

C. Mitigation Monitoring Plan

Southern California Edison (SCE) has proposed the Viejo System Project (proposed project) to respond to growth in electrical service demand and maintain system reliability in southern Orange County. The proposed project includes construction of the 220/66/12 kilovolt (kV) Viejo Substation on a 12.5-acre site located in the City of Lake Forest, and a 3.1-mile 66 kV subtransmission line along the corridor between the proposed Viejo Substation and the existing Chiquita Substation located in the City of Mission Viejo. In addition, the proposed project would include the replacement of 19 double-circuit tubular steel poles with 13 H-frame structures capable of carrying four 66 kV circuits, and the installation of two optical ground wires. SCE's project objective is to improve reliability and meet projected electrical load requirements in the south Orange County area.

An Initial Study was prepared to assess the proposed project's potential environmental effects. The Initial Study was prepared based on information in the Proponent's Environmental Assessment (PEA), project site visits, and supplemental research. The majority of the proposed project's impacts would occur during project construction. Within SCE's application, Applicant-Proposed Measures (APM) were proposed to reduce potentially significant adverse impacts related to project construction and operation.

The purpose of this Mitigation Monitoring Plan is to ensure effective implementation of the APM, as well as mitigation measures imposed by the CPUC and SCE agreed to by SCE.

This plan includes:

- The mitigation measures, which SCE must implement as part of the proposed project, followed by the Applicant-Proposed Measures that SCE has made part of the proposed project and is responsible for implementing;
- The actions required to implement these measures;
- Monitoring requirements; and
- Timing of implementation for each measure (see Table C-2).

A CPUC-designated environmental monitor shall carry out all construction field monitoring by to ensure full implementation of all measures. In all instances where non-compliance occurs, the CPUC's designated environmental monitor shall issue a warning to the construction foreman and SCE's project manager. Continued non-compliance shall be reported to the CPUC's designated project manager. Any decisions to halt work due to non-compliance shall be made by the CPUC. The CPUC's designated environmental monitor shall keep a record of any incidents of non-compliance with mitigation measures, APM, or other conditions of project approval. Copies of these documents shall be supplied to SCE and the CPUC.

Major Required Plans and Reports

The mitigation measures and permitting requirements of various other regulating agencies require SCE to prepare several plans and obtain approval for these documents prior to construction of the Viejo System Project. Major requirements are listed in Table C-1.

Table C-1. Major Plans and Reports Required to be Submitted by SCE

Plan Report Title	Mitigation Measure (or APM)	Required to Initiate Construction
Landscape Screening Plan	A-1, APM A-1	Yes
Lighting Mitigation Plan	A-2	Yes
Construction schedule	AQ-1	Yes
Location of materials and construction equipment	AQ-2	No
Maintenance records	AQ-3, AQ-5	No
NCCP	BIO-4, APM B-1	Yes
Worker Environmental Training Plan (WEAP)	BIO-1	Yes
Record of names of all project personnel receiving WEAP training and signed record	BIO-1	Yes
Training logs, hardhat stickers, or verification cards	BIO-1	Yes
Construction drawings/maps	BIO-3	Yes
Documentation of pre-construction foothill mariposa lily surveys	BIO-4, APM B-1	Yes
Stormwater Pollution Prevention Plan (SWPPP)	BIO-4, BIO-9, APM B-4	Yes
Documentation of pre-construction raptor surveys	BIO-6	Yes
Streambed Alteration Agreement (or documentation the SAA is not necessary)	BIO-7	No (Yes for riparian areas)
Schedule of restoration and revegetation of areas disturbed by project construction	BIO-8	No
Coastal sage scrub survey	APM B-3	Yes
Documentation of pre-construction briefings prior to working in sensitive species habitat	APM B-3	Yes
Cultural resources data recovery plan (CA-ORA-95)	CR-1	No
Construction drawings or maps that clearly identify project areas to be avoided during construction of the project	CR-1	Yes
Geotechnical studies	GEO-1	Yes
Business and residential notification letter	APM N-7	Yes
Documentation of recreation postings	R-1	No
Work Area Protection and Traffic Control Manual	APM HZ-1, HW-1, P-1, T-1	Yes

The CPUC also reviews these documents. Table C-1 includes some plans that are not required prior to construction, but which would likely be submitted during the construction phase. These plans and reports would be reviewed within 30 days of the CPUC's receipt of the completed submittal.

Review Procedures

The CPUC monitoring team, including the CPUC project manager and technical experts, will review all reports and provide comments. Comments will be provided to SCE on these documents to devise an effective and feasible plan to accomplish the intended reduction in impacts, including assurance that objective performance criteria are in place before monitoring begins. Deliverables sent to SCE and the CPUC will include a report on each plan or permit reviewed, in addition to a copy of the plan itself with marginal notes or comments, if appropriate. Each plan will be approved, once it is determined that it is in compliance with the required mitigation measure and that changes (if required) have been made.

Reference Documents

Documents that guide the field monitoring efforts, and which will serve as essential references for the Viejo System Project, include the following:

- Figure C-1: Unanticipated Biological Resource Discovery Flowchart
- Figure C-2: Temporary Extra Work Space Request Sheet
- Figure C-3: Unanticipated Discovery of Cultural Resources Flowchart
- Figure C-4: Unanticipated Discovery of Human Remains Flowchart

Note: These figures appear after Table C-2.

