

Environmental Minor Project Refinement Form



Project Name: ELM Series Capacitor Project Request Prepared By: Barnard Construction

Date Approval Required: October 1, 2021 Variance Request No.: CPUC #4

Date Submitted: September 24, 2021 Location: M22-T2, M24-T5, M66-T2, M69-T1, M128-T1, Apple Valley Hydrant, Fenner Yard

Landowner: See Table 1

Landowner Parcel Number: See Table 1

Current Vegetative Cover/Land Use: See Table 2

Existing Sensitive Resource? NO YES Specify: See "Biological Resources"

Modifying (check as many as apply): MITIGATION MEASURE PLAN/PROCEDURE SPECIFICATION
 DRAWING PERMIT CONDITION OTHER

Specify Source (e.g., Mitigation Measure B.5): Initial Study/ Mitigated Negative Declaration Mitigation Measure (MM) BR-3: Minimize native vegetation and habitat loss

Description of Change and Justification

Attachments:

PHOTO CONSTRUCTION DRAWING ADDITIONAL ENVIRONMENTAL ANALYSIS CORRESPONDENCE OTHER: _____

OVERVIEW AND DESCRIPTION

SCE proposes the addition of new work areas at 5 tower sites to facilitate the safe installation of optical ground wire (OPGW) along the Lugo-Mohave transmission line. The work includes modifications to strengthen the existing transmission structures where new OPGW splice structures will be installed, as well as helicopter and ground based assisted wire-pull activities. These activities are described in the Final Mitigated Negative Declaration (CPUC, 2019) and are consistent with the work to be performed in the new work areas.

The expansion of existing structure work areas is proposed at 5 structures, including M22-T2, M24-T5, M66-T2, M69-T1, and M128-T1, as shown in Figure 1, pages 1, 2, 3, 4, and 5. The expansion of a wire stringing site is proposed at M128-T1 (located on California State Lands surrounded by the Mohave National Preserve), as shown in Figure 1, page 5. Walking paths between the tower pull sites are proposed for 1 structure site, M128-T1, as shown in Figure 1, page 5. The additional work areas include a total temporary disturbance area of 0.90-acre. The proposed work areas are located entirely within the SCE Lugo-Mohave Transmission Line Right-of-Way, are contiguous with previously-approved temporary disturbance areas, and are requested in the interest of worker safety.

The new work areas may be used to stage material, equipment, and personnel during pulling and tensioning activities, as well as during structural modification of the existing splice towers, which will include ground wire peak modifications, body modifications, and/or bent steel repairs. Construction personnel will walk along the designated footpaths shown in Figure 1, page 5 to safely pull the OHGW/OPGW during installation. Prior to using the new work areas and walking paths, the areas will be cleared by approved environmental monitors who will identify sensitive resources that could potentially be impacted by construction, so that appropriate safeguards can be put in place, prior to the commencement of work activities. Impacts to vegetation will be avoided as practical.

Proposed Water Source and Staging Area

Water trucks will park in the concrete surfaced areas shown in Figure 1, pages 6 and 7, to fill water transportation vehicles. Water will be stored in water trucks in approved yards and parking areas or will be hauled directly to work sites for use as dust control. Only occasional short-term filling of water trucks will occur at the water sources, while allowing access to local land uses. No ground disturbance will occur at the water source locations.

Table 1 provides property ownership information for each new work area.

Table 1: Property Information			
Proposed Feature ID	APN/Location	Owner	Figure 1, page
M22-T2_SWA_Expansion	43506249 43506243, 43506248	Islamic Center, of Claremont Southern California Edison Company	1
M24-T5_SWA_Expansion	46415101	Norris, Mary Ann	2
M66-T2_SWA_Expansion (A, B)	52925114	Southern California Edison Company	3
M69-T1_SWA_Expansion	55203124	Southern California Edison Company	4
M128-T1_SWA_Expansion	65603118	State of California	5
M128-T1_WSS_Expansion (A, B)	65603118	State of California	5
M128-T1_PATH (A, B)	65603118	State of California	5
Apple Valley Hydrant	13500 Algonquin Rd, Apple Valley, CA	Liberty Utilities	6
Fenner Water Source	65524114	Zeinaty, Bishara & Najah Family Trust	7

ALTERNATIVE CONSIDERATIONS

An alternatives analysis included a “no perform” option, which is not possible since structural modification of the existing splice towers, including ground wire peak modifications, body modifications, and/or bent steel repairs are required to support the additional loading placed on the towers during OPGW pulls and splicing. The tower modifications must be completed to safely support the structures during installation, as well as during operation of the circuit and associated equipment.

ENVIRONMENTAL ANALYSIS

A desktop environmental analysis was performed to determine the potential for impacts to sensitive resources to occur during implementation of the approved activities within the proposed work areas. The analysis relied upon information from publicly available datasets and data collected for the project during the licensing/permitting and construction phases of the project.

BIOLOGICAL RESOURCES

The proposed work areas are located within the study area for previous habitat assessments and focused/protocol surveys, as well as recent preconstruction surveys for the project (FRED Survey Form 000021, 000042, 000057, 000062, 000133). A desktop analysis of publicly available data (e.g., CNDDDB) and relevant project data (e.g., data from focused/protocol surveys and FRED) were reviewed to determine the potential for special-status species to occur in the proposed work areas, and to assess the potential impacts to biological resources.

Site Description

The proposed work areas are extensions of previously approved SWAs associated with existing project structures where splicing will occur. The areas are dominated by *Larrea tridentata*-*Ambrosia dumosa* Shrubland (creosote bush - white burr sage scrub), *Larrea tridentata* Shrubland (creosote bush scrub), *Atriplex polycarpa* Shrubland (allscale scrub), *Yucca schidigera* Shrubland (Mojave yucca scrub), *Senegalia greggii* - *Hyptis emoryi* - *Justicia californica* Shrubland (catclaw acacia - desert lavender - chuparosa scrub), or active agriculture, with some portions of the proposed work areas including the existing developed/disturbed areas associated with the existing stub roads and Operations and Maintenance (O&M) clearance areas.

