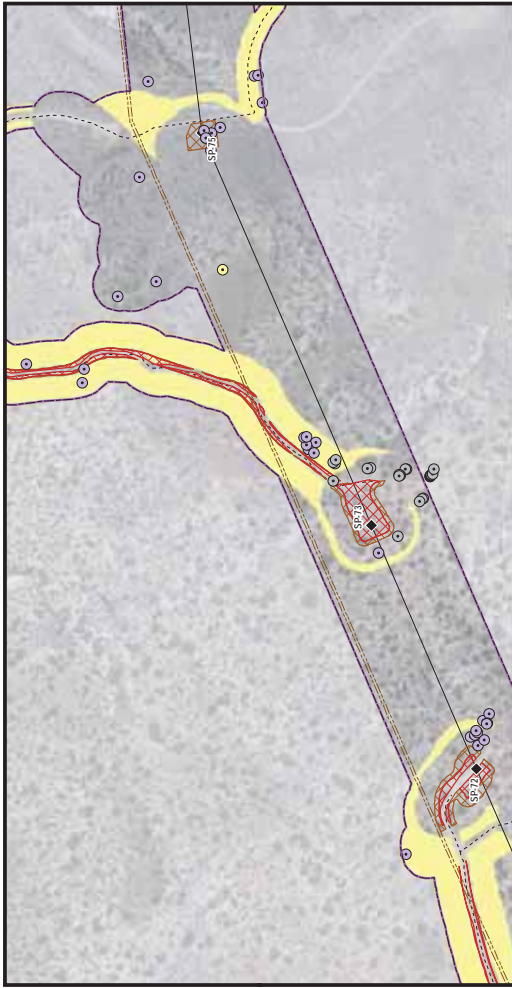
DRAINAGE SURVEY



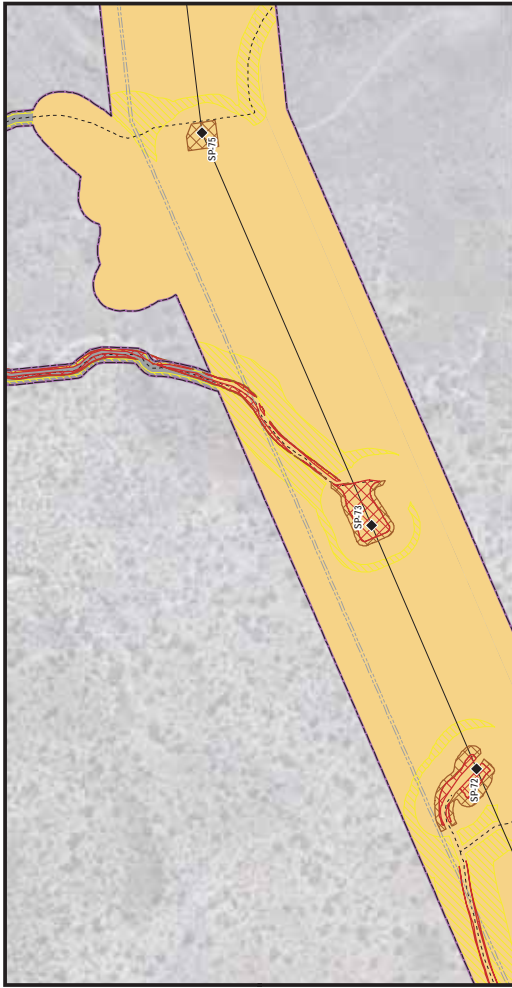
CULTURAL SURVEY



RARE PLANT SURVEY



GENERAL VEGETATION SURVEY



No Eligible Cultural Resources Occur Within Requested Work Areas

Attachment F: Survey Map 14 of 21

<ul style="list-style-type: none"> Survey Area April 2013 Survey (vegetation shown hatched) Final Design <ul style="list-style-type: none"> Permanent Temporary 138 kV Pole 138 kV Overhead Line 	<ul style="list-style-type: none"> Jacumba milk-vetch Oceanblue larkspur Palmer's grapplegrook Stickley gerarea Tecate tarplant Jacumba Monkey Flower 	<ul style="list-style-type: none"> Mixed Desert Scrub Oak Woodland Riparian Scrub Developed/Road Shadscale Scrub Existing Transmission Line Existing Access Road Centerline 	<ul style="list-style-type: none"> Vegetation Type Agriculture Chamise-Redshank Chaparral Disturbed Grassland Fresh Emergent Wetland Juniper Woodland 	<ul style="list-style-type: none"> Survey Data Drainage** Rare Plants*** Campo pea Desert beauty Jacumba Monkey Flower
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*The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder.

**In some instances, drainages were followed to their extent, resulting in the mapping of areas outside of the survey corridor.