Table C-2. Mitigation Monitoring Plan

Impact	Measure	Monitoring Requirements	Timing of Action
MITIGATION MEASURES			
Aesthetics			
Views from Edison Trail	A-1: SCE shall design and implement a landscape-screening plan that is effective in screening the proposed Viejo Substation from views from the Edison Trail. The Screening Plan shall include the strategic planting of trees and appropriate shrubs of sufficient height and density to screen views of the substation, to the extent possible, within five years of completion of substation construction. The Screening Plan shall be developed in consultation with the CPUC's Aesthetics Specialist to ensure the Plan would effectively meet the objectives of this measure. The Plan shall be submitted to the CPUC for review and approval during project design. The CPUC must approve the Screening Plan prior to implementation and the start of any construction. SCE must fully implement the plan within 30 days of the completion of the substation.	<ul style="list-style-type: none"> • SCE shall submit landscape plan to CPUC for approval prior to construction. • SCE shall verify annual vegetation progress and compliance with specified five-year timeframe. • CPUC monitor shall confirm implementation and timing of landscape plan. 	Prior to, during, and after construction.
Light and Glare	<p>A-2: SCE shall design and install all permanent lighting at the Viejo Substation such that:</p> <ul style="list-style-type: none"> • Light bulbs and reflectors are not visible from public viewing areas including residential developments and nearby roads, • Lighting does not cause reflected glare, and • Illumination of the project, the vicinity, and the nighttime sky is minimized. <p>To meet these requirements, SCE shall submit a Lighting Mitigation Plan to the CPUC that includes but is not necessarily limited to the following:</p> <ul style="list-style-type: none"> • Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light source is shielded to prevent light trespass outside the project boundary; • All lighting shall be of minimum necessary brightness consistent with worker safety; • High illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied. 	<ul style="list-style-type: none"> • SCE shall submit Lighting Mitigation Plan to CPUC for approval prior to construction. • CPUC shall verify that light bulbs and reflectors are not visible from public viewing areas. • SCE shall maintain all records of lighting complaints and resolutions for periodic CPUC review. 	Prior to, during, and after construction.
Air Quality			
NOx Emissions from Construction Equipment	AQ-1: To reduce simultaneous project-related NOx emissions from on-highway haul trucks and off-road heavy construction equipment, given the constraints of the construction schedule, SCE shall phase project construction, to the extent feasible, so that off-site disposal of excavated material from Viejo Substation grading and excavation does not occur simultaneously with transmission line construction or modification activity (including, but not limited to, access grading, excavation for tower bases, crane pads, tower delivery, or tower erection). During transmission line construction or modification, SCE shall phase the project construction schedule, to the extent feasible, so that grading and excavation for site access, tower bases, or crane pads do not occur simultaneously with tower delivery or erection.	<ul style="list-style-type: none"> • SCE shall provide the CPUC with a construction schedule prior to ground disturbance. • CPUC shall verify that, to the extent possible, ground disturbing activities are not conducted concurrently at sub-station and transmission line sites. 	Prior to and during construction.
NOx Emissions from Construction Equipment	AQ-2: SCE shall obtain competitively bid construction materials, including heavy equipment, from the nearest feasible location, where cost and quality are comparable, and export excavated materials to the nearest feasible destination.	<ul style="list-style-type: none"> • SCE shall provide to the CPUC monitor the location of materials and construction equipment procurement sites. 	Prior to and during construction.

Impact	Measure	Monitoring Requirements	Timing of Action
Construction Emissions	AQ-3: SCE shall use diesel engines that meet, at a minimum, 1996 CARB or U.S. EPA-certified standards for off-road equipment that has a rating of more than 100 horsepower. Installing high-pressure diesel injectors and installing retard injection timing on any off-road equipment that was manufactured prior to 1996 may accomplish this.	<ul style="list-style-type: none"> SCE shall provide maintenance records to the CPUC upon request. 	Prior to and during construction.
Construction Emissions	AQ-4: SCE shall substitute small electric-powered equipment for diesel- and gasoline-powered construction equipment where feasible.	<ul style="list-style-type: none"> SCE shall provide documentation of any electric-powered equipment use to the CPUC monitor upon request. 	Prior to and during construction.
Construction Emissions	AQ-5: SCE shall maintain construction equipment per manufacturing specifications.	<ul style="list-style-type: none"> SCE shall provide maintenance records to the CPUC upon request. 	Prior to and during construction
Construction Emissions	AQ-6: SCE shall prohibit all vehicles from idling in excess of ten minutes if not being utilized for construction activities.	<ul style="list-style-type: none"> CPUC monitor to verify idling restrictions. 	During construction
Biological Resources			
Take of Sensitive Biological or Cultural Resources	<p>BIO-1: SCE shall conduct Worker Environmental Awareness Program (WEAP) training for construction crews. All construction crews and contractors shall participate in WEAP training prior to starting work on the project. The WEAP training shall include a review of the special-status species and other sensitive resources that could exist in the project area (including their life history and habitat requirements), the locations of sensitive biological resources, and their legal status and protection under the U.S. Endangered Species Act of 1973 (6 USC 1536). The education program shall include materials describing sensitive resources, resource avoidance, permit conditions, and possible fines for violations of State or federal environmental laws. The program shall cover the mitigation measures, environmental permits, proposed project plans, reclamation plans, and any other required plans.</p> <p>SCE shall be responsible for ensuring that all project personnel and subcontractors adhere to the guidelines and restrictions set forth in the WEAP training. Training shall be conducted as needed to update crews as they commence work on the project or as crews advance into sensitive areas. Project personnel shall receive a hardhat sticker or be issued a card verifying compliance with the WEAP. In addition, a record of all personnel trained during the project shall be maintained and made available for compliance verification.</p>	<ul style="list-style-type: none"> SCE shall provide the CPUC a copy of the Worker Environmental Training Plan prior to initiation of any project activities. SCE shall maintain the names of all project personnel and a signed record indicating participation on the WEAP Training. CPUC monitor shall verify project personnel have completed WEAP training by verification of training logs, checking hardhat stickers, or checking verification cards. 	Prior to and during construction
Unanticipated Biological Resources	<p>BIO-2: In the event that SCE encounters unanticipated sensitive biological resources outside of the Central and Coastal NCCP (California gnatcatchers, cactus wrens, or other sensitive bird species) or species not covered by the Central or Coastal NCCP, SCE shall halt construction within 250 feet of the biological resources and notify the CPUC within 24 hours. Work shall commence after a qualified biologist, in consultation with the appropriate resource agency and CPUC has determined that impacts to the species will be reduced to less-than-significant levels. See Unanticipated Biological Resource Flowchart in Figure C-1 of the Mitigation Monitoring Plan (Section C).</p>	<ul style="list-style-type: none"> SCE shall notify the CPUC monitor in the event of unanticipated biological resources. CPUC monitor shall verify SCE has coordinated with affected resource agencies concerning unanticipated biological resources. 	Prior to and during construction