Table 2 presents the land cover types within each proposed work area.

Table 2 Impacts to Vegetation Communities and Land Cover Types in Proposed Splice Site Work Areas (acres)

Vegetation Type	M22- T2_SWA_Expansion	M24- T5_SWA_Expansion	M66- T2_SWA_Expansion (A, B)	M69- T1_SWA_Expansion	M128- T1_SWA_Expansion	M128- T1_WSS_Expansion (A, B)	TOTAL
<i>Larrea tridentata</i> - <i>Ambrosiadumosa</i> Shrubland Creosote bush - white burr sage scrub	0.00	0.00	<0.01 (A)	0.00	0.01	0.12	0.13
<i>Larrea tridentata</i> Shrubland Creosote bush scrub	0.00	0.00	0.15 (A) 0.03 (B)	0.19	0.00	0.00	0.37
<i>Atriplex polycarpa</i> Shrubland Allscale scrub	0.15	0.00	0.00	0.00	0.00	0.00	0.15
<i>Yucca schidigera</i> Shrubland Mojave yucca scrub	0.00	0.00	0.00	0.00	0.09	0.00	0.09
<i>Senegalia greggii</i> - <i>Hyptis</i> <i>emoryi</i> - <i>Justicia californica</i> Shrubland Catclaw acacia - desert lavender - chuparosa scrub	0.00	0.00	0.00	0.00	0.00	0.02	0.02
Active Agriculture	0.00	0.07	0.00	0.00	0.00	0.00	0.07
Disturbed/Developed	0.07	0.00	0.00	<0.01	<0.01	0.00	0.07
TOTAL	0.22	0.07	0.15 (A) 0.03 (B)	0.19	0.10	0.13	0.90

Nesting Birds

Suitable substrates for nesting birds protected by the California Fish and Game Code and Migratory Bird Treaty Act, including trees, shrubs, man-made structures, and the ground surface, can be found throughout the Project area. Golden eagle nest buffers (FRED Nest Events 000159, 000160, 000166, 000167, 000169, 000172, 000173, 000175, 000176, 000213) overlap M24-T5_SWA_Expansion (see **Golden Eagle** discussion below). Non-breeding season nest observations are currently underway to confirm status of these nests. No other active nest buffers intersect the proposed work areas at this time. An inactive common raven nest (*Corvus corax*) (FRED Nest Event 0000234) is located near M66-T2_SWA_Expansion (Figure 1, page 3). An inactive red-tailed hawk nest (*Buteo jamaicensis*) (FRED Nest Event 0000127) (previously unknown stick nest [FRED Nest Event 0000104]) is located near M69-T1_SWA_Expansion (Figure 1, page 4). Loggerhead shrike (FRED Species Event 000280, 000665, 000722) has also been observed near M69-T1_SWA_Expansion, along with prairie falcon (*Falco mexicanus*) (FRED Species Event 000504, 000583, 000718) (Figure 1, page 4).

A preconstruction survey for nesting birds will be conducted prior to the initiation of construction activities during the avian breeding season (Jan 1 – Aug 31). If active nests are identified, avoidance buffers will be established in accordance with the project NBMP. With implementation of the NBMP, no impacts are anticipated.

Special-Status Riparian Birds

No suitable habitat for riparian birds (least Bell's vireo or southwestern willow flycatchers) occurs within 500 feet of the proposed work areas. Therefore, no impacts are anticipated.

Golden Eagle

Based on a review of USFWS data and both aerial habitat assessments and protocol surveys conducted for the Project, suitable nesting habitat and many historical nest records for golden eagles are located within 2 miles of the proposed work areas. At M24-T5_SWA_Expansion, the closest golden eagle nest record was 0.4-mile southwest in the Lucerne Valley (FRED Nest Event 0001770). However, focused protocol surveys conducted in April 2021 confirmed that no nest is present in that location and the nest is considered inactive. A cluster of historic golden eagle nest records are located south of transmission structure M24-T5 in the Granite Mountains and Lucerne Valley (FRED Nest Events 000159, 000160, 000166, 000167, 000169, 000172, 000173, 000175, 000176, 000213), the buffers of which overlap the proposed expansion area. Non-breeding season nest observations are currently underway to confirm status of these nests.

Work activities are not proposed to occur during the golden eagle breeding season. Therefore, no active golden eagle nests are expected to be located within 1 mile of the splicing and wire-pull activities. If the proposed work activities are planned during the golden eagle breeding season, a 1-mile buffer will be implemented for all active golden eagle nests unless buffer reductions are implemented in coordination with the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW).

Burrowing Owl

The entire Project is within the overall range of the burrowing owl and burrowing owl habitat is widespread across its footprint, including on/near the proposed work areas. No burrowing owls, burrows, or sign have been observed in or near the proposed work areas during previous surveys for the Project.

A preconstruction survey will be conducted prior to the initiation of construction activities in the proposed work areas. If any burrowing owl are found during the preconstruction survey or construction activities, potential impacts will be addressed according to the Burrowing Owl Plan.

Special-Status Bats

No rocky outcrops or trees potentially providing suitable roosting habitat for bat species will be affected by the proposed work. Therefore, no impacts are anticipated.

Special-Status Small Mammals

Special-status small mammals such as the American badger, desert kit fox, and/or ringtail can occur in many parts of the Project area, as suitable habitat is widespread. Based on the existing data reviewed, Project-specific survey records, and habitat conditions observed during surveys, the desert kit fox and American badger are assumed to be potentially present regionally. American badgers were observed 700 feet east and 810 feet southwest of M69-T1_SWA_Expansion

(FRED Species Event 000001, 000259) (Figure 1, page 4). Suitable habitat for the ringtail is present in the region, but is limited in extent to riparian areas and some desert mountains. M24-T5_SWA_Expansion is located within two miles of Lucerne Lake. Lucerne Lake is an unvegetated lake bed with high saline levels and periodic inundation and the associated portion of Argos wash does not consist of any riparian habitat; however, ringtail may have potential to occur temporarily through utilization of the associated corridors for movement through the region. If any special-status small mammals are found during the preconstruction survey or construction activities, potential impacts will be addressed according to the Desert Kit Fox, American Badger, and Ringtail Avoidance and Mitigation Plan and mitigation measures.