***Rare plants outside of the survey corridor that were observed incidentally are also mapped.

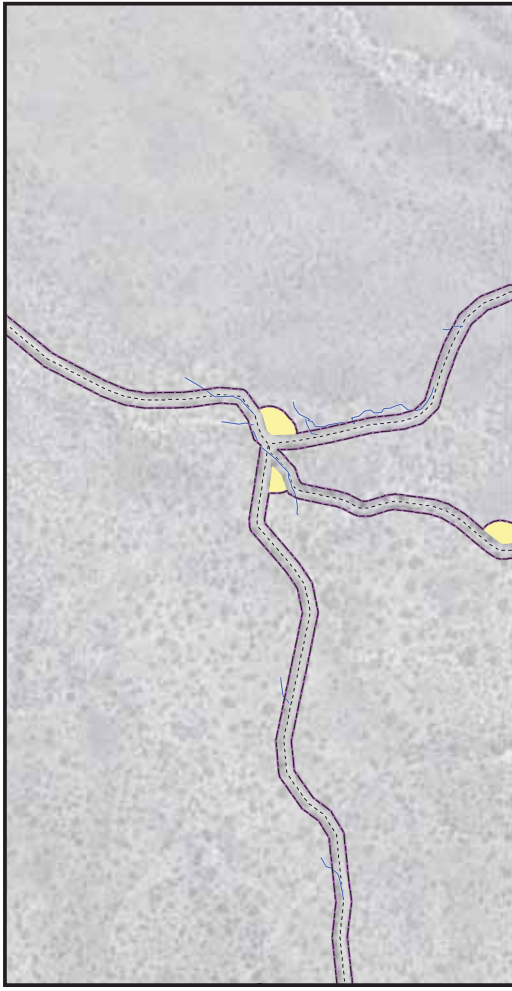
East County Substation Project

Scale: 1:3,400

0 100 200 400 600 Feet

7/25/2013

DRAINAGE SURVEY

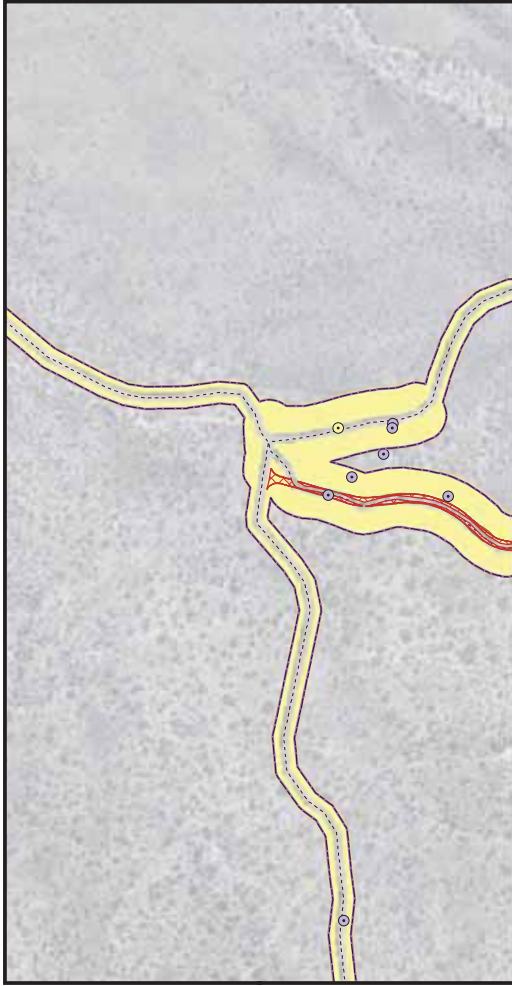


CULTURAL SURVEY

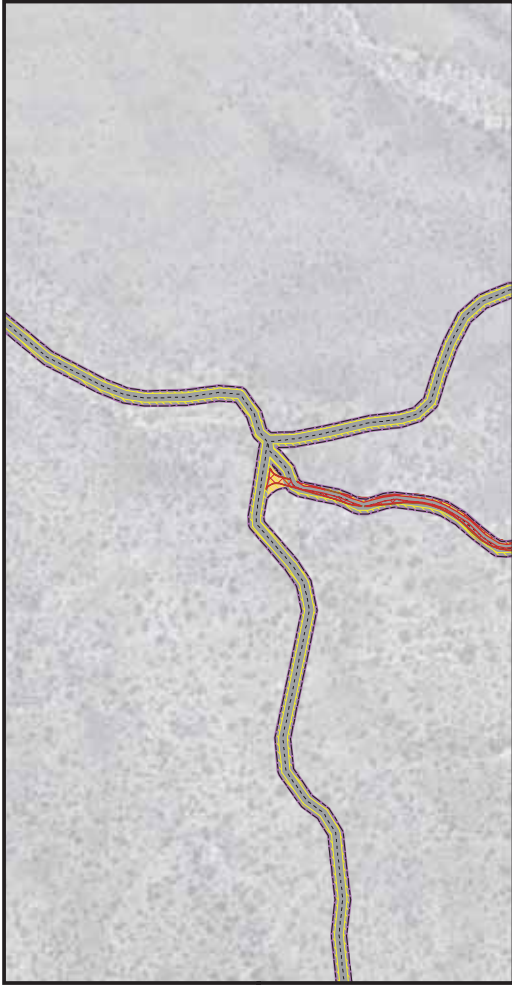


No Eligible Cultural Resources Occur Within Requested Work Areas

RARE PLANT SURVEY



GENERAL VEGETATION SURVEY



Attachment F: Survey Map 15 of 21

<ul style="list-style-type: none"> Survey Area April 2013 Survey (vegetation shown hatched) Final Design <ul style="list-style-type: none"> Permanent Temporary 138 kV Pole 138 kV Overhead Line 	<ul style="list-style-type: none"> Jacumba milk-vetch Oceanblue larkspur Palmer's grapplinghook Stickkey gerarea Tecate tarplant Jacumba Monkey Flower 	<ul style="list-style-type: none"> Mixed Desert Scrub Oak Woodland Riparian Scrub Developed/Road Shadscale Scrub Existing Transmission Line Existing Access Road Centerline* 	<ul style="list-style-type: none"> Vegetation Type Agriculture Chamise-Redshank Chaparral Disturbed Grassland Fresh Emergent Wetland Juniper Woodland 	<ul style="list-style-type: none"> Rare Plants*** <ul style="list-style-type: none"> Campo pea Desert beauty Jacumba Monkey Flower 	<ul style="list-style-type: none"> Survey Data Drainage** Rare Plants*** <ul style="list-style-type: none"> Campo pea Desert beauty Jacumba Monkey Flower
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*The existing roads depicted on these maps represent a representation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. **In some instances, drainages were followed to their extent, resulting in the mapping of areas outside of the survey corridor. ***Rare plants outside of the survey corridor that were observed incidentally are also mapped.

Scale: 1:3,400
 0 100 200 400 600 Feet

North Arrow

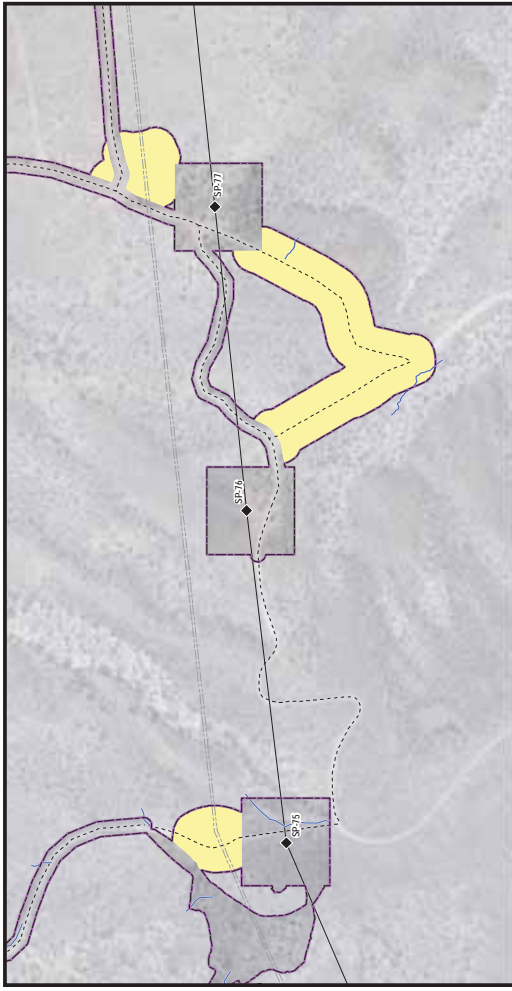
Logos: SDBE, ANISIGNIA

Inset Map: A grid of numbered rectangles (12-18) with a red box highlighting rectangle 15.