Impact	Measure	Monitoring Requirements	Timing of Action
Sensitive Species	BIO-3: SCE shall limit construction activities, staging areas, and access roads to the project footprint defined in the SWPPP, at all times. Prior to construction, SCE shall clearly delineate all work areas, approved access roads, and laydown areas. Use of areas outside the project area will be subject to approval by the CPUC. See Temporary Extra Work Space Request Form, Figure C-2.	<ul style="list-style-type: none"> SCE shall provide construction drawings/maps that clearly designate and identify all areas subject to project disturbance, construction access roads, and laydown areas. CPUC monitor shall verify that construction activities are limited to the project footprint defined in the SWPPP. 	Prior to and during construction
Take of Foothill Mariposa Lily	BIO-4: SCE shall conduct pre-construction surveys in the Central and Coastal NCCP to quantify the number of foothill mariposa lilies present and flag known populations prior to commencing construction.	<ul style="list-style-type: none"> SCE shall provide documentation that pre-construction surveys have been completed for foothill mariposa lily. CPUC monitor shall review documentation and verify number and location of foothill mariposa lilies. 	Prior to and during construction
Biological Resources and Fire Protection	BIO-5: SCE shall remove trash and litter from the project right-of-way at the conclusion of each work week and prohibit open fires (e.g., barbecues), hunting, and pets from the project area.	<ul style="list-style-type: none"> CPUC monitor shall verify that construction waste and litter are removed from the right-of-way. 	Prior to and during construction
Potential Harm to Nesting Raptors	BIO-6: SCE shall conduct project-wide raptor surveys and remove trees, if necessary, outside the nesting season (Feb 1-August 31), if possible. If a tree containing a raptor nest must be removed during the nesting season, SCE shall coordinate with the CDFG and USFWS and obtain written verification prior to moving the nest.	<ul style="list-style-type: none"> SCE shall provide documentation to the CPUC that raptor surveys have been conducted prior to construction. CPUC monitor shall verify the absence of raptors and document any necessary coordination between SCE and affected resource agencies. 	Prior to and during construction
Potential Harm to Jurisdictional Waterways and Riparian Vegetation	BIO-7: Construction equipment and vehicles shall not be operated within riparian habitat without obtaining a Streambed Alteration Agreement or written approval from the CDFG that a Streambed Alteration Agreement is not required. Riparian buffer zones shall be clearly marked for avoidance prior to construction. No removal of native riparian vegetation shall occur unless authorized by the Streambed Alteration Agreement.	<ul style="list-style-type: none"> SCE shall provide to the CPUC the Streambed Alteration Agreement or documentation that the agreement is not required prior to conducting work in any riparian areas. CPUC monitor shall review the Streambed Alteration Agreement and verify SCE complies with any and all required conditions. 	Prior to and during construction

Impact	Measure	Monitoring Requirements	Timing of Action
Coastal Sage Scrub	BIO-8: SCE shall conduct restoration and re-seeding of areas temporarily disturbed by project construction and implemented the restoration plan during the optimal time for seedling establishment.	<ul style="list-style-type: none"> • SCE shall provide to the CPUC a schedule for the restoration and revegetation of areas temporarily disturbed by project construction. • SCE shall provide verification to the CPUC that it has conducted restoration within identified biological time frames. 	During and after construction
Potential Harm to Waters of the State	BIO-9: SCE shall provide a Storm Water Pollution Prevention Plan (SWPPP) for construction activities associated with the Viejo System Project to the CPUC prior to ground disturbance.	<ul style="list-style-type: none"> • CPUC monitor shall verify that SCE implements SWPPP Best Management Practices to minimize sediment transfer from the right-of-way and reduce impacts to waters of the State. 	Prior to and during construction.
Cultural Resources			
Disturbance of Known Cultural Resources	CR-1: SCE shall plan construction to avoid CA-ORA-905 and shall install protective fencing around CA-ORA-905 prior to construction. If avoidance is not feasible, SCE shall submit a data recovery plan to the CPUC for review and approval prior to data recovery. The data recovery plan shall include collection and analysis of all surface artifacts. Locations from where the artifacts were collected shall be documented on a site map using the point provenience method. The plan shall provide for subsurface testing, followed by recovery of a valid sample of subsurface cultural material, if testing indicates its presence. The plan shall also include preparation of a report that provides the results of data recovery.	<ul style="list-style-type: none"> • SCE shall provide construction drawings or maps that clearly identify project areas to be avoided during construction of the project. • SCE shall clearly delineate the area to be avoided in the field prior to construction. • CPUC monitor shall verify site areas and review construction plans. 	Prior to and during construction

Impact	Measure	Monitoring Requirements	Timing of Action
<p>Discovery of Unanticipated Cultural Resources and Human Remains</p>	<p>CR-2: SCE shall immediately halt all construction activities within 100 feet of any potential unanticipated cultural or historical resources encountered during construction. A qualified archaeological or cultural resources specialist shall examine the findings, assess their significance, and identify any additional exploratory measures deemed necessary for the further evaluation of and/or mitigation to reduce adverse impacts to any potential historical or archaeological resources. SCE shall notify the CPUC monitor and the local jurisdiction (City or County) immediately in the event of a potential unanticipated cultural resource.</p> <p>SCE shall incorporate the following provisions into the grading and construction contracts to address the potential to encounter currently unknown cultural resources:</p> <ul style="list-style-type: none"> • If the find is determined to be historical or contain significant archaeological resources, and if avoidance of the resource is not possible, the archaeological or cultural resources specialist shall prepare a plan for the methodical excavation of those portions of the site that would be adversely affected. The plan shall be designed to result in the extraction of archaeological data to address important regional research considerations and shall be submitted to the CPUC for approval prior to implementation. The work shall be performed by the archaeological or cultural resources specialist, and shall result in a detailed technical report at the conclusion of data recovery and shall be submitted to the CPUC and the California Historical Resources Regional Information Center. Construction shall not resume within 100 feet of the site without written authorization by the CPUC. Refer to Unanticipated Cultural Resource Flow Chart in Figure C-3 of the Mitigation Monitoring Plan (Section C). • During the Worker Environmental Training Program (WEAP), SCE shall ensure that project personnel are informed that law prohibits collection of significant historical or archaeological resources. WEAP training will identify prehistoric or Native American resources including chert or obsidian flakes, projectile points, mortars and pestles, as well as dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic resources can include nails, bottles, or other items often found in refuse deposits. • If human remains are discovered, SCE shall immediately cease all construction activities within 100 feet of the find. SCE shall cordon off the area and there shall be no further excavation or disturbance of the discovery site or any nearby area reasonably suspected to overlie adjacent human remains until SCE has complied with the provisions of State CEQA Guidelines Section 15064.5(e). SCE shall immediately notify the County Coroner and the CPUC monitor. If the remains are found to be Native American, the County Coroner shall notify the Native American Heritage Commission (Commission or NAHC) within 24 hours. The most likely descendant of the deceased Native American shall be notified by the Commission and given the chance to make recommendations for the remains. If the Commission is unable to identify the most likely descendent (MLD), or if no recommendations are made within 24 hours, remains may be re-interred with appropriate dignity elsewhere on the property in a location not subject to further subsurface disturbance after written approval by the CPUC. If recommendations from the MLD are made and not accepted, the Native American Heritage Commission will mediate the problem. Refer to Unanticipated Discovery of Human Remains Flow Chart in Figure C-4 of the Mitigation Monitoring Plan (Section C). 	<ul style="list-style-type: none"> • SCE monitor shall ensure construction activities are not conducted within 100 feet of any unanticipated cultural or historic resources. • SCE monitor shall verify that data recovery plans are implemented in the field and construction does not resume prior to CPUC approval. • SCE monitor shall ensure all project personnel have completed WEAP training prior to working in the project area. • SCE monitor shall verify that human remains are handled according to CEQA guidelines and that human remains are not re-interred without CPUC approval. 	<p>Prior to and during construction</p>
<p>Geology and Soils</p>			
<p>Potential Damage From Seismic-Related Ground Failure</p>	<p>GEO-1: SCE shall perform geotechnical studies for the length of the project alignment to make design and construction recommendations for slope stability, liquefaction potential, subsidence, collapse, or seismic ground failure. Prior to construction SCE shall provide the CPUC with written verification that the applicable geotechnical studies have been conducted and that suitable structural features have been incorporated into the substation design to minimize damage from seismic-related ground failure.</p>	<ul style="list-style-type: none"> • SCE shall provide documentation to the CPUC that geotechnical studies have been performed and any engineering recommendations have been incorporated into project designs. 	<p>Prior to construction</p>