Desert Bighorn Sheep

Suitable habitat for desert bighorn sheep is present on the Project and this species is known to occur. However, no desert bighorn sheep have been previously observed in the vicinity of the proposed work areas. With monitoring, no impacts are anticipated.

Desert Tortoise

The proposed work areas are located within suitable desert tortoise habitat as determined by vegetation types and ground cover. Protocol-level desert tortoise surveys were previously conducted across the project, including these work areas. Based on previous project-specific surveys, there are multiple recorded occurrences of desert tortoise sign in the vicinity of M66-T2_SWA_Expansion and M69-T1_SWA_Expansion. A potential desert tortoise burrow was observed 270 feet north of M66-T2_SWA_Expansion (FRED Species Event 000599) (Figure 1, page 3). Several desert tortoise burrows were observed in the vicinity of M69-T1_SWA_Expansion, with the closest being 175 feet north (FRED Species Events 000178, 000179, 000181, 000668000671, 000672, 000673, 000674), along with one desert tortoise carcass identified 350 feet to the northwest (FRED Species Event 000566, Mortality Event 000050) (Figure 1, page 4).

A preconstruction survey will be conducted prior to the initiation of construction activities in the proposed work areas. If any desert tortoises are found during the preconstruction survey or construction activities, potential impacts will be addressed through implementation of appropriate mitigation measures and biological monitoring.

Special-Status Terrestrial Herpetofauna

One observation of Mohave fringe-toed lizard was recorded 200 feet northwest of M69-T1_SWA_Expansion (FRED Species Event 000596) (Figure 1, page 4). Although only Mohave fringe-toed lizard was observed, many special-status terrestrial herpetofauna species have the potential to occur throughout the Project area. A preconstruction survey will be conducted prior to the initiation of construction activities in the additional work areas. If any special-status terrestrial herpetofauna are found during the preconstruction survey or construction activities, potential impacts will be addressed through implementation of the mitigation measures. If Mohave fringe-toed lizard are present in the proposed work areas, a biological monitor will be present to assist with the location of equipment to avoid crushing this species.

Special-Status Plants

Project-specific protocol rare plant surveys were conducted in survey areas including all of the proposed work areas. No special-status plants were observed within the proposed work areas.

The work is scheduled to occur outside the growing season for most special-status annuals, and due to drought conditions, many annuals and event perennial herbs are not currently present. Given these conditions and considering that the activities involve drive and crush, no impacts to special-status plants are anticipated.

In general, if special-status plants are observed, potential impacts to special-status plants will be addressed in accordance with the Special-Status Plant Salvage and Relocation Plan.

Cacti, Yucca, and Trees

A preconstruction survey will be conducted prior to the initiation of construction activities in the proposed work areas. Any cacti and yucca found during the preconstruction survey or construction activities will be avoided to the extent feasible. Unavoidable impacts to cacti and yucca will be addressed in accordance with the Cacti and Yucca Salvage Plan.

CULTURAL RESOURCES

A desktop analysis was conducted to determine the presence of and potential impacts to cultural resources within and directly surrounding the proposed work area.

The proposed work areas are located within the APE for the project. Work area M22-T2_SWA_Expansion is located within a historic site, which is not eligible for the National Register of Historic Places. As such no monitoring is required at this location. M66-T2_SWA_Expansion is located within a prehistoric unevaluated / historic ineligible site where tribal monitoring is required during construction. No impacts to cultural resources are expected in the other work areas, as no previously recorded cultural resources are located within or in proximity to the proposed areas. Since no ground disturbing activities are expected, there is little potential for unanticipated discovery of previously unrecorded cultural resources. If cultural resources are encountered unexpectedly, a standard work stoppage will be implemented, and a qualified archaeologist contacted. The discovery would then be addressed in accordance with the project's CRMP.

PALEONTOLOGICAL RESOURCES

Since excavation is not proposed within the scope of work to be conducted in the new work areas, no impacts to paleontological resources are expected. If earth disturbance is required with impacts greater than 5' in depth, further analysis by an approved paleontological monitor will be required to assess impacts in "unknown areas" (M69_T1_SWA_Expansion) and full time monitoring of excavation in highly sensitive areas will be required per the Project's Paleontological Resources Monitoring Plan for sites in high sensitivity areas (M66-T2_SWA_Expansion).

JURISDICTIONAL WATERS

No wetlands or other jurisdictional waters are present within the proposed work areas associated with M22-T2, M24-T5, or M69-T1 or in the surrounding vicinity.

The work area associated with M66-T2 has been separated into north and south components (M66-T2_SWA_Expansion_A and M66-T2_SWA_Expansion_B) to avoid the mapped jurisdictional feature that bisects the area (Figure 1, page 3). The north and south components will only be accessed from the north and south, respectively; therefore, the jurisdictional feature will be avoided. In addition, the disturbance limits will be clearly staked at the boundaries of the feature.

The proposed wire stringing expansion area associated with M128-T1 also been separated into east and west components (M128-T1_WSS_Expansion_A and M128-T1_WSS_Expansion_B) to avoid the mapped jurisdictional feature that overlaps the area (Figure 1, page 5). The work area components will be accessed away from the feature and disturbance limits will be clearly staked at the boundaries of the feature. Therefore, the jurisdictional feature will be avoided.

CONCLUSION

Based on close examination and analysis of the proposed work areas and scope of work, no environmental constraints that warrant further review or would preclude approval of the work areas were identified. With preconstruction clearance surveys and implementation of the project mitigation measures and permit conditions, no additional significant impacts to biological, archaeological, paleontological resources, or jurisdictional waters are anticipated.