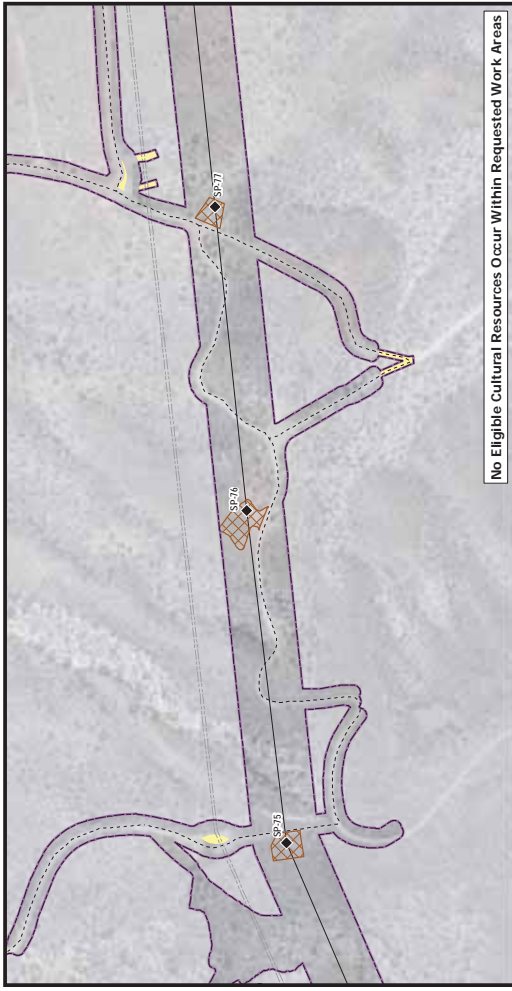
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Date: 7/25/2013

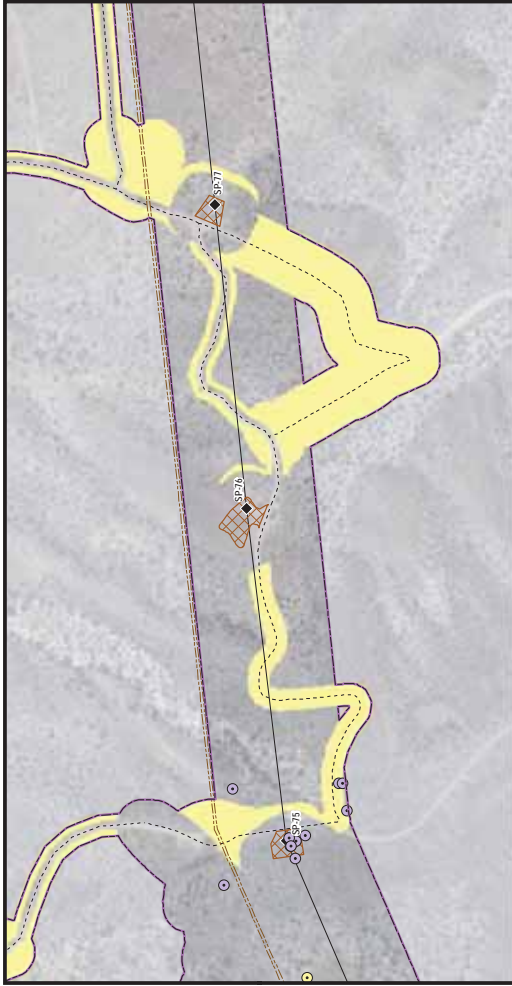
DRAINAGE SURVEY



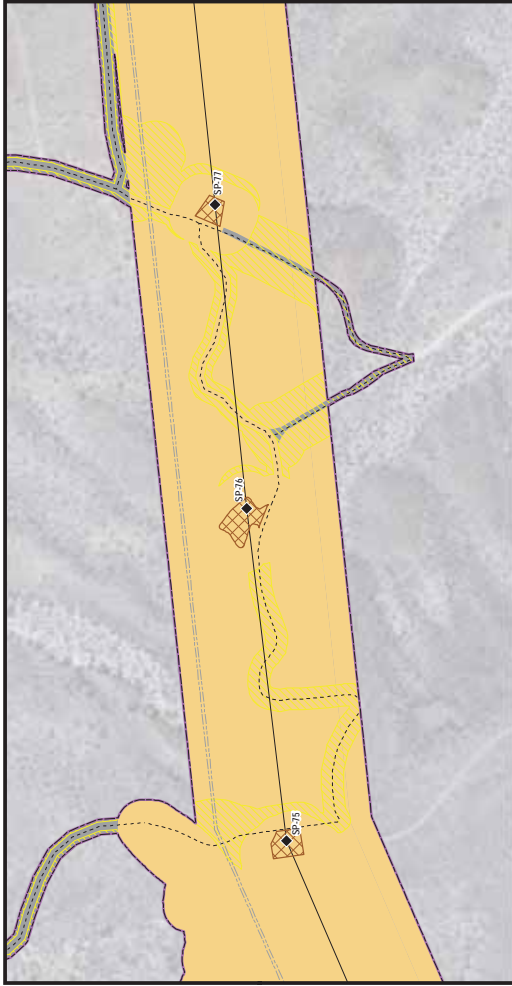
CULTURAL SURVEY



RARE PLANT SURVEY

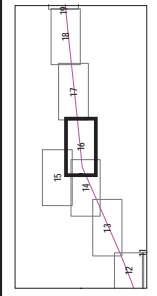


GENERAL VEGETATION SURVEY



No Eligible Cultural Resources Occur Within Requested Work Areas

East County Substation Project



The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. In some instances, drainages were followed to their extent, resulting in the mapping of areas outside the survey corridor. Rare plants outside of the survey corridor that were observed incidentally are also mapped.

- Mixed Desert Scrub
- Oak Woodland
- Riparian Scrub
- Developed/Road
- Shadscale Scrub
- Existing Transmission Line
- Existing Access Road Centerline

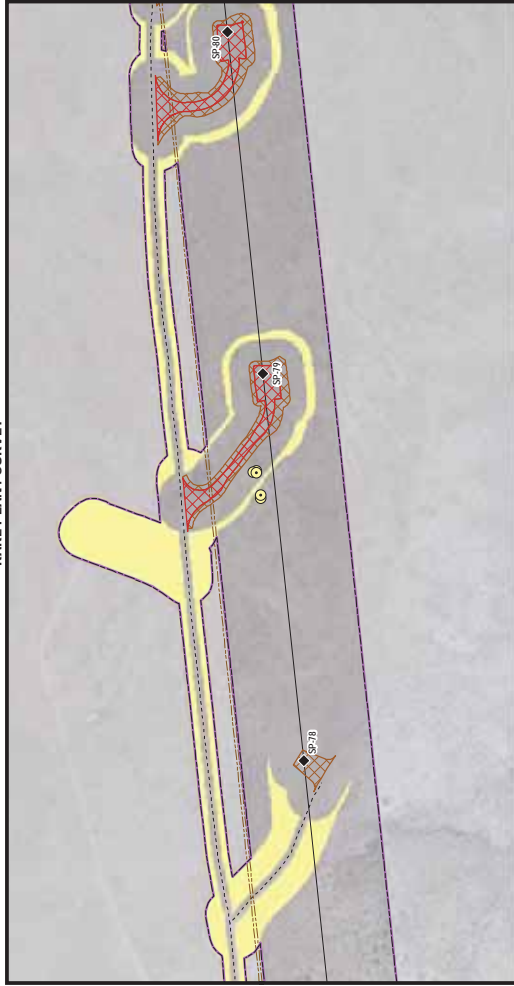
- Vegetation Type
- Jacumba milk-vetch
- Oceanblue larkspur
- Palmer's grapplegrook
- Stickley gerea
- Tecate tarplant
- Jacumba Monkey Flower
- 138 kV Pole
- 138 kV Overhead Line

- Survey Area
- April 2013 Survey (vegetation shown hatched)
- Final Design
- Permanent
- Temporary
- 138 kV Pole
- 138 kV Overhead Line