Impact	Measure	Monitoring Requirements	Timing of Action
Hazards and Hazardous Materials			
Fire Prevention During Construction	HAZ-1: The northern one-half mile of the alignment crosses undeveloped, fire-prone areas. Specific care should be exercised to prevent fires in this area when constructing new towers. During construction, fire prevention protocols shall be used, which include spark arrestors on vehicles and equipment; fire mats or shields during grinding, welding and torch cutting, carrying water and fire extinguishers; and not operating or parking vehicles in areas of dry, fire-prone vegetation. Operation of the project shall include brush clearing at substation facilities and maintenance of access roads consistent with applicable fire codes to provide access for fire-fighting equipment and personnel.	<ul style="list-style-type: none"> • CPUC monitor shall ensure that construction equipment contains appropriate fire fighting gear when working in fire prone areas. • CPUC monitor shall ensure that welding crews utilize mats, barriers or screens when working in fire prone areas. 	Prior to and during construction
Recreation			
Disruption During Peak Use Periods	R-1: Avoidance of Peak Use Periods and On-Site Notification. SCE shall provide onsite notification, and notify affected jurisdictions, of recreational access closures at least two weeks in advance, through the posting of signs and/or notices at all public entrances. Documentation of such notification should be submitted to CPUC.	<ul style="list-style-type: none"> • SCE shall provide verification of recreation access closures to the CPUC. 	During construction
APPLICANT-PROPOSED MEASURES			
Aesthetics			
Landscaping	APM A-1: Landscaping around the proposed Viejo substation would be designed to filter views from residential areas located to the north and east of the proposed substation site. The following measures shall be implemented: <ul style="list-style-type: none"> • A landscape plan will be prepared by a certified licensed landscape architect and will be consistent with the Orange County Environmental Management Agency Standards, adopted planned community regulations, scenic corridor, and Foothill Ranch Master Planned Community Specific Plan requirements. • Landscape plan will include an eight-foot-high, architect-designed block wall surrounding three sides of the proposed substation with secured barbed wire mounted on the substation side of the wall. The side of the substation site facing the 220 kV corridor will have an eight-foot-high, chain link fence topped with barbed wire. • Landscaping will be consistent with the Industrial Site Development of Foothill Ranch Planned Community Development Plan and Supplemental Text. 	<ul style="list-style-type: none"> • SCE shall verify landscape plan conforms to community and county specifications. • CPUC monitor shall verify implementation of landscape plan. 	Prior to and during construction

Impact	Measure	Monitoring Requirements	Timing of Action
Biological Resources			
Take of Identified Species	<p>APM B-1: SCE development activities and uses that are addressed by the Central and Coastal NCCP are considered fully mitigated under the Central and Coastal NCCP Act and the state and federal Endangered Species Acts for impacts to covered habitats and habitat occupied by identified species. Take of Identified Species is authorized on all lands owned or controlled by participating landowners outside of the Reserve System, but within the Central and Coastal Sub-region, as outlined in the Implementation Agreement and NCCP described below:</p> <ul style="list-style-type: none"> • “No amendment to the Central and Coastal NCCP will be necessary for purposes of construction of infrastructure facilities (including utilities) as long as the amended infrastructure plans do not result in Incidental Take beyond that described and permitted by the Central and Coastal NCCP” (NCCP, page II-341); • “The number of acres of coastal sage scrub and covered habitats on lands outside of the reserve system may fluctuate over time.” The Central and Coastal NCCP also states that “due to dispersal patterns and periodic fluctuations in Identified Species population locations and numbers, the term ‘Incidental Take authorized’ includes all coastal sage scrub habitat potentially impacted by participating landowners, regardless of the number of Identified Species occupying the area to be converted at the time habitat conversion actually occurs.” In the Central and Coastal NCCP, it states that “if additional gnatcatchers do disperse onto such non-reserve lands owned by participating landowners at the time the Central and Coastal NCCP Implementation Agreement is signed, development on these lands shall be considered fully mitigated for purposes of coastal California gnatcatcher and coastal sage scrub impacts and no additional mitigation shall be required.” (NCCP, page II-392). 	<ul style="list-style-type: none"> • SCE monitor shall verify that take of species and or habitat is consistent with Central and Coastal NCCP. • CPUC monitor shall review Central and Coastal NCCP during construction. 	During construction
Conditionally Covered Species	<p>APM B-2: Any impacts to plants that are Identified Species are fully authorized under the Central and Coastal NCCP, while impacts to plants that are Conditionally Covered Species, such as foothill mariposa lily, have mitigation provisions associated with the amount of allowable take. The take of fewer than 20 individuals (foothill mariposa lily) is authorized under the Central and Coastal NCCP. If it is found that the Viejo System Project would impact between 20 to 100 individuals, mitigation shall be implemented consistent with the mitigation measures described in the NCCP (II-254). Mitigation options include:</p> <ul style="list-style-type: none"> • Addressing design modification or other on-site measures that are consistent with the projects purposes, minimizing impacts to foothill mariposa lily habitat, and providing appropriate protection for any adjoining conserved mariposa lily habitat; • Providing an evaluation of salvage, restoration, enhancement and management of other conserved mariposa lily, or other mitigation techniques to determine the most appropriate mitigation technique to offset impacts, and implement mitigation consistent with the foregoing evaluation; and • Provide for monitoring and adaptive management of foothill mariposa lily consistent with Chapter 5 of the NCCP. • Any additional mitigation not fully addressed by the NCCP required for foothill mariposa lily shall be developed in coordination with FWS and the California Department of Fish and Game (CDFG). 	<ul style="list-style-type: none"> • SCE monitor shall verify that impacts to foothill mariposa lily remain consistent with the Central and Coastal NCCP. • SCE shall provide documentation to the CPUC verifying number and location of foothill mariposa lily. • CPUC shall verify that if additional mitigation is required for foothill mariposa lily is required that mitigation is developed in consultation with CDFG and USFWS. 	During construction