Resources:

Biological NO SENSITIVE RESOURCES PRESENT SENSITIVE RESOURCES PRESENT N/A

New Survey Report Attached: YES NO

If No, Previous Biological Survey Reference:

Insignia Environmental. 2018. Revised Biological Resources Technical Report for the Eldorado-Lugo-Mohave Series Capacitor Project. April.

Cultural NO RESOURCES PRESENT RESOURCES PRESENT WITH PROJECT APE: YES NO
 (PAVED/GRAVEL AREA AND NO GROUND DISTURBANCE)

If in APE, Previous Cultural Survey Reference:

Williams, Audry, 2020. Cultural Resources Management Plan For Southern California Edison Company's Eldorado-Lugo-Mohave Series Capacitor Project, San Bernardino County, California, and Clark County, Nevada.

Rincon Consultants, Inc. 2020. Eldorado-Lugo-Mohave Series Capacitor Project, Paleontological Resources Mitigation Plan

If not in APE, attach new survey report.

Other Potential Impacts:

- | | | |
|---|--|--|
| <input type="checkbox"/> AIR QUALITY | <input type="checkbox"/> LAND USE | <input type="checkbox"/> TRAFFIC |
| <input type="checkbox"/> BIOLOGICAL RESOURCES | <input type="checkbox"/> NOISE | <input type="checkbox"/> VISUAL |
| <input type="checkbox"/> CONTAMINATED SOILS | <input type="checkbox"/> PALEO RESOURCES | <input type="checkbox"/> WATER RESOURCES |
| <input type="checkbox"/> CULTURAL RESOURCES | <input type="checkbox"/> SOCIOECONOMIC | <input type="checkbox"/> WETLANDS |
| <input type="checkbox"/> HAZARDOUS MATERIALS | <input type="checkbox"/> STORM WATER (SWPPP) | |

CEQA and Permitting:

1. Will modification involve substantial changes that will require major changes to the CEQA document?
 YES NO
2. Will modification result in new significant environmental effects or a substantial increase in the severity of previously identified impacts?
 YES NO
3. Additional agency notifications and/or permit modifications required? YES NO

Conditions of Approval or Reasons for Denial:

Required Signatures:

SCE Construction Manager:

Name: Jeff Miller Signature: _____ Date: 9/24/21

SCE Real Estate Manager:

Name: Stephanie Tsai Signature: _____ Date: 9/24/21

SCE Environmental Project Manager:

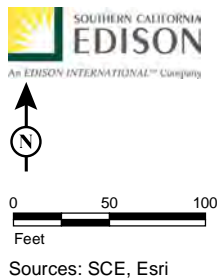
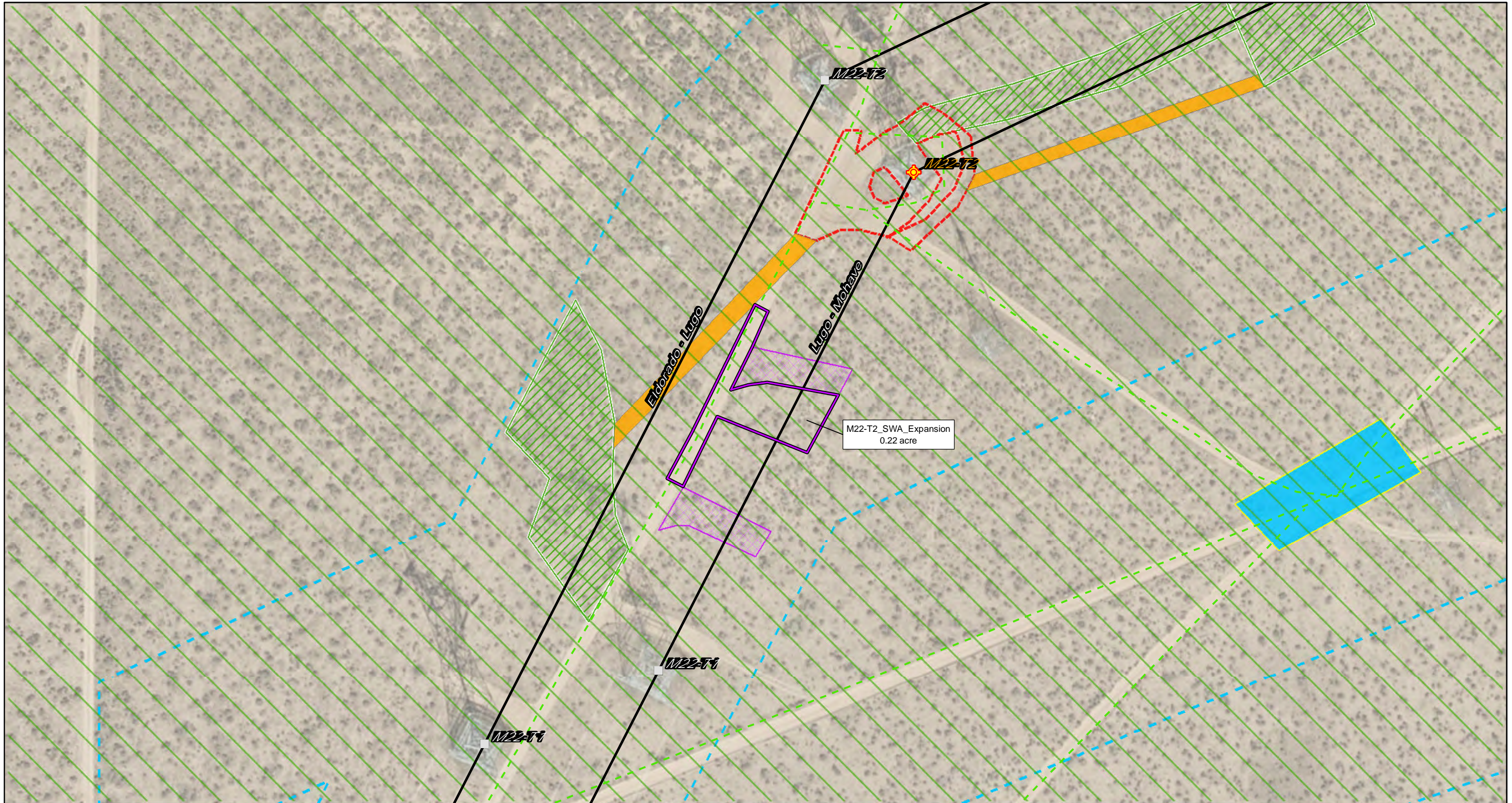
Name: Sylvia Granados Signature: _____ Date: 9/24/21