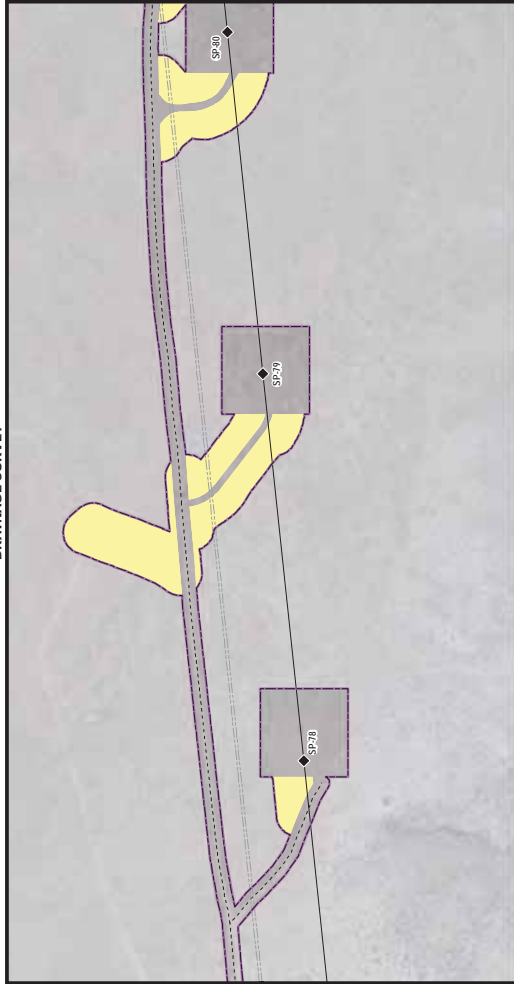
- Survey Data
- Drainage
- Rare Plants
- Campo pea
- Desert beauty
- Jacumba Monkey Flower

Attachment F: Survey Map 16 of 21

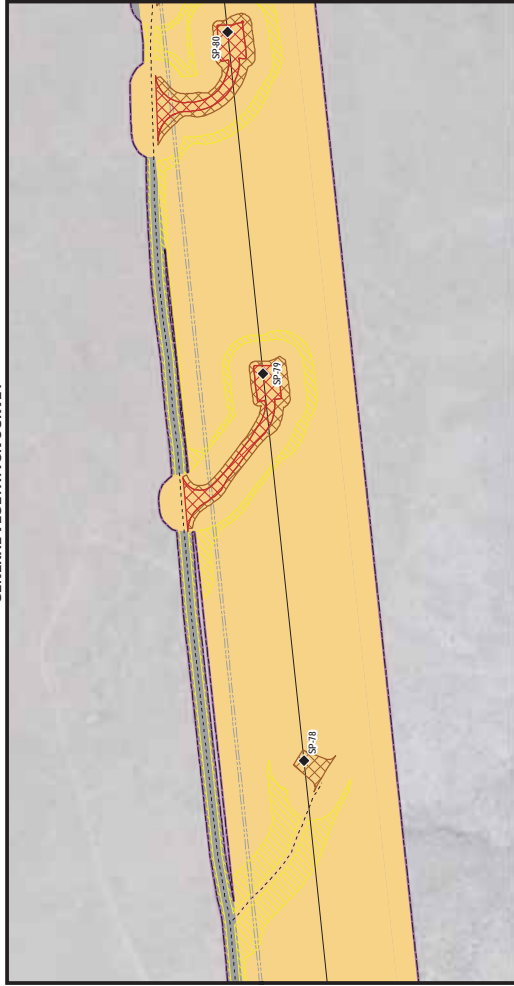
RARE PLANT SURVEY



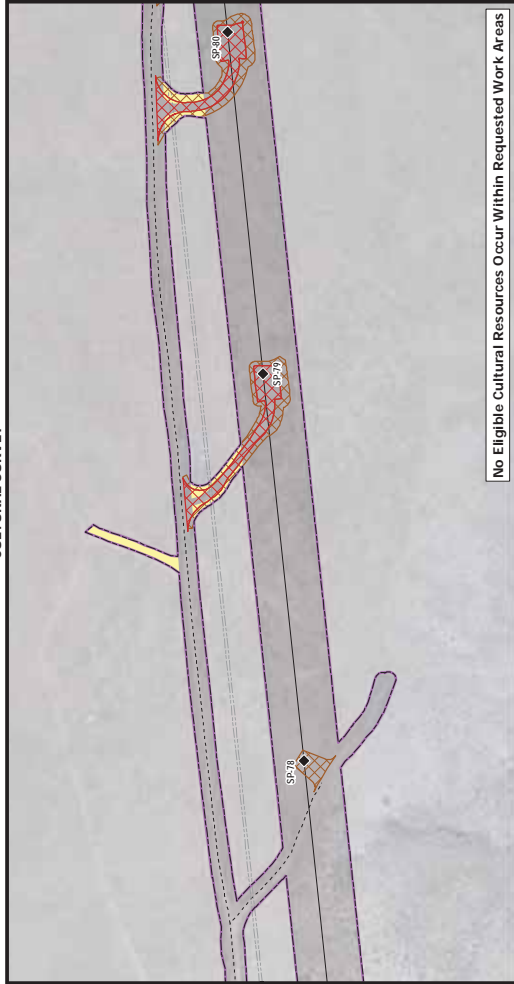
DRAINAGE SURVEY



GENERAL VEGETATION SURVEY



CULTURAL SURVEY



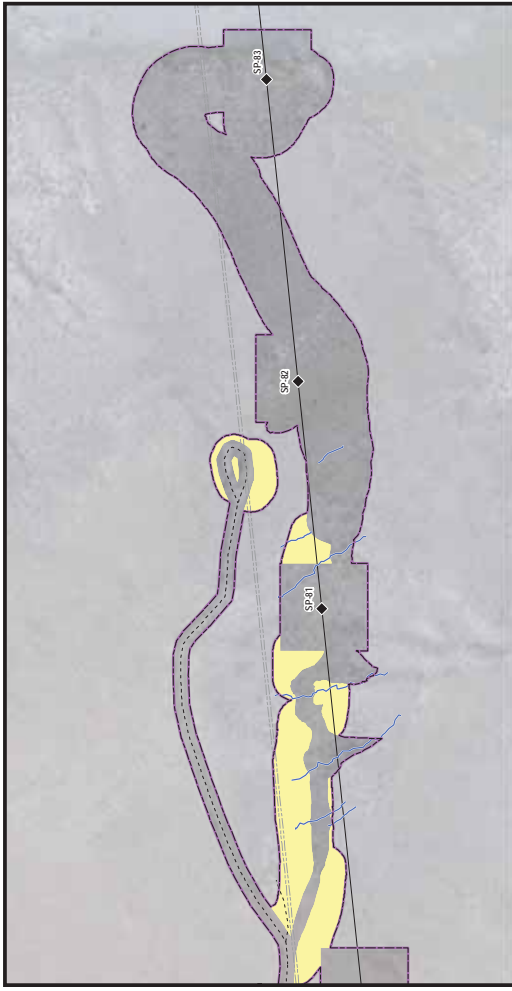
No Eligible Cultural Resources Occur Within Requested Work Areas