Impact	Measure	Monitoring Requirements	Timing of Action
<p>Coastal Sage Scrub, California gnatcatcher, Cactus wren, Orange-throated whiptail, and Covered species identified in Table 3-5 (SCE, 2003a)</p>	<p>APM B-3: Southern California Edison shall comply with provisions of the Central and Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan (NCCP) requirements for mitigating impacts to these species. Take of species and habitat identified and covered in the NCCP is fully authorized by the NCCP on all lands outside the reserve system but within the Central and Coastal Subregion. Minimization measures for construction-related impacts are outlined below and are required for construction of the proposed project and any alternatives within the NCCP:</p> <ul style="list-style-type: none"> • To the maximum extent practicable, no grading of coastal sage scrub habitat that is occupied by nesting coastal California gnatcatchers would occur during the breeding season (February 15 through July 15). It is expressly understood that this provision and the remaining provisions of these "construction-related minimization measures," are subject to public health and safety considerations. These considerations include unexpected slope stabilization, erosion control measures and emergency facility repairs. In the event of such public health and safety circumstances, landowners or public agencies/utilities shall provide USFWS/CDFG with the maximum practicable notice (or such notice as is specified in the Central and Coastal NCCP) to allow for capture of coastal California gnatcatchers, coastal cactus wrens and any other coastal sage scrub Identified Species that are not otherwise flushed and shall carry out the following measures only to the extent as practicable in the context of the public health and safety considerations. • Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of coastal sage scrub habitat to be avoided under the provisions of the Central and Coastal NCCP, are to be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations or other activities involving disturbance of coastal sage scrub, a survey would be conducted to locate coastal California gnatcatchers, coastal cactus wrens, and southern California Rufous-crowned sparrows within 100 feet of the outer extent of projected soil disturbance activities and the locations clearly marked and identified on the construction/grading plans. • A monitoring biologist acceptable to USFWS/CDFG would be on site during any clearing of coastal sage scrub. SCE shall advise USFWS/CDFG at least seven (7) calendar days (and preferably fourteen (14) calendar days) prior to the clearing of any habitat occupied by Identified Species to allow USFWS/CDFG to work with the monitoring biologist in connection with bird flushing/capture activities. The monitoring biologist shall flush Identified Species (avian or other mobile Identified Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they shall be captured in mist nests, if feasible, and relocated to areas of the site to be protected or to the Central and Coastal NCCP Reserve System. It shall be the responsibility of the monitoring biologist to ensure that Identified bird species shall not be directly impacted by brush-clearing and earth-moving equipment in a manner that also allows for construction activities on a timely basis. • Following the completion of initial grading/earth movement activities, all areas of coastal sage scrub habitat to be avoided by construction equipment and personnel shall be marked with temporary fencing or other appropriate markers clearly visible to construction personnel. No construction access, parking or storage of equipment or materials shall be permitted within such marked areas. • In areas bordering the Central and Coastal NCCP Reserve System or Special Linkage/Special Management areas containing significant coastal sage scrub identified in the Central and Coastal NCCP for protection, vehicle transportation routes between cut-and-fill locations shall be restricted to a minimum number during construction consistent with project construction requirements. Waste dirt or rubble shall not be deposited on adjacent coastal sage scrub identified in the Central and Coastal NCCP for protection. Pre-construction meetings involving the monitoring biologist, construction supervisors and equipment operators shall be conducted and documented to ensure maximum practicable adherence to these measures. • Coastal sage scrub identified in the Central and Coastal NCCP for protection and located within the likely dust drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the monitoring biologist. 	<ul style="list-style-type: none"> • CPUC monitor shall verify that SCE remains in compliance with the Central and Coastal NCCP. • SCE monitor shall verify that clearing and grubbing occurs outside the breeding season, to the maximum extent possible, and that qualified biologists monitor the area. • SCE monitor shall verify that coastal sage scrub habitat is clearly delineated prior to construction. • SCE monitor shall verify that construction crews receive pre-construction briefings prior to working in sensitive species habitat. • SCE monitor shall verify that construction equipment is limited to only necessary vehicles when working in sensitive species habitat. 	<p>Prior to and during construction</p>

Impact	Measure	Monitoring Requirements	Timing of Action
Riparian Habitat/ Watersheds	<p>APM B-4: To ensure avoidance of wetland habitat (includes vernal pools, artificial seasonal pools, freshwater marsh, and other natural wetlands, riparian vegetation, and perennial and ephemeral streams) the following measures shall be implemented:</p> <ul style="list-style-type: none"> • Schedule mass grading to occur outside of the rainy season. If mass grading occurs during the rainy season, appropriate best management practices (Refer to SWPPP) should be implemented to maintain existing water flows within the watershed and to prevent sediment being deposited into Aliso Creek or other drainages and watersheds that could be indirectly impacted during construction. • Schedule fueling of construction equipment to only occur at a designated area at a distance greater than 30 meters from drainages and associated plant communities to preclude adverse water quality impacts. 	<ul style="list-style-type: none"> • CPUC monitor shall verify that mass grading occurs outside the rainy season or that best management practices are employed to minimize off-site sediment transport. • CPUC monitor shall ensure fueling and maintenance occurs greater than 30 meters from riparian and wetland habitat, storm drains or waters of the State. 	Prior to and during construction
Staging and Lay Down Areas	<p>APM B-5: Locate staging and/or lay down areas in disturbed habitat or developed areas to the extent possible. Staging areas shall be delineated on project maps and reviewed by the project biologist. If staging areas are placed outside of the study area, additional field assessments may be required.</p>	<ul style="list-style-type: none"> • CPUC monitor shall verify that construction staging and laydown areas are limited to approved areas only. • CPUC monitor shall process temporary extra workspace requirements after reviewing environmental documentation for the site. 	Prior to and during construction
Raptor Protection	<p>APM B-6: Pre-construction surveys for raptors would be conducted. If nesting raptors are located, work within 500 feet of the nest site would occur outside of the applicable nesting/fledgling period. If this were not possible, SCE would consult with CDFG and USFWS on the relocation of the nest and/or fledglings.</p> <p>SCE has designed the H-frame structures to be raptor safe in accordance with Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996 (Avian Power Line Interaction Committee, 1996).</p>	<ul style="list-style-type: none"> • CPUC monitor shall verify that pre-construction raptor surveys are conducted. • CPUC monitor shall verify that SCE completes necessary consultation with CDFG and USFWS prior to the re-location of raptor nests or fledglings. 	Prior to and during construction
Revegetation of Disturbed Coastal Sage Scrub	<p>APM B-7: All areas of coastal sage scrub to be temporarily impacted shall be reseeded with an appropriate coastal sage scrub seed mix. It is recommended that the seed be collected on site or within the same county since the species shall be environmentally adapted to the site conditions and to ensure genetic similarity with species presently on site.</p>	<ul style="list-style-type: none"> • SCE monitor shall verify seed is collected from local sources and seeded during the appropriate season to maximize the potential for successful restoration. 	During and after construction
Cultural Resources			
Archeological and Historical Resources	<p>APM C-1: To ensure the avoidance of archeological resources in the project site, SCE shall conduct archeological monitoring for all Lattice Steel Tower (LST)- and Tubular Steel Pole (TSP)- related ground-disturbing activities north of El Toro Road.</p>	<ul style="list-style-type: none"> • CPUC monitor shall verify the presence of archaeological monitors during ground disturbing activities north of El Toro Road. 	Prior to and during construction