SCE Project Manager:

Name: Selya Arce Signature: _____ Date: 9/24/21

Environmental Compliance Lead:

Name: Cara Snellen Signature: _____ Date: 9/24/21



Sources: SCE, Esri

Legend

- Proposed Work Area
- Right-of-Way
- Existing Transmission Line
- Existing
- ⊕ OPGW Splicing
- Approved Existing Access Roads
 - Non-Paved
- Approved New Access Features
 - Travel Path
- Approved Construction Work Areas
 - Guard Site
 - Helicopter Landing Zone
 - OPGW Pull Site
- New Structure Work Area
- Biological Habitat/Jurisdictional Waters
 - Desert Tortoise Suitable Habitat

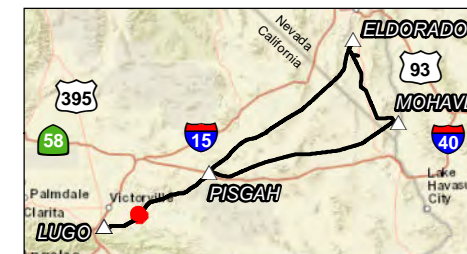


FIGURE 1
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Southern California Edison
Eldorado-Lugo-Mohave
Series Capacitor Project
Proposed Work Areas
MPR #1

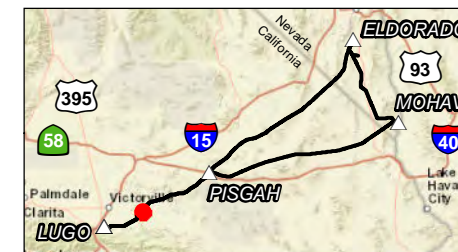
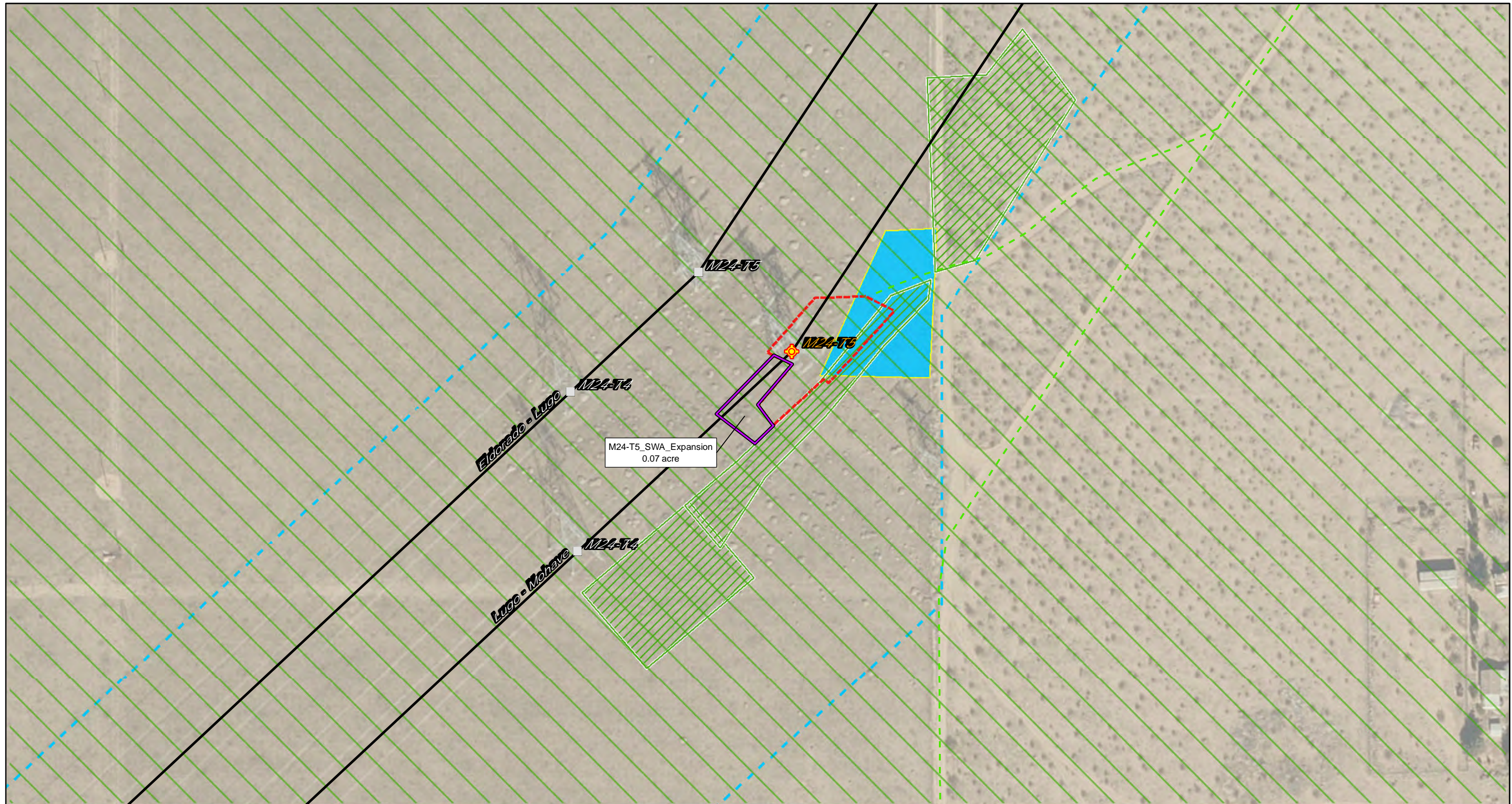
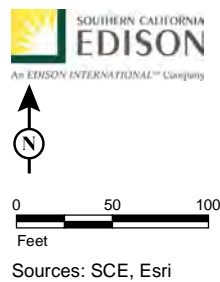
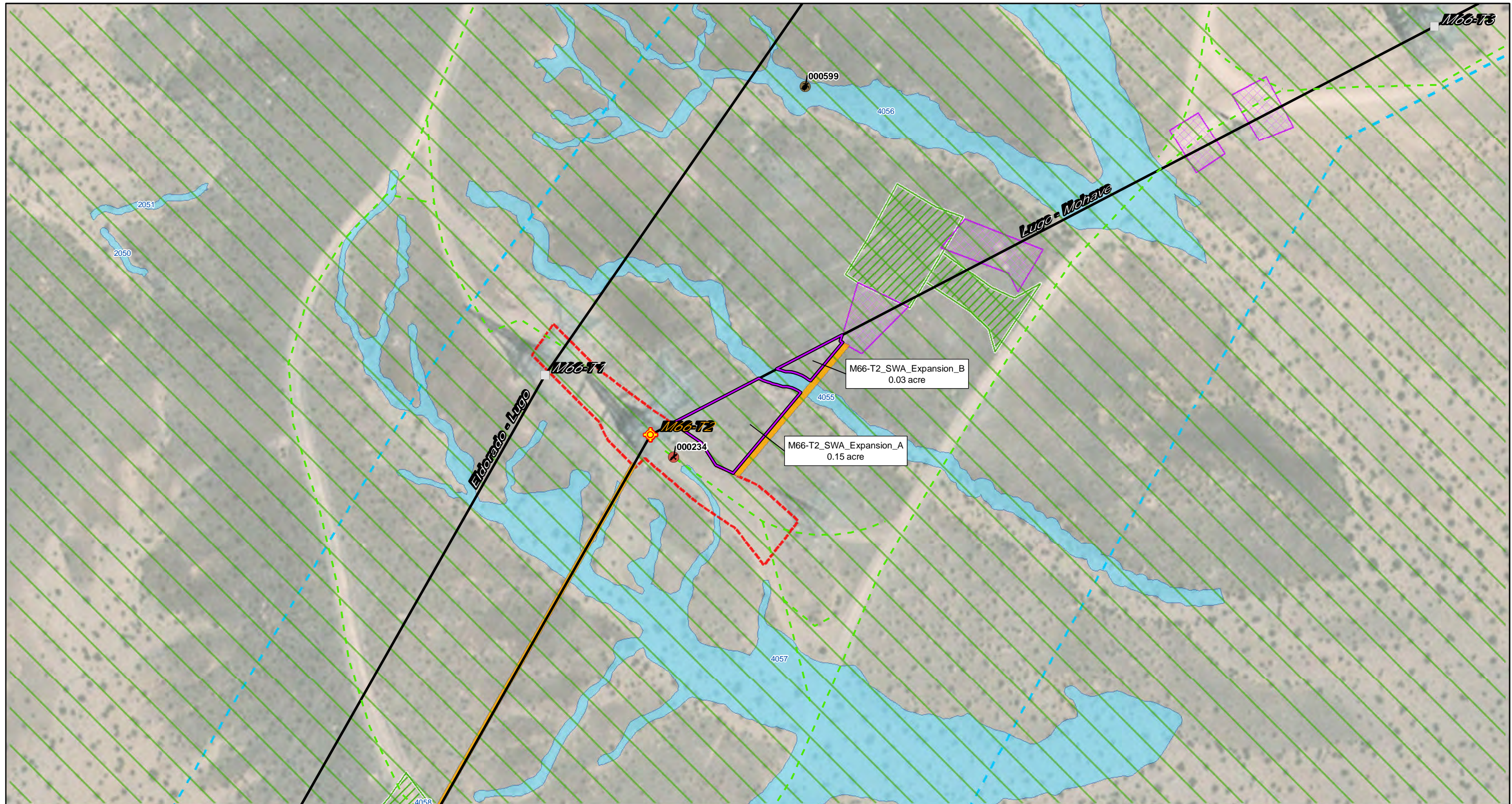


FIGURE 1
PAGE 2 OF 7



Sources: SCE, Esri

Legend

- Proposed Work Area
- Right-of-Way
- Existing Transmission Line
- Transmission Structures**
- Existing
- OPGW Splicing

- Approved Existing Access Roads**
- Non-Paved
- Approved New Access Features**
- Travel Path
- Approved Construction Work Areas**
- Guard Site
- OPGW Pull Site
- New Structure Work Area

Biological Habitat/Jurisdictional Waters

- Desert Tortoise Suitable Habitat
- Non-wetland Waters
- USACE/RWQCB Jurisdiction
- FRED Nest Events**
- Common Raven
- FRED Species Events**
- Desert Tortoise