Attachment F: Survey Map 17 of 21

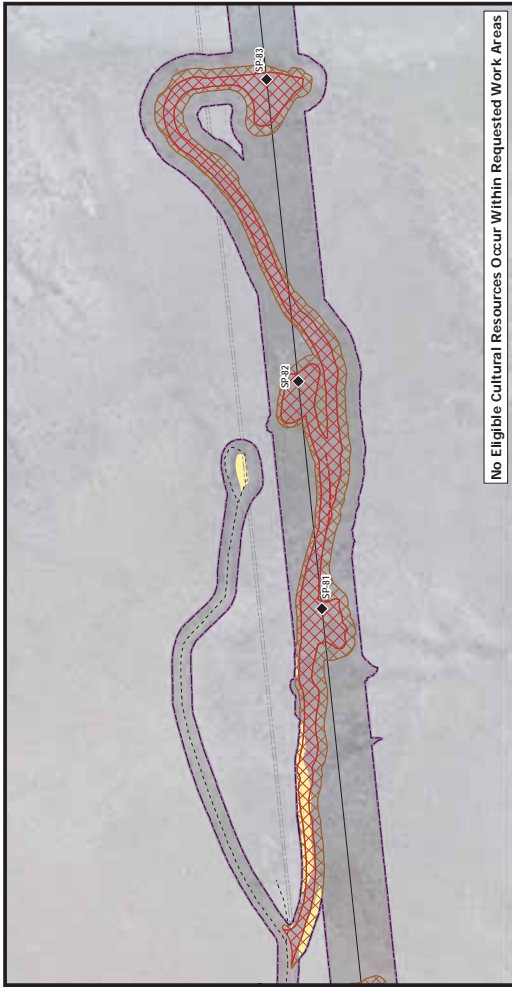
	Survey Data Drainage** Rare Plants*** Campo pea Desert beauty Jacumba Monkey Flower 138 kV Pole 138 kV Overhead Line
	Vegetation Type Jacumba milk-vetch Oceanblue larkspur Palmer's grappingbrook Stickey gerarea Tectate tarplant Jacumba Monkey Flower
	Vegetation Type Mixed Desert Scrub Oak Woodland Riparian Scrub Developed/Road Shadscale Scrub Existing Transmission Line Existing Access Road Centerline

*The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder.
 **In some instances, drainages were followed to their extent, resulting in the mapping of some drainages that may not be continuous.
 ***Rare plants outside of the survey corridor that were observed incidentally are also mapped.

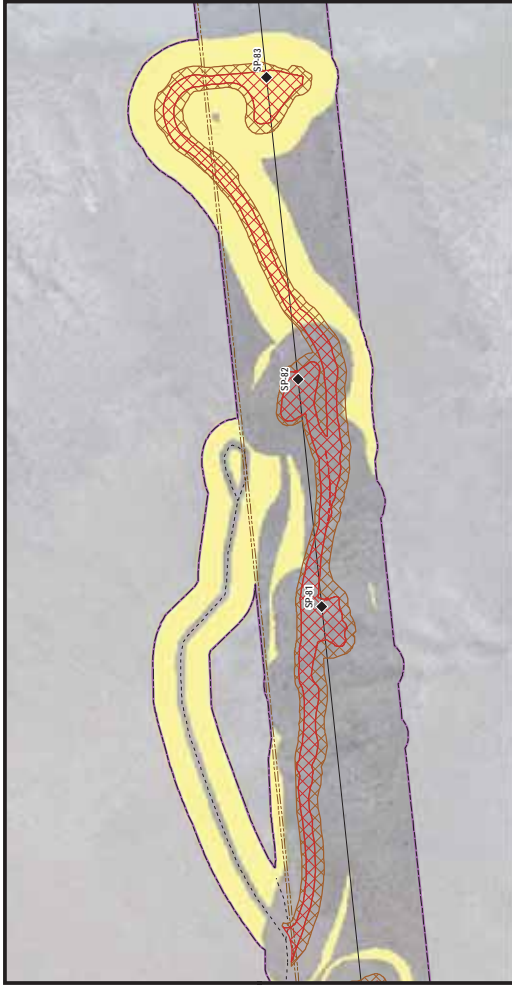
DRAINAGE SURVEY



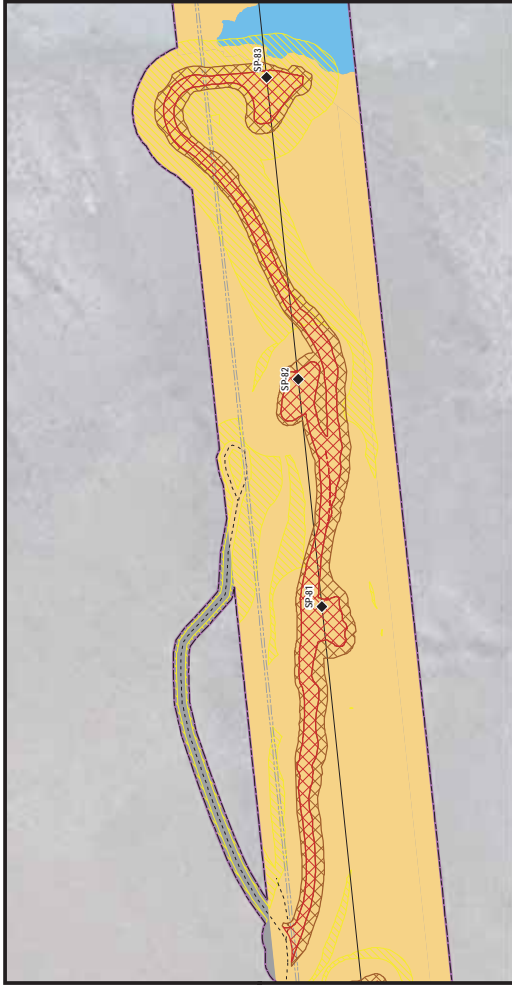
CULTURAL SURVEY



RARE PLANT SURVEY

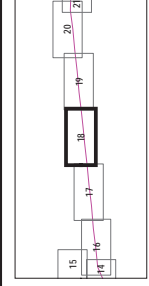
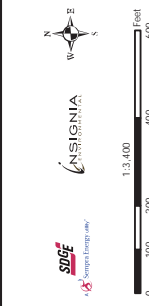


GENERAL VEGETATION SURVEY



No Eligible Cultural Resources Occur Within Requested Work Areas

East County Substation Project



The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. In some instances, drainages were followed to their extent, resulting in the mapping of areas outside the survey corridor that were observed incidentally are also mapped. Rare plants outside of the survey corridor that were observed incidentally are also mapped.