Impact	Measure	Monitoring Requirements	Timing of Action
Paleontological Resources	<p>APM C-2: In order to reduce the adverse impact of project construction on paleontological resources, the following measures shall be implemented:</p> <ul style="list-style-type: none"> • An Orange County Certified Paleontologist shall be retained by SCE to supervise monitoring of construction excavation and to produce a mitigation plan for the proposed project. • Paleontological monitoring shall include inspection of the exposed rock units and microscopic examination of matrix to determine if fossils are present. The monitor shall have authority to temporarily divert grading away from exposed fossils in order to recover the fossils specimens. • If microfossils are present, the monitor shall collect matrix for processing. In order to expedite removal of fossiliferous matrix, the monitor may request heavy machinery assistance to move large quantities of matrix out of the path of construction to designated stockpile areas. Testing of stockpiles shall consist of screen washing small samples (approximately 200 pounds) to determine if significant fossils are present. Productive tests shall result in screen washing of additional matrix from the stockpiles to a maximum of 6000 pound per locality to ensure recovery of a scientifically significant sample. • Quaternary Alluvium, Colluvium and Quarternary Landslide Deposits have a low paleontological sensitivity level, and shall be spot-checked on a periodic basis to insure that older underlying sediments are not being penetrated. All soil removal shall be monitored. • An Orange County Certified Paleontologist shall prepare monthly progress reports to be filed with SCE. • Recovered fossils shall be prepared to the point of curation, identified by qualified experts, listed in a database to allow analysis, and deposited in a designated repository such as the Interpretive Center at Ralph Clark Regional Park, and Orange County facility, which shall have the right of first refusal to the collection, or the Natural History Museum of Los Angeles County. • At each fossil locality, field data forms shall record the locality, stratigraphic columns shall be measured and appropriate scientific samples shall be submitted for analysis. • The Orange County Certified Paleontologist shall prepare a final mitigation report to be filled with the client, the lead agency, and the repository. 	<ul style="list-style-type: none"> • SCE shall provide a paleontological mitigation plan to the CPUC prior to ground disturbance. • CPUC monitor shall verify the presence of paleontological monitoring in areas identified as containing fossiliferous soils. • SCE shall notify the CPUC in the event of significant paleontological resources are discovered during construction. • CPUC shall verify paleontological resources are deposited at approved repositories at the conclusion of construction. 	Prior to and during construction
Geology			
Geology	<p>APM G-1: SCE's standard practices for geo-technical and geologic evaluation of substation and transmission tower/pole sites include the following:</p> <p><i>Geological Studies</i></p> <ul style="list-style-type: none"> • Geologic mapping of the site • Subsurface investigations for soil and rock conditions • Drilling and logging of boring logs • Determination of groundwater conditions • Geophysical surveys for resistivity and corrosivity <p><i>Geo-technical Engineering Studies</i></p> <ul style="list-style-type: none"> • Reviews of pertinent geologic information, boring log information and proposed development plans • Development of a laboratory testing program • Lab testing of samples to determine physical properties of subsurface materials • Testing for hazard waste shall also be performed in accordance with the Hazardous Waste Characterization Guidebook prepared by SCE and any other pertinent city, county, state regulatory agencies requirements, such as California State Regional Water Quality Control Board or Cal EPA • Determination of the necessary design parameters 	<ul style="list-style-type: none"> • SCE shall provide the geo-technical report to the CPUC prior to construction. 	Prior to construction

Impact	Measure	Monitoring Requirements	Timing of Action
	<ul style="list-style-type: none"> Preparation of a geo-technical Engineering Report Foundation excavations, soil handling on or off the site (stock piling, offsite disposal, on site spreading) are all conducted in accordance with site specific geo-technical report recommendations, environmental soil characterization report findings, and Cal OSHA and other applicable City, State regulatory agencies requirements. 		
Hazards and Hazardous Materials			
Hazards and Hazardous Materials	APM HZ-1: SCE shall implement measures from the SWPPP and the Work Area Protection and Traffic Control Manual to minimize project impacts related to Hazards and Hazardous Materials	<ul style="list-style-type: none"> CPUC monitor shall verify SCE is in compliance with SWPPP, Work Area Protection Plan and Traffic Control Plan. 	Prior to and during construction
Fire Protection	APM HZ-2: SCE shall minimize operational fire risk by maintaining a brush clearance in accordance with applicable State and Federal laws.	<ul style="list-style-type: none"> SCE shall provide verification that brush clearance is in conformance with applicable laws. 	During construction
Hydrology and Water Quality			
Hydrology and Water Quality	APM HW-1: SCE shall implement measures from the SWPPP and the Work Area Protection and Traffic Control Manual to minimize project impacts related to Hydrology and Water Quality.	<ul style="list-style-type: none"> CPUC monitor shall verify SCE implements best management practices in conformance with approved work plans. 	During construction
Noise			
Vehicle Noise	APM N-1: SCE shall limit the time smaller trucks and equipment are allowed to idle to no longer than five minutes, unless the piece of equipment is required to support a specific construction activity. All construction personnel shall be briefed on allowable idling times prior to start of construction.	<ul style="list-style-type: none"> CPUC monitor shall verify compliance with this measure. 	Prior to and during construction
Vehicle Noise	APM N-2: The number of construction equipment and vehicles at any single work site shall be kept to the absolute minimum required to perform construction activities.	<ul style="list-style-type: none"> CPUC monitor shall verify compliance with this measure. 	During construction
Vehicle Noise	APM N-3: SCE shall maintain proper mufflers on all internal combustion and vehicle engines used in construction.	<ul style="list-style-type: none"> CPUC monitor shall verify compliance with this measure. 	During construction
Traffic Noise	APM N-4: Where feasible, construction traffic shall be routed to avoid noise-sensitive areas.	<ul style="list-style-type: none"> CPUC monitor shall verify compliance with this measure. 	During construction
Public Outreach	APM N-5: SCE shall provide a toll-free number for concerned residents to call.	<ul style="list-style-type: none"> CPUC monitor shall verify the number is in operation. 	During construction
Public Outreach	APM N-6: SCE shall ensure that a public liaison person is available to address the concerns of the public.	<ul style="list-style-type: none"> CPUC monitor shall verify the public liaison officer is accessible to the public. 	During construction
Public Notification	APM N-7: Prior to construction, SCE shall notify all businesses and residences within 300 feet of the project, of the status of the project, the proposed construction schedule, and tips on reducing noise intrusion.	<ul style="list-style-type: none"> SCE shall provide to the CPUC a copy of the fact sheet utilized to notify businesses and residents within 300 feet of the project. 	Prior to and during construction