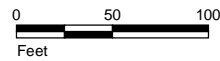
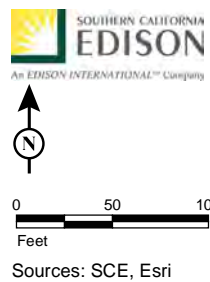
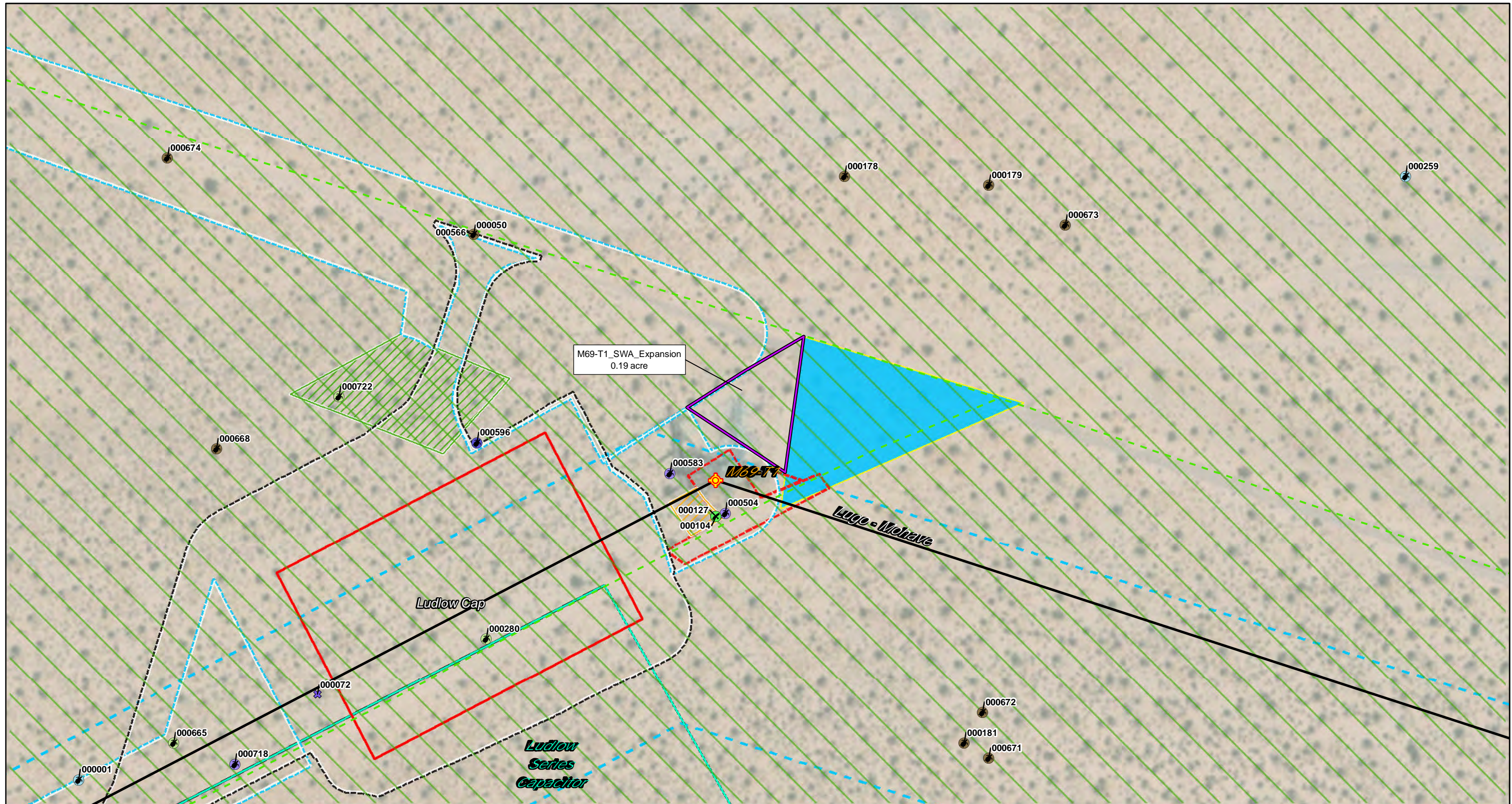


FIGURE 1
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Southern California Edison
Eldorado-Lugo-Mohave
Series Capacitor Project
Proposed Work Areas
MPR #1





Legend

- Proposed Work Area
- Capacitor Boundary
- Material Laydown Yard
- Right-of-Way
- Existing Transmission Line
- OPGW Splicing
- Approved Existing Access Roads
 - Non-Paved
- Approved Construction Work Areas
 - Equipment Setup Area
 - Helicopter Landing Zone
 - OPGW Pull Site
 - Potential Work Areas
 - Series Capacitor Work Area

- New Structure Work Area
- Biological Habitat/Jurisdictional Waters**
 - Desert Tortoise Suitable Habitat
- FRED Nest Events**
 - Red-tailed Hawk
 - Unknown Species