- Mixed Desert Scrub
- Oak Woodland
- Riparian Scrub
- Developed/Road
- Shadscale Scrub
- Existing Transmission Line
- Existing Access Road Centerline

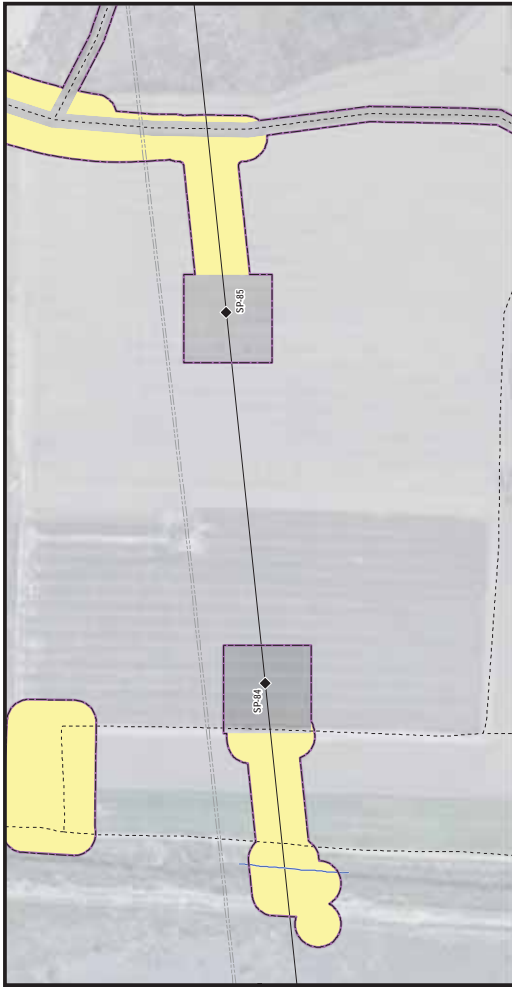
- Vegetation Type
- Jacumba milk-vetch
- Oceanblue larkspur
- Palmer's grapplingbrook
- Stickley gerarea
- Tecate tarplant
- Jacumba Monkey Flower
- 138 kV Pole
- 138 kV Overhead Line

- Survey Area
- April 2013 Survey (vegetation shown hatched)
- Final Design
- Permanent
- Temporary
- 138 kV Pole
- 138 kV Overhead Line

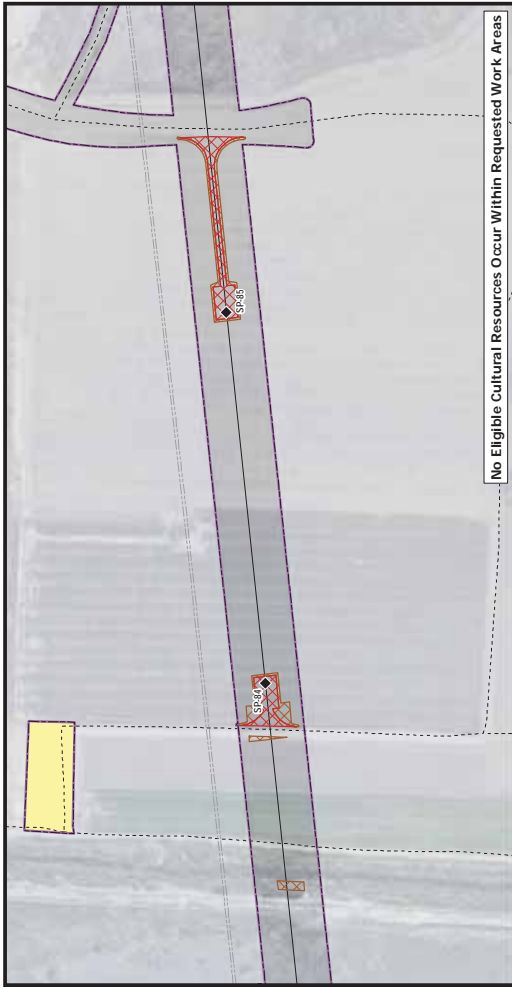
- Survey Data
- Drainage
- Rare Plants
- Campo pea
- Desert beauty
- Jacumba Monkey Flower