Impact	Measure	Monitoring Requirements	Timing of Action
Public Services and Utilities			
Emergency Vehicle Access	APM P-1: As appropriate, SCE shall implement measures from the Work Area Protection and Traffic Control Manual to maintain adequate emergency vehicle access when crossing existing roadways.	<ul style="list-style-type: none"> CPUC monitor shall verify that emergency access is maintained when crossing existing roadways. 	During construction
Recreation			
Revegetation of Recreational Areas	APM R-1: Any park areas temporarily impacted by project construction would be revegetated and returned to their original state. <ul style="list-style-type: none"> Landscaped areas: SCE shall coordinate with owners of landscaped areas, parks and hillsides, to restore disturbed areas to a condition equal to or better than original. Natural areas: SCE shall coordinate with the Nature Reserve of Orange County and United States Fish and Wildlife Services (USFWS). 	<ul style="list-style-type: none"> SCE shall verify park areas are returned to original condition at the completion of construction. CPUC shall verify that SCE coordinates with the affected agencies for the restoration of natural areas disturbed by project construction. 	After construction
Recreation	APM R-2: SCE shall erect guard structures along the right-of-way as needed.	<ul style="list-style-type: none"> CPUC monitor shall ensure SCE employs construction barriers when constructing in City or County parks. 	During construction
Transportation and Traffic			
Traffic	APM T-1: SCE shall implement the Work Area Protection and Traffic Control Manual to minimize impacts to traffic and transportation.	<ul style="list-style-type: none"> CPUC shall verify SCE complies with the work plans when construction occurs on or near City or County roadways. 	During construction

Figure C-1

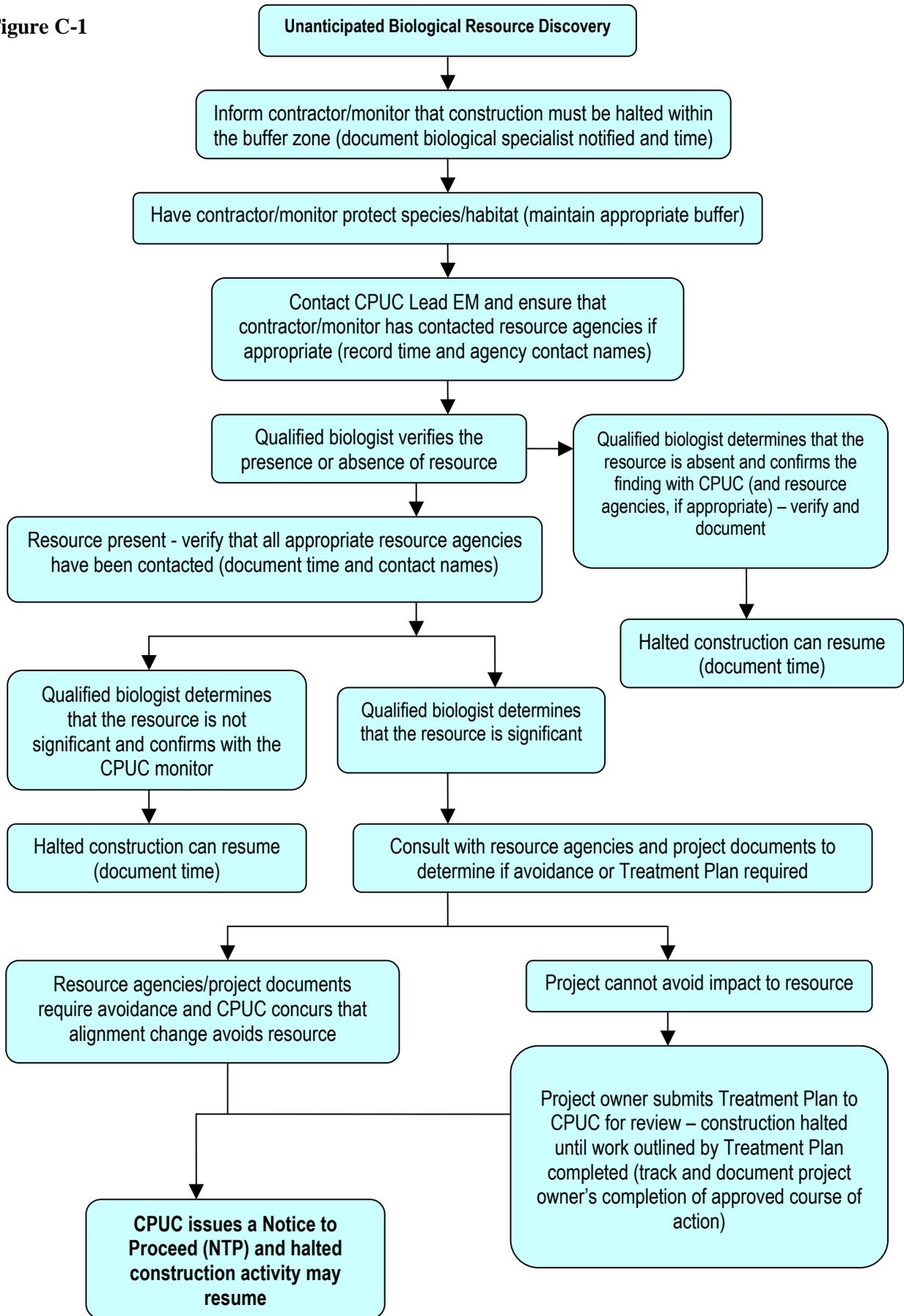


Figure C-2

TEMPORARY EXTRA WORK SPACE REQUEST

SCE Viejo System Project

Segment _____

Location/Address _____ City/County _____

Proposed Use of Site _____

Proposed Date(s) of Use _____ Proposed Hours of Use _____

Adjacent Land Uses _____

SCE Permit Coordinator (Prepared by) _____ Date _____

Biological, Cultural and Paleontological reconnaissance surveys are mandatory for use of any areas containing vegetation, or exposed earth that have not been previously surveyed and fully described in project documents. Biological surveys are mandatory for all temporary extra work sites. Attach a diagram of the proposed area that identifies the location of the site and proximity to sensitive resources or receptors.

*Complete the environmental checklist below. Note: **Yes** answers require additional clarification and should be submitted as an attachment to this form.