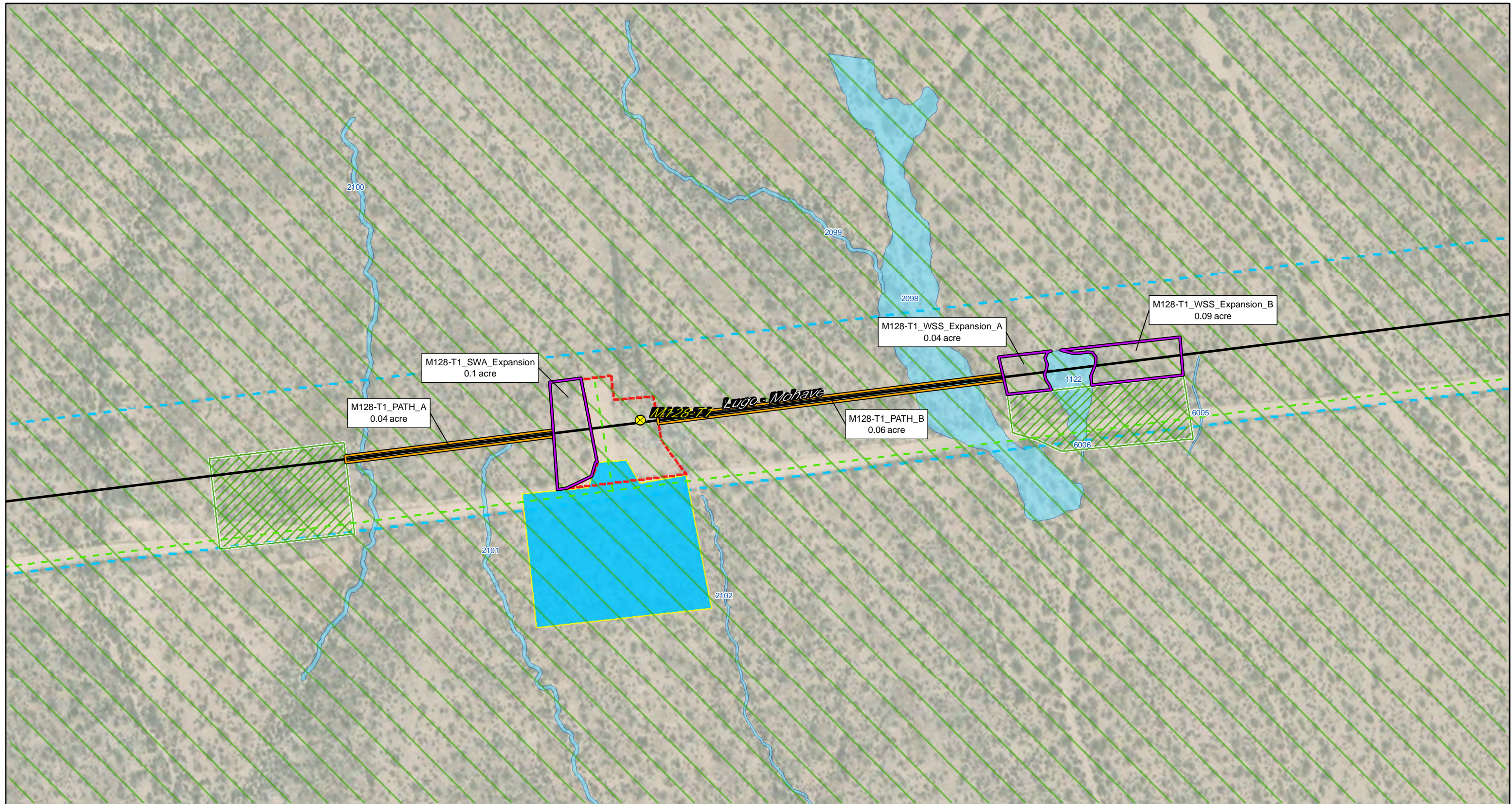
- FRED Species Events**
 - American Badger
 - Desert Tortoise
 - Loggerhead Shrike
 - Mojave fringe-toed lizard
 - Prairie Falcon

- FRED Mortality Events**
 - Desert Tortoise
 - Nashville Warbler



FIGURE 1
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Southern California Edison
Eldorado-Lugo-Mohave
Series Capacitor Project
Proposed Work Areas
MPR #1



SOUTHERN CALIFORNIA EDISON
 An EDISON INTERNATIONAL Company

0 50 100
 Feet

Sources: SCE, Esri

Legend

- Proposed Work Area
- Proposed Walking Path
- Right-of-Way
- Existing Transmission Line
- Transmission Structures**
 - OPGW Modification
- Approved Existing Access Roads**
 - Non-Paved
- Approved Construction Work Areas**
 - Helicopter Landing Zone
 - OPGW Pull Site
 - New Structure Work Area
- Biological Habitat/Jurisdictional Waters**
 - Desert Tortoise Suitable Habitat
 - Non-wetland Waters USACE/RWQCB Jurisdiction

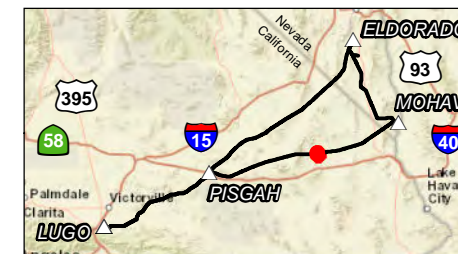


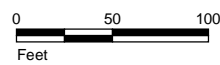
FIGURE 1
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Southern California Edison
 Eldorado-Lugo-Mohave
 Series Capacitor Project
Proposed Work Areas
 MPR #1



Legend

- Proposed Work Area
- X Existing Hydrant/Wellhead
- Biological Habitat/Jurisdictional Waters**
- /// Desert Tortoise Suitable Habitat



Sources: SCE, Esri

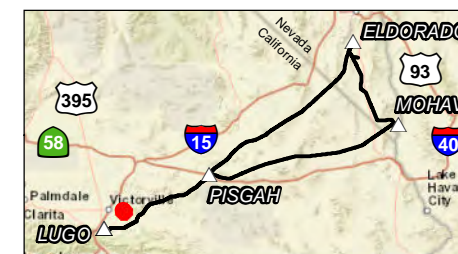
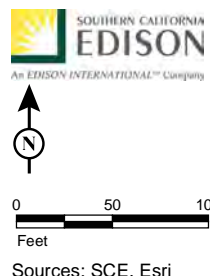


FIGURE 1
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Southern California Edison
Eldorado-Lugo-Mohave
Series Capacitor Project
Proposed Work Areas
MPR #1





- Legend**
- Proposed Work Area
 - x Existing Hydrant/Wellhead
 - Material Laydown Yard
 - Approved Existing Access Roads**
 - Paved
 - Biological Habitat/Jurisdictional Waters**
 - /// Desert Tortoise Suitable Habitat

Sources: SCE, Esri

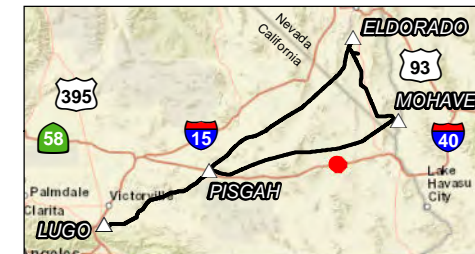


FIGURE 1
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Southern California Edison
Eldorado-Lugo-Mohave
Series Capacitor Project
Proposed Work Areas
MPR #1