Attachment F: Survey Map 18 of 21

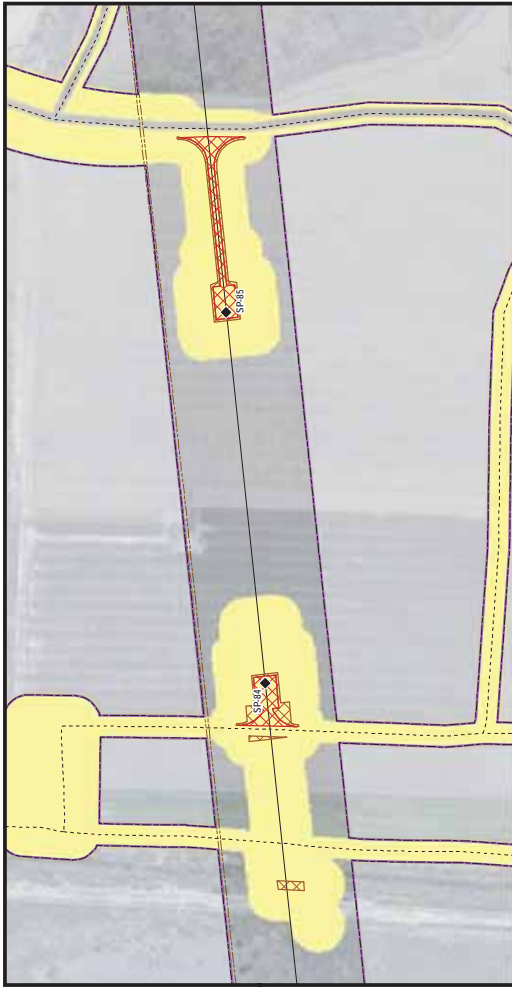
DRAINAGE SURVEY



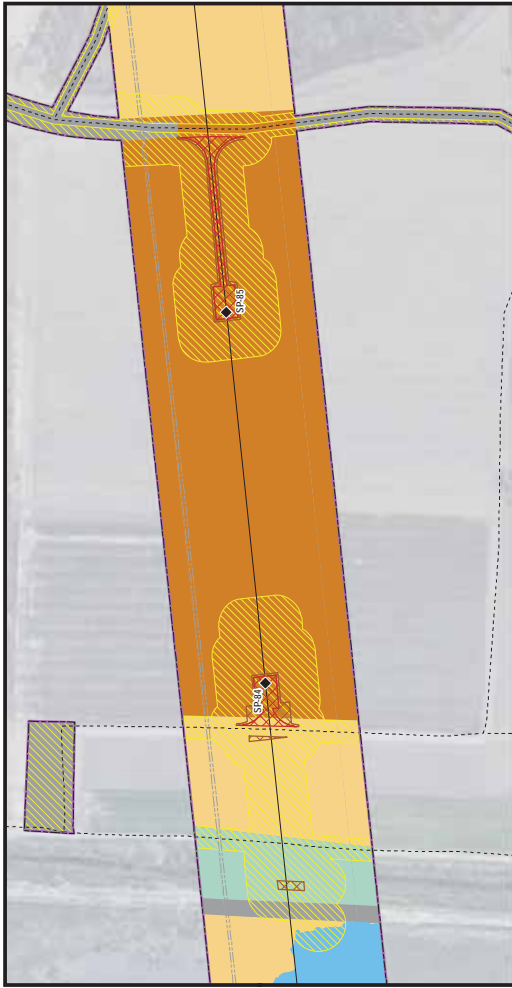
CULTURAL SURVEY



RARE PLANT SURVEY

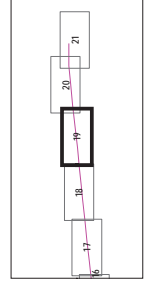


GENERAL VEGETATION SURVEY



No Eligible Cultural Resources Occur Within Requested Work Areas

East County Substation Project

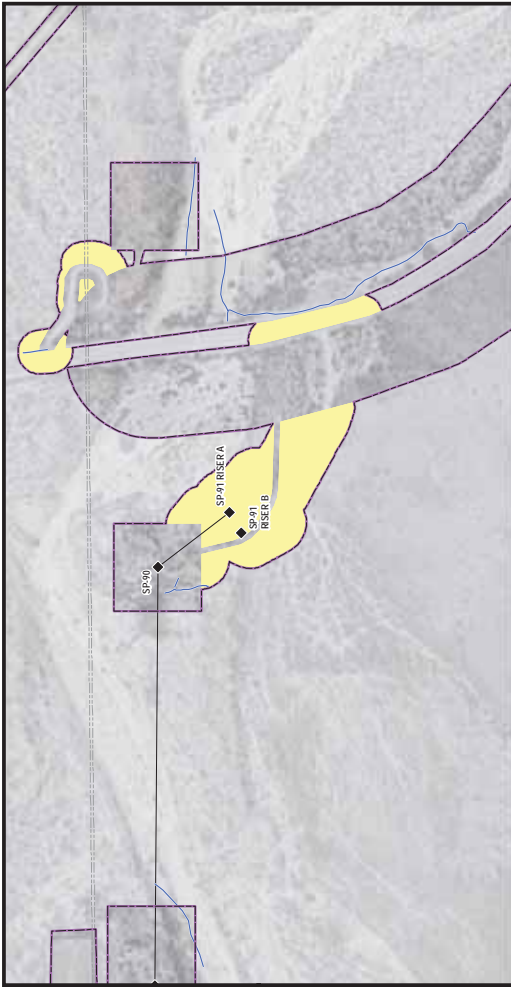


The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. In some instances, drainages were followed to their extent, resulting in the mapping of areas outside the survey corridor that were observed incidentally are also mapped. Rare plants outside of the survey corridor that were observed incidentally are also mapped.

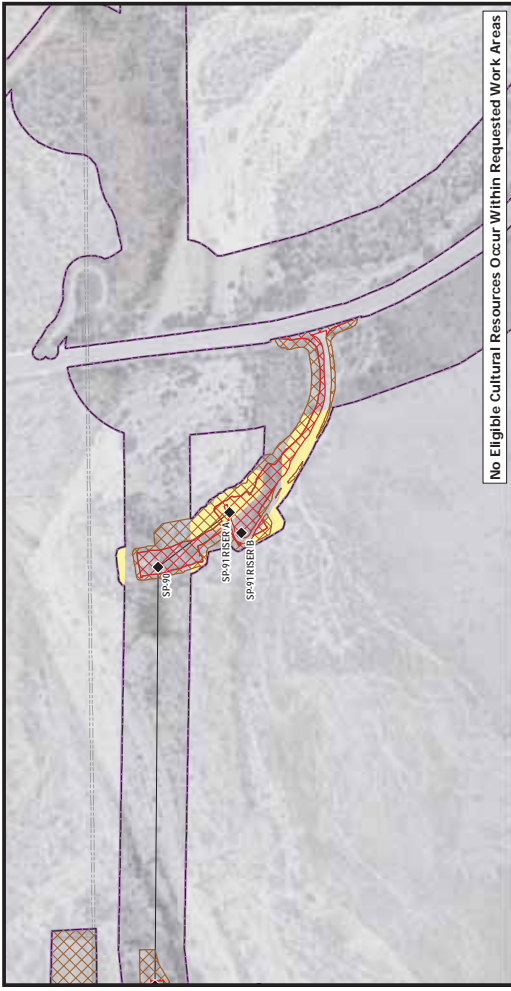
- Survey Area**
 - April 2013 Survey (vegetation shown hatched)
 - Final Design
 - Permanent
 - Temporary
 - 138 kV Pole
 - 138 kV Overhead Line
- Survey Data**
 - Drainage**
 - Rare Plants***
 - Campo pea
 - Desert beauty
 - Jacumba Monkey Flower
- Vegetation Type**
 - Jacumba milk-witch
 - Oceanblue larkspur
 - Palmer's grapplinghook
 - Sticky gerarea
 - Tecate tarplant
 - Agriulture
 - Chamise-Redshank Chaparral
 - Disturbed Grassland
 - Fresh Emergent Wetland
 - Juniper Woodland
 - Mixed Desert Scrub
 - Oak Woodland
 - Riparian Scrub
 - Developed/Road
 - Shadscale Scrub
 - Existing Transmission Line
 - Existing Access Road Centerline*