ENVIRONMENTAL CHECKLIST	YES*	NO	CPUC VERIFIED
Air Quality: Would equipment be on site or idled for more than 10 minutes? Would there be dust-producing activities?	<input type="checkbox"/>	<input type="checkbox"/>	
Biological Resources A: Would use of the site result in potential impacts to sensitive biological resources.	<input type="checkbox"/>	<input type="checkbox"/>	
Biological Resources B: Is the site located within the Central and Coastal NCCP?	<input type="checkbox"/>	<input type="checkbox"/>	
Cultural/Paleontological Resources: Would clearing or grading be required?	<input type="checkbox"/>	<input type="checkbox"/>	
Water Resources: Would runoff from the site flow into storm drains or a waterway? Would equipment refueling or maintenance be performed? Would materials block/impact storm drains or gutters?	<input type="checkbox"/>	<input type="checkbox"/>	
Land Use and Recreation: Would use of site block access to local land uses and recreational areas?	<input type="checkbox"/>	<input type="checkbox"/>	
Noise: Are noise-sensitive receptors (e.g., homes, schools, hospitals, churches convalescent homes, parks, recreational areas) adjacent to the site?	<input type="checkbox"/>	<input type="checkbox"/>	
Socioeconomic: Would access to business be blocked? Would there be disruption of business operations?	<input type="checkbox"/>	<input type="checkbox"/>	
Traffic: Would parking be eliminated? Would increased construction traffic result in impacts? Is the site a residential area?	<input type="checkbox"/>	<input type="checkbox"/>	
Visual: Would lights at site create glare for adjacent land uses (including roadways)?	<input type="checkbox"/>	<input type="checkbox"/>	

Standard Conditions of Approval

- *The CPUC, via its designated Environmental Monitor, will review and approve/deny the Temporary Extra Workspace Request (TEWS) request within four business days of receiving this completed form.*
- Use of TEWS is limited to 60 days. First proposed date of use: _____
- Use of TEWS shall be in compliance with local ordinances (including traffic/noise) and mitigation measures.
- If any signs of cultural resources are identified, work shall cease immediately and the site shall be reevaluated.
- The proposed site shall not be used for storage of fuel or hazardous materials.
- All drips, leaks, and/or spills from vehicles and/or equipment shall be cleaned-up immediately and disposed of in appropriate, labeled containers.
- Adjacent streets shall be swept or cleaned with water at the end of each workday if visible soil material is carried on them.
- No parking or storage of vehicles (including personnel vehicles), equipment, pipe, or any other project-related item shall be allowed on adjacent roadways.
- If a complaint is received, it shall be forwarded to the SCE Permit Coordinator, the CPUC Environmental Monitor, and the CPUC Lead Environmental Monitor for review.

The following signatures indicate that the proposed site is approved for TEWS. On a random basis, a CPUC Environmental Monitor will verify that use of the proposed site is in accordance with the conditions noted. This approval may be revoked at any time by any one of the approval team. Failure to comply with all conditions will result in immediate revocation of this TEWS approval.

Property Owner Date

SCE Construction Date

SCE Permit Coordinator Date

The above TEWS request and attached documentation have been reviewed and this request is approved **/ denied (circle one).

CPUC Environmental Monitor Date

****Additional CPUC Conditions of Approval**

(CPUC Monitor Initial _____)

REASON(S) FOR DENIAL: _____

Figure C-3

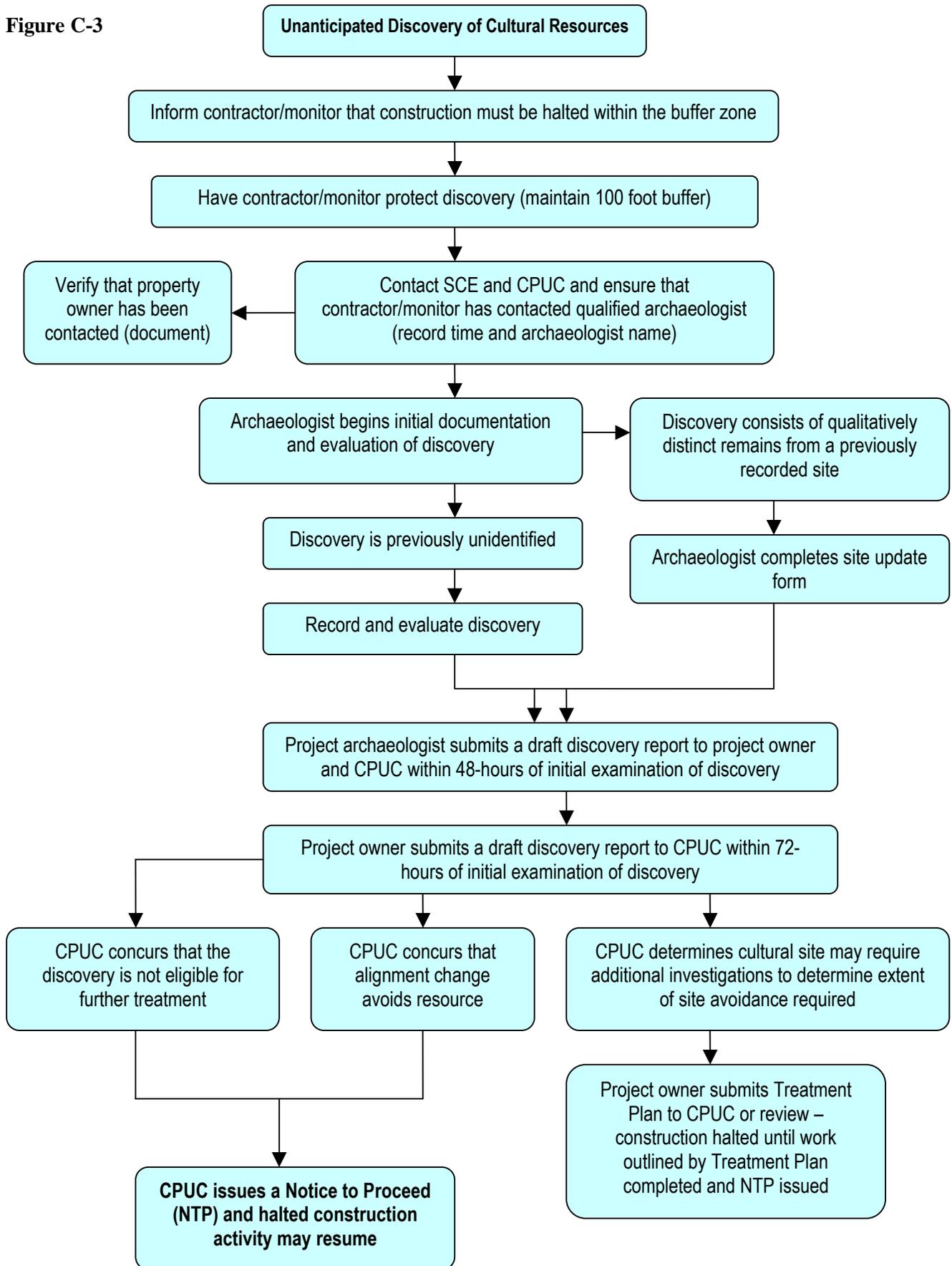


Figure C-4