Attachment F: Survey Map 19 of 21

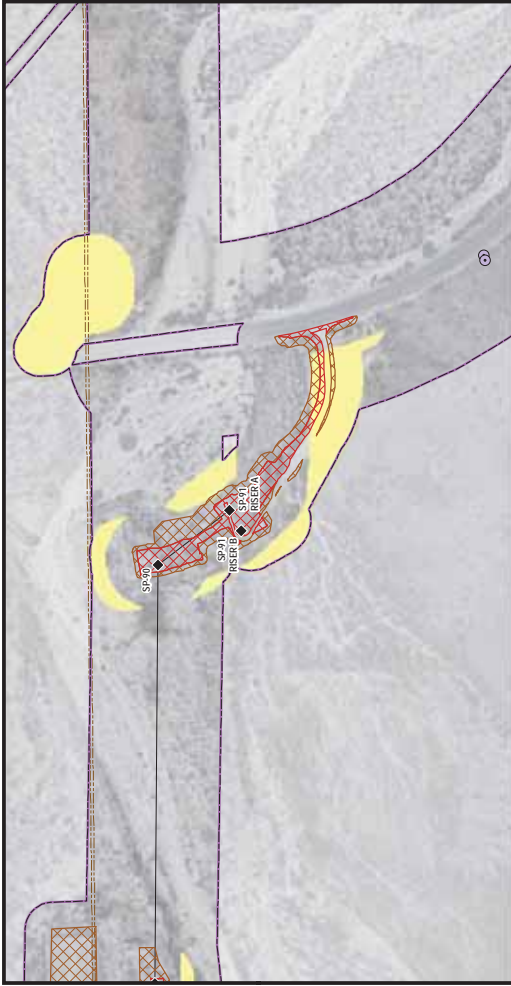
DRAINAGE SURVEY



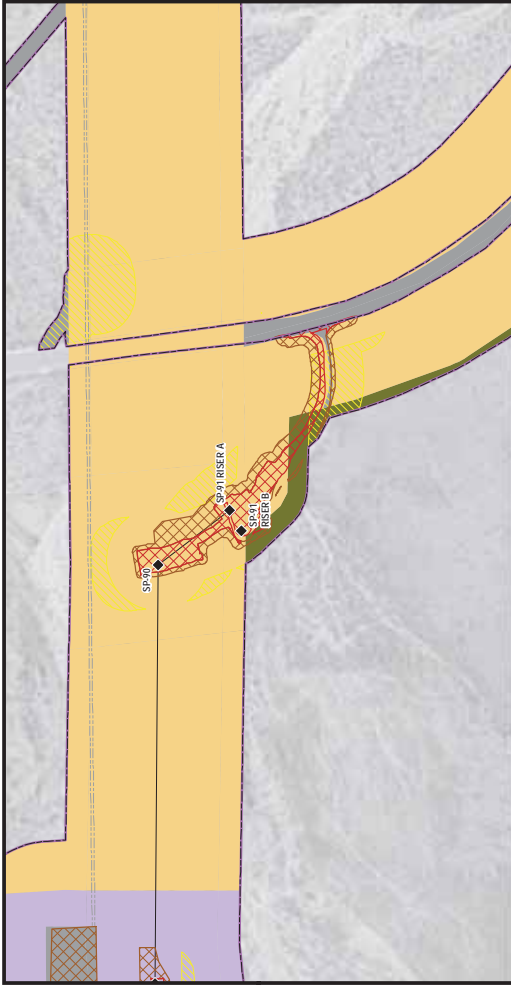
CULTURAL SURVEY



RARE PLANT SURVEY



GENERAL VEGETATION SURVEY



Attachment F: Survey Map 21 of 21

<ul style="list-style-type: none"> Survey Area April 2013 Survey (vegetation shown hatched) Final Design Permanent Temporary 138 kV Pole 138 kV Overhead Line 	<ul style="list-style-type: none"> Jacumba milk-vetch Oceanblue larkspur Palmer's grapplingbrook Stickey gerea Tectate tarplant Jacumba Monkey Flower 	<ul style="list-style-type: none"> Mixed Desert Scrub Oak Woodland Riparian Scrub Developed/Road Shedscale Scrub Existing Transmission Line Existing Access Road Centerline 	<ul style="list-style-type: none"> Vegetation Type Chaparral Chamise-Redshank Disturbed Grassland Fresh Emergent Wetland Juniper Woodland 	<ul style="list-style-type: none"> Survey Data Drainage Rare Plants Campo pea Desert beauty Jacumba Monkey Flower 	<ul style="list-style-type: none"> 138 kV Pole 138 kV Overhead Line
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The existing roads depicted on these maps represent an approximation of the road center. All surveys were conducted using an appropriate buffer from the actual road shoulder. In some instances, drainages were followed to their extent, resulting in the mapping of areas outside of the survey corridor. Rare plants outside of the survey corridor that were observed incidentally are also mapped.

Scale: 1:3,400

0 100 200 400 600 Feet

North Arrow

Logos: SDBE, ANTIIGNIA

Project Path: Z:\Projects\SDBE_ECOWXD\MP\PS\Section2\Section2_Survey%_JL_V2.mxd

Date: 7/25/2013

ATTACHMENT G: EIR/EIS STUDY AREA TABLE

ATTACHMENT G: EIR/EIS STUDY AREA TABLE

Environmental Impact Report/Environmental Impact Statement (EIR/EIS) Study Area Table

Resource	Study Area from Final EIR/EIS	Location in Final EIR/EIS
Biological Resources	<ul style="list-style-type: none"> • Six parcels (498 acres total) on which the East County (ECO) Substation/Southwest Powerlink (SWPL) loop-in are located • 400-foot-wide corridor along the originally proposed 13.3-mile-long 138 kilovolt (kV) overhead transmission alignment, between the proposed ECO and Boulevard substation sites • Existing Boulevard Substation (within the fenced limits) • 8.5-acre Boulevard Substation Rebuild site • 377-acre alternative ECO Substation site¹ • 40 feet from the edge of the disturbed road on each side of the Old Highway 80 – Carrizo Gorge Road underground transmission line route alternative (ECO Partial Underground 138 kV Transmission Route Alternative) • 60-foot-wide corridor along the SWPL to Boulevard portion of the ECO Partial Underground 138 kV Transmission Route Alternative 	<ul style="list-style-type: none"> • Page D.2-3 • Figures D.2-1 through D.2-3 • Proponent’s Environmental Assessment (PEA) Page 4.4-3 • Page C-25 • Old Highway 80 – Carrizo Gorge Road Reroute • Biological Resources and Jurisdictional Drainages Surveys Summary Report • Figure A-3 of San Diego Gas & Electric Company’s comments on the Draft EIR/EIS
Visual Resources	Within five miles of the ECO Substation Project (Project) components and alternatives	Page D.3-3
Land Use	Land underlying and directly adjacent to the Project components and alternatives	Page D.4-1
Wilderness and Recreation	Recreation areas and facilities in southeastern San Diego and southwestern Imperial counties	<ul style="list-style-type: none"> • Page D.5-1 • Figure D.5-1B
Agriculture	All California Department of Conservation Farmland Mapping and Monitoring Program agricultural land in San Diego County	Pages D.6-1 and D.6-2

¹ The approved ECO Substation site is located approximately 700 feet east of the originally proposed location on three parcels totaling 377 acres. Additional information regarding the ECO Substation Alternative Site is provided on page C-25 of the Final EIR/EIS.

Resource	Study Area from Final EIR/EIS	Location in Final EIR/EIS
Cultural and Paleontological Resources	0.5-mile radius from Project components and approved alternatives ²	<ul style="list-style-type: none"> • Pages D.7-2 through D.7-4 regarding information used (distance provided in the PEA section) • Pages C-25 through C-27
Noise	<ul style="list-style-type: none"> • Distance from closest property line or sensitive receptor from each Project component, including the following: <ul style="list-style-type: none"> - Approximately 500 feet from ECO Substation site - Approximately 1,320 feet from SWPL Loop-in site - Approximately 235 feet from the 138 kV transmission line - Approximately 500 feet from the Boulevard Substation site 	Pages D.8-4 and D.8-5
Transportation and Traffic	<ul style="list-style-type: none"> • Roads in the Project vicinity, including the following: <ul style="list-style-type: none"> - Interstate 8 - State Route 94 - Old Highway 80 - Ribbonwood Road - McCain Valley Road - Tule Jim Lane - Jacumba National Cooperative - Carrizo Creek Road - Carrizo Gorge Road - Jewel Valley Road - Several unnamed dirt roads throughout the Project area • San Diego and Arizona Eastern Railway • Jacumba Airport and Empire Ranch airstrip • San Diego Metropolitan Transit Service Bus Route 888, providing service between El Cajon and Jacumba, California 	Figures D.9-1A and D.9-1B

² The approved alternatives include the ECO Substation Alternative Site, as well as the ECO Partial Underground 138 kV Transmission Route Alternative alignments. Additional information regarding the approved alternative areas is provided on pages C-25 through C-27 of the Final EIR/EIS.

Resource	Study Area from Final EIR/EIS	Location in Final EIR/EIS
Public Health and Safety	Within two miles of the ECO Substation site and approximately 14-mile-long overhead transmission line alignment	<ul style="list-style-type: none"> • Page D.10-2 • Page ES-1 of the Phase I Environmental Site Assessment of the 377-acre ECO Substation site parcels • Page 5 of the Limited Phase I Environmental Site Assessment for the transmission alignment
Air Quality	San Diego Air Basin	Page D.11-6
Water Resources	Colorado River Basin	Page D.12-2
Geology, Mineral Resources, and Soils	<ul style="list-style-type: none"> • Within 40 miles for faults • Within 0.5 mile of land underlying Project components and alternatives 	Page D.13-1, Figure D.13-1
Public Services and Utilities	<ul style="list-style-type: none"> • Within 60 miles for landfills • Within five miles for all other public services and utilities 	Page D.14-27
Fire and Fuels Management	Greater eastern San Diego County	Page D.15-1, Figures D.15-1A and D.15-1B
Social and Economic Conditions	Mountain Empire Subregion (Jacumba, Boulevard, Tecate, Potrero, and Campo)	Page D.16-2
Environmental Justice	Mountain Empire Census County Division	Page D.17-1
Climate Change	California	Page D.18-2